

Comparative Outcomes for Progressive School and Non-Progressive School Students

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Abstract

This is a formal study of Peninsula School graduates to measure their academic achievement with comparable students in the general school population, and to assess adult alumni attitudes regarding their K-8 experience. This research identifies and articulates appropriate measures and examples of Peninsula students' academic and life successes. The study conclusion validates the effectiveness of Peninsula's progressive education, argues for the inclusion of progressive ideals in all children's education, and provides recommendations for further study. It is our goal that this research project will open a dialog for the future about the value and benefit of progressive education.

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Chapter I

Introduction

During the first half of the 20th Century, John Dewey was regarded internationally as America's greatest philosopher, and progressive education as America's greatest contribution to the world of education and democratic ideals. This was no mean feat at a time when Bertrand Russell, Wittgenstein, and Heidegger were all alive and producing some of their finest work. Russell himself called Dewey "the leading living philosopher of America" (Strathern, 2002, p. 7). Today there is a great variety of opinion as to the value of the work and ideas of John Dewey and of progressive education. On one end of the scale, some educators such as Alfie Kohn (2008) argue:

"Progressive schools are the legacy of a long and proud tradition of thoughtful school practice stretching back for centuries — including hands-on learning, multiage classrooms, and mentor-apprentice relationships — while what we generally refer to as traditional schooling "is largely the result of outdated policy changes that have calcified into conventions. (p.1)

On the other end, progressive ideals are criticized by such renowned public figures as Admiral H.G. Rickover (also known as "father" of the nuclear Navy) as exerting a "pernicious influence" on American education" (Dewey, J, & Dewey, E, 1962, p ix). Olson (2000b) points out that progressive education's modern critics even like to blame it for their perceived "failure" of public education. Olson cites E.D Hirsch Jr., who has proposed a common core of knowledge that all students should learn, and who has been particularly critical of what he sees as the denigration of knowledge:

Political liberals really ought to oppose progressive educational ideas because they had led to practical failure and greater social inequity. Instead...the anti-subject-matter principles of progressivism have demonstrably triumphed in American schools. (p. 100)

Unfortunately, there have been very few extensive studies comparing outcomes of progressive and non-progressive school graduates. Between the years 1932-40, the Progressive Education Association conducted its famous Eight-Year Study, in which some 30 schools or districts experimented with progressive changes in the secondary curriculum, and the impact was evaluated. The study, conducted under the auspices of the University of Chicago, ...concluded that among the 1,475 matched pairs, graduates of the experimental (progressive) schools earned slightly higher grade point averages, received slightly more academic honors, seemed to possess a higher degree of intellectual curiosity and drive, and participated more often in student groups.” By the 1940’s, progressive ideas were no longer referred to as new or modern, but simply as “good educational practice.”(Olson, 2000b, p. 97).

A backlash ensued, partly as a result of political pressures brought to bear on education in the United States (U.S.) because of the Cold War, and partly because of misguided interpretations of progressive education’s methods and purposes, and although progressive education enjoyed a temporary resurgence in the 1960s and 1970s its earlier pedagogical appeal amidst calls for social awareness was largely lost.

Since the 1970s, the political and educational climate in the U. S. has generally been chilly for progressive thought and practice (Olson, 2000b, p. 100). . Increases in course requirements, a reliance on standardized tests, and the rise of the academic-standards movement have often made it difficult to pursue innovation along progressive lines. However, hundreds of schools continue their adherence to progressive approaches. Peninsula School in Menlo Park, California is one of

those schools that has successfully maintained and expanded its progressive approach since the earliest days of the progressive education movement. This research examines Peninsula School graduates' achievements and attitudes as high school students and adults, and puts the value of a progressive education, which purposefully de-emphasizes the prevailing standardization and assessment pressures of American public education, into context.

Even though prominent American educators have warned of its deficiencies and false presuppositions, it is apparent that public education in the United States has taken a sharp turn towards the external accountability and assessment model of education. The assessment of schoolchildren “is unprecedented in our history and unparalleled anywhere else in the world...never have the tests been given so frequently, and never have they played such a prominent role in schooling...” (Kohn, 2000).

These commonplace features of the American educational landscape are “institutionalized expressions of a persistent belief in the importance of inherited aptitude. The system they are part of is self-sustaining” (Resnick, 2000, p. 176). Also, the dictates of No Child Left Behind (NCLB) and other high-stakes testing legislation have further institutionalized the counter-educational assumptions of standardized curriculum and relentless assessment. Alfie Kohn (2002) points out that, among other damages done by such misguided assumptions:

By virtue of its definition of a qualified teacher, NCLB helps to cement the idea that education consists of pouring knowledge into empty receptacles. We don't need people who know how to help students become proficient learners (a skill that they might be helped to acquire in a school of education); we just need people who know a lot of stuff (a distinction that might simply be certified by a quasi-private entity – using, naturally, a standardized test)... This nicely rounds out the “reform” agenda, by locking into place a

model that not only deprofessionalizes teachers but confuses teaching with the transmission of facts (p. 577).

In the current environment, progressive ideals placing the learner at the center of the education experience are often dismissed as too idealistic, too impracticable, and “lacking in any far reaching aim or guiding principle” (Dewey, J. & Dewey, E. 1962). As Linda Darling-Hammond (1996) illustrates:

These days the talk is tough: standards must be higher and more exacting, outcomes must be measurable and comparable, accountability must be hard-edged and punitive, and sanctions must be applied almost everywhere (p. 5).

In contrast, Peninsula School’s pedagogy asserts that schools, “should be based on confidence in children, relying on trust, natural interest, and the stimulus of freedom of choice as motivators for learning instead of relying on authoritarian controls, fear, rewards, punishments, or humiliation as shapers of child growth and behavior” (Young, 1982, p.28).

This research investigates the consequences of Peninsula’s progressive pedagogy in terms of quantitative measurements (standardized test results for Peninsula School graduates attending high school), and of more qualitative (survey and interview) views of Peninsula School graduates’ learning and education experience. By comparing standardized test scores for Peninsula School graduates with those of their aggregated local high school California Standardized Testing and Reporting (CST/STAR) scores, our research evaluated the relative outcomes for progressive school and non-progressive school graduates. Through a survey, the research determined student views of their K-8 educational experience, and compared views of progressive school and non-progressive school graduates. The research also included interviews

of adult Peninsula School graduates to determine their views regarding the value and influence of their Peninsula School progressive education in their later academic and life choices.

Setting

Peninsula School is one of the oldest progressive K-8 schools in the United States. The school is located on six acres of heirloom oak trees in Menlo Park, California. The main building is a Victorian mansion, fondly called "the big building," and classrooms are located in separate buildings around the campus. In the big building there are the administrative offices, the library, two music rooms, a weaving room with many floor looms, a clay room, drama room, fine art studio, math lab, a science lab, and a large auditorium. The student population consists of 254 children with some (but not enough) ethnic diversity (M.L. Lacina, personal communication, October 16, 2008). The improvement of the diversity of the school is a priority in the school's Strategic Plan (2006).

Peninsula School was established in 1925 by a group of parents, including the noted educator, Josephine Duveneck, who were unhappy with the Palo Alto schools at the time. These parents wanted a school for their children that appreciated the unique and different ways that children learn. They established a school where children learn through their own experiences, where learning is happy and exciting work, and where independence, positive self-concept, and working together as a group in a non-competitive environment are top priorities.

Former Director Barney Young (1982), describes the founders' progressive philosophy of educational environment as one that, "respects and supports children's need to be individuals, discovering the world, and learning how to meet their own needs – how to take charge of their lives" (p.28). He relates that in a school like Peninsula children are involved in "learning by doing... exposing them to the full richness of human culture; to the arts, sciences, history,

literature and practical arts and crafts, but beyond this giving them room to follow their own inclinations for play, experiment, and contemplation” (p.29).

The atmosphere is relaxed as well as stimulating. The school's philosophy supports the concept that the social and emotional development of children is equally as important as their academic performance. Childhood and play are celebrated here. Children feel safe, supported, and trust the adults in their school life. Everyone learns to take care of themselves, to contribute to the school and to the environment, and to trust and respect each other.

Class size at Peninsula School is from 18 to 21 children. There are sixty staff members. Most classes have one head teacher and at least two assistants. The teachers get to know their students completely, and both children and parents receive an abundance of individual attention. There are fifteen head teachers. Eight of the head teachers have multiple subject teaching credentials, four head teachers have Masters degrees, and three head teachers have Bachelors degrees. Auxiliary teachers teach P.E. and woodshop as well as reading, science, music, weaving, drama, art, dance, jewelry, and clay. Of the auxiliary teachers, eight have Masters degrees, and three have Bachelors degrees (Katy Dalglish, personal communication, November 14, 2008).

At Peninsula, professional development is strongly supported and encouraged by the Director and the Board of Directors. The school has specifically designated funds in its budget for the purpose of professional development. At staff meetings, teachers are informed about seminars, upcoming course work, conferences, and lectures of interest to the staff community. The school makes professional development funds available to facilitate staff participation. The head teachers in particular are taking advantage of these opportunities to continually educate

themselves on current trends in education; in particular about teaching methods and concepts related to progressive education.

Parents play an essential role in the running of the school. All parents sign an agreement when they join Peninsula that they will volunteer at least fifteen hours per year to help the school in three fundraising events during the school year. These events are the Holiday Craft Sale, held the first Sunday in December, the annual school auction held in mid-March, and the spring Learning Fair, held the first Sunday in May. These three events help to fund the scholarship and other financial needs of the school. Each event requires a significant effort from everyone in the community.

At the Holiday Craft Sale there is a special section where children in the school can sell things they create themselves. The school auction is the only “adult's only” event held at the school, though the graduating (8th grade) students traditionally participate in the event. Many of the donations for the auction are from staff and families within the school, and the eight graders serve as waiters and waitresses and perform for the attendees. The Spring Fair requires extensive parent participation, and fairgoers enjoy many of the student choruses and bands that have “sprung up” over the school year.

Parents play an integral role in the running of the school. Parents volunteer in the classrooms to help with reading, math, and language arts, drive on field trips, arrange cooking activities, help run the office, organize fund development, volunteer to be on the many committees (especially the Strategic Plan committees), and support the teachers in the classrooms.

As children get older, the parental role in the classroom changes. In the “upper school”, children have a developmental need to strike out on their own. Thus, parents do not drive on too

many field trips, and they do not come along on camping trips. In the upper school, there are five "choice" short-course periods offered during the school year. These courses last from two to three weeks. Sometimes parents, along with a staff member, may co-teach one of these choice offerings.

There is no homework until the fourth grade, and no testing until fifth grade. There is no standardized testing in the form advocated in No Child Left Behind (NCLB), or data collected in the form required for Academic Performance Index (API) evaluation. However, starting in the 5th grade children receive preparation and instruction that prepares them for the transition to high school.

Assessment comes in the form of subject tests, unit tests, and one-on-one meetings with teachers to evaluate students' knowledge of subject matter. In the eighth grade, students are given practice standardized tests. These tests are used primarily as tools to help children transition from Peninsula to high school, and are not indicative of any evaluative summary of the child's learning.

Other forms of assessment include ongoing meetings between teachers to discuss the children in their classes, and to evaluate their academic as well as social and emotional progress. These are the varied ways assessment of the whole child is accomplished at Peninsula School. Most Peninsula School graduates go on to attend the local public high schools, Menlo Atherton High School, Palo Alto High School and Gunn High School in Palo Alto, and to Summit Preparatory Charter School. There are several local private schools that Peninsula School graduates attend as well - among these are Sacred Heart High School, Castilleja School, Crystal Springs, and Mid-Peninsula High School.

The Peninsula School Strategic Plan (2006) specifies and advocates for identity and cultural preservation of the school; for staff succession, retention and development; for progressive teaching and learning; for strengthening finances and funding development; for increasing student diversity; and for engaging with the community beyond Peninsula School. The strategic planning process was a community effort that “relied upon the involvement of the broadest spectrum of community members to shape a plan appropriate to such a unique organization.” The Strategic Plan, as part of its goal of engaging with the community beyond Peninsula School, advocates the following: “Through research and study, identify and articulate appropriate historical measures and examples of Peninsula students’ life-success”

Problem Statement

The problem was that there had never been a formal study of Peninsula School graduates to measure their academic achievement with comparable students in the general school population, or to assess their attitudes regarding their K-8 experience. Because Peninsula graduates are not tested or evaluated on the same scales as other K-8 students, the question whether their later academic careers are thus affected, and how they compare with students who have been continually tested and evaluated in their K-8 schooling, had never been researched. Also, the much-vaunted values of progressive education taught at Peninsula - the encouragement of creativity, artistry, non-competitive learning, and social development as essential components of early education - had never been qualitatively evaluated for their effects on subsequent student attitudes and life choices.

Statement of Purpose

This research sought to identify and articulate appropriate measures and examples of Peninsula students’ academic and life successes. It documents the comparative data of

Peninsula's graduates' academic outcomes using standardized assessments. It also documents the qualitative outcomes of Peninsula's progressive curriculum in graduates' academic choices, continuing arts participation, and influence on later academic and life choices. It establishes what the differentiated outcomes are for Peninsula School graduates, as compared with graduates of K-8 programs that stress assessment and structured, standardized learning.

One purpose of the study was to prove or disprove the assumption that, as measured by standardized tests in the form of CST/STAR results, Peninsula School graduates would meet or exceed the norms of their public school counterparts. Another purpose of the study was to determine the opinions of Peninsula School graduates, both as high school students and as adults, regarding the influence of their K-8 experience at Peninsula. This research investigated several categories including interest in learning, interest in science and mathematics, respect for the arts, participation in arts education in high school (crafts, music, writing, and theater), overall attitude towards learning and education, and later career and life choices. In the case of high school students, the research compared the opinions of progressive (Peninsula School) and non-progressive K-8 graduates.

Research Questions

What did standardized test data (CST/STAR tests) given in high school reveal about Peninsula School graduates as compared with public school graduates of the same age?

What did the interview and survey data reveal about the perception of Peninsula School graduates regarding their academic preparation for high school in math, science, English, and arts?

What did the interview data reveal about Peninsula School graduates' academic subject choices (i.e. math, science, arts, English, etc.)?

What did the interview data reveal about whether graduates of Peninsula School continued studying in arts, crafts, music, and theater in high school and college and beyond?

What was the perception of Peninsula School graduates, both high school students and adults, regarding the influence of their experience at Peninsula? How well did they consider they were prepared for learning; how did the Peninsula progressive curriculum influence their trust for adults as guides and teachers; how did it influence their abilities to learn from others; and how did their Peninsula experience affect their later careers and interests?

Chapter II

Literature Review

"We have tried to show what actually happens when schools start out to put into practice, each in its own way, some of the theories that have been pointed to as the soundest and best ever since Plato, to be then laid politely away as precious portions of our "intellectual heritage". Certain views are well known to every teacher who has studied pedagogy, and portions of them form an accepted part of every theory of education. Yet when they are applied in a classroom the public in general and other teachers in particular cry out against that classroom as a place of fads and caprices; a place lacking in any far reaching aim or guiding principle." (Dewey, J, & Dewey, E, 1962)

These words from John and Evelyn Dewey's *Schools of Tomorrow*, the classic text of progressive education first published in 1915, echo in the modern controversies swirling in the field of education in the United States. Most pointedly, those who advocate (as do the proponents of No Child Left Behind (NCLB) and other high-stakes testing regimes, as well as other hyper-competitive "achievement" oriented schools modeled after industrial business practices) for an increasing standardization of curriculum, frequent and persistent assessment,

and strict adherence to external, social notions of “achievement” in education, are most likely to cry out against the progressive education classroom as “a place of fads and caprices...lacking in any far reaching aim or guiding principle.”

The current views of progressive education reveal a divergence of opinion, continuing the controversy that progressive pedagogy has historically attracted. The debate has been framed by the critics of progressive education, who often misunderstand its methods and objectives, and may have an animus against it for political or commercial reasons. The lucrative standardized testing industry in America is a case in point.

Olson (2000b) points out that progressive education’s modern critics even like to blame it for their perceived “failure” of public education:

Political liberals really ought to oppose progressive educational ideas because they had led to practical failure and greater social inequity. Instead...the anti-subject-matter principles of progressivism have demonstrably triumphed in American schools. (p. 100)

Linda Darling-Hammond (1996) reveals the hyperbole, double standard, and hypocrisy of the “higher standards” movement, which ultimately leads to its counter-educational outcome:

These days the talk is tough: standards must be higher and more exacting, outcomes must be measurable and comparable, accountability must be hard-edged and punitive, and sanctions must be applied almost everywhere – to students and teachers, especially – although not to those whose decisions determine the possibilities for learning in schools. (p. 5)

However, modern awareness of the evolutionary benefits of progressive education’s practice and outlook, even when they are not identified as such, is increasingly making an impact

in the public's appreciation of what a real education might mean as opposed to externally imposed testing regimes. The unpopularity of No Child Left Behind (NCLB) and other such high-stakes assessment dictates have caused educators and parents to reassess the legacy and ideals of progressive education. As Alfie Kohn (2008) argues:

“Progressive schools are the legacy of a long and proud tradition of thoughtful school practice stretching back for centuries — including hands-on learning, multiage classrooms, and mentor-apprentice relationships — while what we generally refer to as traditional schooling “is largely the result of outdated policy changes that have calcified into conventions. (p.1)

Darling-Hammond (1996), like other progressive oriented educators, advocates for:

...a shift from a selective mode – ‘characterized by minimal variation in the conditions for learning’ in which a ‘narrow range of instructional options and a limited number of ways to succeed are available’ – to an adaptive mode in which “the educational environment can provide for a range of opportunities for success. Modes of teaching are adjusted to individuals – their backgrounds, talents interests, and the nature of past performance (p.7)

Even though prominent American educators have warned of its deficiencies and false presuppositions, it is apparent that public education in the United States has taken a sharp turn towards the accountability and assessment model of education. The assessment of schoolchildren “is unprecedented in our history and unparalleled anywhere else in the world...never have the tests been given so frequently, and never have they played such a prominent role in schooling...” (Kohn, 2000)

As perhaps the most outspoken and well-known critic of the accountability and assessment “fad” currently holding sway in modern public education, Alfie Kohn makes extensive pedagogical arguments against such testing and accountability regimes. According to Kohn (2000), “The main objective of these tests is to rank, not to rate; to spread out the scores, not to gauge the quality of a given student or school”. Among many other objections, Kohn argues that; “standardized-test results are positively correlated with a shallow approach to learning”, and that; “virtually all specialists condemn the practice of giving standardized tests to children younger than 8 or 9 years old”. (p.60)

Darling-Hammond (1995) maintains that, for much of our history, traditional, norm referenced tests have been used as a sorting mechanism and have reinforced and extended social inequalities. Darling-Hammond’s views are supported and elaborated by other educators such as D.J. Hoff (2000), who documents how standardized testing moved far beyond its modest beginnings in Boston’s urban school districts to become a tool used nationwide to judge what is taught and how. Hoff shows how SAT and other modern testing tools evolved to “legitimize” multiple choice tests as a lucrative business for test publishers and administrators, in spite of their obvious and proven bias: “...critics have long charged that SAT is not a fair or equitable measure for the rest of society, for minorities and sometimes girls.” (p. 158)

In other research, Walsh (2000) documents the non-educational history and commercially exploitative motivations of educational testing, and suggests the misunderstood relevance of assessment in education and in a learning environment.

The failures of NCLB and its standardizing and assessing counterparts are now becoming apparent to many educators, who, according to Anne Lewis (2007) “are now admitting that the law has done little to improve real achievement (as opposed to raising test scores by increasing

test prep), and it has not closed the achievement gap between white students and their minority counterparts. (p.483). This view was borne out recently in an article posing the question, “Can the achievement gap really be closed?” (Noguchi, 2009), reporting the Palo Alto, CA school superintendent’s frustration at the lack of equity progress despite enormous resources devoted to closing the gap.

Kohn (2000) summarizes the situation: “Far from improving education ...(standardized high-stakes testing) marks a major retreat from fairness, from accuracy, from quality, and from equity.”

The progressive education pedagogy offers a humane and equitable alternative to a “standards” based or “achievement” based curriculum (especially where “achievement” is defined by external sources unfamiliar with the students). The contextual learning of a progressive classroom offers a stark contrast to the shallow approach encouraged by “teach-to-the-test” dictates such as NCLB.

Kohn (2008) persuasively contends that progressive pedagogy, as practiced in alternative schools like Peninsula School, which have no assessment orientation, easily outpaces traditional assessment oriented curriculums on the basis of its effectiveness:

Across domains, the results overwhelmingly favor progressive education. Regardless of one’s values, in other words, this approach can be recommended purely on the basis of its effectiveness. And if your criteria are more ambitious — long-term retention of what’s been taught, the capacity to understand ideas and apply them to new kinds of problems, a desire to continue learning — the relative benefits of progressive education are even greater. This conclusion is only strengthened by the *lack* of data to support the value of

standardized tests, homework, conventional discipline (based on rewards or consequences), competition, and other traditional practices. (p. 4)

Ever since the publication of Dewey's pioneering works, researchers in child-development, cognitive theory, and education practice such as Piaget (1952), Vygotsky (1978), and Westwater & Wolfe (2000), have substantiated the original philosophies of Dewey and the progressives, that all learning is contextual and is most effective when it takes place within the domain of the learners' practical experience, cognitive age, and interests.

Today hundreds of schools continue their adherence to progressive approaches. And a new generation of schools has revived the idea of marrying progressive pedagogy with issues of social justice. The pedagogical values of progressive education and of Peninsula School are articulated by Kohn (2004), who cites Stanford's Nel Noddings:

How they (students) feel—about themselves, about their teachers, about the curriculum and the whole experience of school—is crucially related to the quality of their learning. Richer thinking is more likely to occur in an atmosphere of exuberant discovery, in the kind of place where kids plunge into their projects and can't wait to pick up where they left off yesterday. (p. 37)

The progressive ideals that human beings learn best when they are trained to evoke learning from within, to seek artistry and creativity in life, to cultivate their talents and relationships as leaders and collaborators, remain controversial and even threatening concepts. Progressive education remains a work in process; its history is one of trial and error, scarred by criticism and even persecution. Even so, the learning environment of Peninsula School has flourished for more than eight decades and its appeal is growing. Its outlook is quite well supported by education

research and literature, and Peninsula School may be among the most demonstrable successes of progressive education.

Chapter III

Methodology

This research sought to identify and articulate appropriate measures and examples of Peninsula students' academic and life successes. It documents the comparative data of Peninsula's graduates' academic outcomes using standardized assessments. It also documents the qualitative outcomes of Peninsula's progressive curriculum in graduates' opinions of their academic preparation, and of its influence on their learning and later academic and life choices. It established what the differentiated outcomes and opinions are for Peninsula School graduates, as compared with graduates of K-8 programs that stress assessment and structured, standardized learning.

One purpose of the study was to prove or disprove the assumption that, as measured by standardized tests in the form of California Standardized Testing and Reporting (STAR) results, Peninsula School graduates would meet or exceed the norms of their public school counterparts. Another purpose of the study was to determine the opinions of Peninsula School graduates, both as high school students and as adults, regarding the preparation and influence of their experience at Peninsula.

In the case of high school students, the research compared the subjective opinions of Peninsula School alumni and non-Peninsula K-8 graduates regarding their preparation for high school academics in several categories, and assessed their comparative opinions about how their K-8 experience influenced them as learners. In the case of adult alumni, the research investigated several categories including influence on learning, influence on academic work in science and

mathematics, influence on academic work in language art, respect for and participation in arts education (crafts, music, writing, and theater), overall perception regarding their Peninsula experience, and later career and life choices.

The research focused on the following questions:

What did the data derived from recent standardized tests given in high-school (CST/STAR results) reveal about Peninsula School graduates as compared with public school K-8 graduates of the same age?

What did the data derived from a survey of Peninsula School alumni currently in high-school reveal about their academic subject preparation (i.e. math, science, arts, language arts, etc.) as compared with non-progressive school graduates attending the same high schools and responding to the same survey questions?

What was the perception of Peninsula School graduates, both high school students and adults, regarding the influence of their experience at Peninsula? How well did they consider they were prepared for learning; how did the Peninsula progressive curriculum influence their trust for adults as guides and teachers; how did it influence their abilities to learn from others; and how did their Peninsula experience affect their later careers and interests?

Description of Action

We developed and executed two research instruments, a survey and an interview questionnaire. We used the survey to establish measures of high-school students' attitudes regarding their K-8 school experience, and the telephone interview to measure adult Peninsula alumni opinions regarding their subsequent academic and life choices.

Additionally, we compared CST/STAR results for Peninsula School and non-Peninsula high-school students to determine the academic performance of the two groups according to standardized assessments.

Population and Sample

We selected three different categories of subjects for the research: Peninsula School alumni currently enrolled in local high-schools, non-Peninsula School alumni currently enrolled in local high-schools, and Peninsula School adult alumni already graduated from high-school. The number of participants in each category was as follows:

1. Peninsula School alumni currently enrolled in high-school – 25
2. non-Peninsula School alumni currently enrolled in two local high-schools – 25
3. Menlo-Atherton High School – 9
4. Summit Preparatory Charter High School - 16
5. Peninsula School adult alumni already graduated from high-school. - 25

Participants were selected to provide a sizeable sample of Peninsula School vs. non-Peninsula School high-school students for the survey, and of Peninsula school alumni for the qualitative interview. The Peninsula School alumni, both high-school students and adult alumni, were selected from alumni lists provided by the school.

The non-Peninsula School students were selected at random according to the distribution and return of San Jose State University consent forms by the participating high schools. The non-Peninsula high-school student population included in the sample was derived from two local high schools. Menlo-Atherton High School, located less than one-half mile from Peninsula School, is the local public high school for many Peninsula students; and Summit Preparatory Charter High School is a nearby charter school attended by many Peninsula School alumni.

The San Jose State University Institutional Review Board (IRB) proposal for this research was approved on July 10, 2009, protocol number S0902185.

Instrumentation

Three separate sets of data were collected for this study. The first data were California Standards Test (CST) Scores for Peninsula School alumni (aggregated), compared with the same aggregated CST results for the two local high-schools attended by those alumni, and available at the California Department of Education website reporting California Standardized Testing and Reporting (STAR) test results: <http://star.cde.ca.gov/star2008/index.asp> . The CST results for Peninsula alumni were derived from a survey we developed and made available via SurveyMonkey to Peninsula alumni currently attending high-school.

The second set of data, which measured student opinions, were derived from a survey we developed and made available via SurveyMonkey to assess student perceptions and attitudes regarding their K-8 experience (Appendix C). This survey was made available to Peninsula School alumni currently enrolled in local high schools; and to their non-Peninsula School counterparts currently enrolled in local high schools, who took a different version of the same survey omitting the reporting of their STAR test results.

We collected the three sets of data in the following ways. First, the CST/ STAR test results were collected and aggregated for Peninsula School graduates from the SurveyMonkey survey designed especially to collect this information from Peninsula alumni. In the Peninsula School Alumni Survey, a page entitled "California Standardized Tests (CST/STAR) Section", asked them to specify the year they took the standardized tests and their scores by category (Advanced, Proficient, Basic, Below Basic, Far Below Basic).

The survey investigated three categories of STAR/CST test results: CST Summative High School Mathematics Score, CST English-Language Arts Score, and CST World History Score

These scores in each category were then compared with the publicly available CST/STAR results for the high schools participating in the survey, Menlo-Atherton High School and Summit Preparatory Charter High School.

Second, the SurveyMonkey website was utilized to administer the survey regarding student opinions of their K-8 preparation. Previously identified participants were notified by email of the survey address and invited to take the survey. The survey consisted of ten questions asked of all respondents, and allowed for “in-depth” branches if respondents answered “Strongly Agree” to certain questions, thus allowing for textual elaboration of those questions. The final survey question required a text response reporting, “How else does your K-8 experience guide you?” Results were reported to us through the SurveyMonkey reporting utility (Analyze Results), and imported to Excel spreadsheets. Text responses to the “in-depth” branching questions were imported as Adobe .pdf files and later combined into four tables to compare responses between groups for each question.

The SurveyMonkey surveys for both Peninsula School and non-Peninsula School alumni were approved by the Director of Peninsula School, by the Executive Director of Summit Preparatory Charter High School, by the Vice Principal for Instruction at Menlo Atherton High School, and by the San Jose State University Institutional Review Board (IRB).

Third, ten interview questions were addressed to adult Peninsula School alumni via interviews conducted by telephone, wherein we interviewed respondents directly and completed the interview questionnaires. The third set of data was gathered to assess adult alumni attitudes and perceptions regarding the influence of Peninsula School on their later academic and life

choices. The interview questions were developed by us and approved by the Director of Peninsula School and by the San Jose State University (IRB).

Data Collection Procedures

We conducted a mailing to Peninsula School alumni, who were identified from the school's alumni database according to graduation year, to invite and identify participants for both the SurveyMonkey survey and telephone interviews. Graduates from the years 1980-2000 were identified as candidates for the adult alumni telephone interviews. Graduates from the years 2006-2009 were identified as candidates for the high-school students' survey. Consent forms returned to us in self-addressed stamped envelopes identified willing participants, and these individuals were invited by email to take the SurveyMonkey survey, or contacted to be interviewed by telephone. We successfully enlisted twenty-five Peninsula alumni participants in each category; both adult interviewees and current high-school students.

We also procured support from staff members at Menlo-Atherton High School and Summit Prep High School to distribute consent forms to non-Peninsula alumni students. From the consent forms returned to the participating school, we successfully identified twenty five participants in the non-Peninsula high-school student category under investigation, nine from Menlo-Atherton High School, and sixteen from Summit Prep Charter High School. These students were invited by email to take the SurveyMonkey survey for their participating school group, and their responses were collected and aggregated by the SurveyMonkey utilities.

Data Analysis

The data collected from the Peninsula alumni regarding their CST/STAR results were imported directly into Excel spreadsheets. These STAR test results collected from the Peninsula School alumni were aggregated according to responses (%Advanced, %Proficient, %Basic,

%Below Basic, %Far Below Basic) and graphed in order to compare Peninsula with non-Peninsula student test results. Non-Peninsula CST/STAR results were collected from the publicly available data for the two schools involved in the non-Peninsula student survey, Menlo-Atherton High School and Summit Preparatory Charter High School. These results were entered into Excel spreadsheets and graphed with the Peninsula School alumni results for comparison of the three groups.

The second set of data collected from the SurveyMonkey survey regarding all participating high-school students' opinions of their K-8 experience were also aggregated by participating school and imported directly into Excel spreadsheets. Peninsula alumni opinions of their K-8 experience were compared with their non-Peninsula high-school peers and graphed by question for each of ten multiple choice/single answer questions. In the case of non-Peninsula participants, their responses were identified and disaggregated by participating high-school, and the graphs compare responses from three different participant groups; Peninsula School Alumni, Summit Prep High-School, and Menlo-Atherton High School. These survey questions required a single answer from among four multiple-choice selections (Strongly Agree, Agree, Disagree, Strongly Disagree) and the graphs depict the comparative responses for each question.

The "in depth" text responses to the four branching survey questions (permitted by a "Strongly Agree" answer to one of four specific questions) were imported into four tables to compare the text responses of Peninsula school alumni and non-Peninsula students.

The third data set, the Peninsula adult alumni interview questions, were evaluated for frequency of response, patterns of consistency or inconsistency of response, and for any particular emphasis or unusual perception. We were especially interested to discover and report any exceptional interview responses, either positive or negative perceptions. The responses were

grouped by question into tables for comparison and illustration of frequency and consistency of responses and emphases.

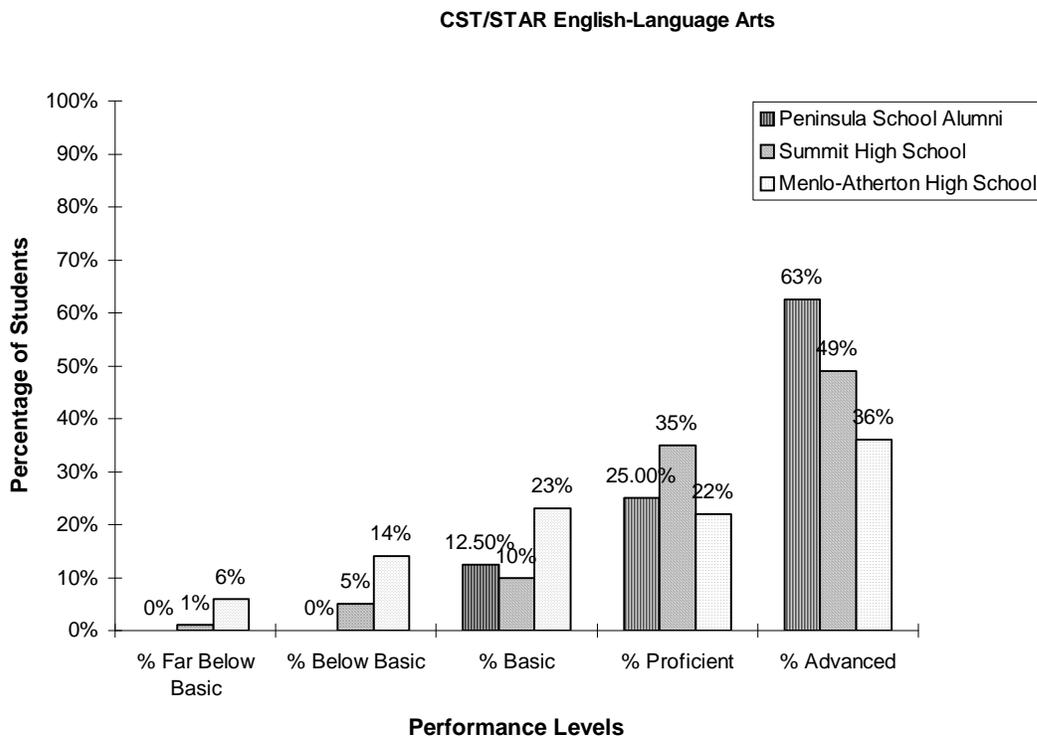
Chapter IV

Findings

What did the data derived from recent standardized tests given in high school (CST/STAR results) reveal about Peninsula School graduates as compared with public school K-8 graduates of the same age?

Peninsula graduates performances on the CST/STAR English-Language Arts test are higher than the performance of students who did not attend Peninsula School. Figure 1 illustrates the findings for the English-Language Arts category of the CST/STAR assessment.

Figure 1. English-Language Arts



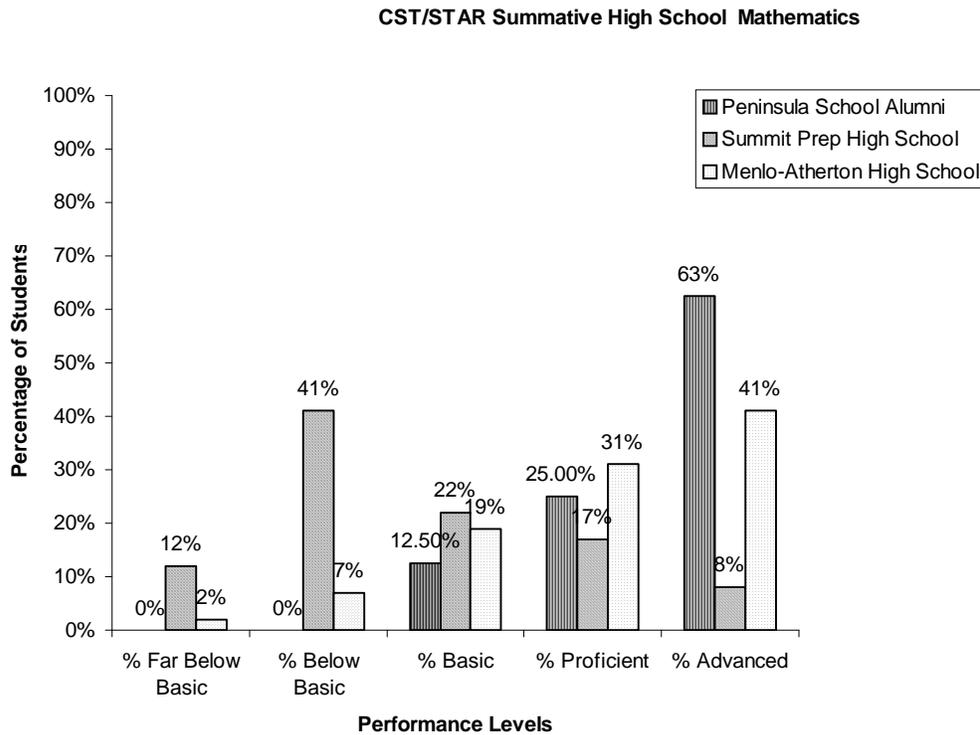
The data reveal that Peninsula School alumni achieved 88% aggregate rankings in the Advanced and Proficient categories, while 12.5% ranked in the Basic category. The high percentage (63%) of Peninsula graduates scoring in the Advanced range is greater than either of the two compared samples. There were no (0%) Peninsula School graduates in our research sample who scored in the Below Basic or Far Below Basic Categories.

These data for Peninsula School alumni show higher performance than the published CST/STAR results for Summit Preparatory Charter High School and Menlo-Atherton High School students. For Summit High School, the percentage of students scoring in the Advanced and Proficient categories was 84%, while only 49% scored in the Advanced range. Of the Menlo-Atherton students participating in the research, 58% scored in the Advanced and Proficient range, while only 36% scored in the Advanced range.

Notably, both of the participating high schools reported students scoring in the Below Basic and Far Below Basic categories, while no Peninsula alumni reported scores in these categories. For Menlo-Atherton high school the Below Basic and Far Below Basic categories constituted 20% of their students, while Summit High School had 6% reporting in these categories.

Figure 2 represents the findings for the Summative High School Mathematics category of the CST/STAR assessment.

Figure 2. CST/STAR Summative High School Mathematics



Again, as in the scores for the English-Language Arts test, the Peninsula alumni achieved scores exceeded those of their non-Peninsula peers. The high percentage (63%) of Peninsula graduates scoring in the Advanced range is notably greater than either of the two compared sample groups. Summit High School students reported 8% of all scores in the Advanced range, and Menlo-Atherton High School students reported 41% in the Advanced range.

Peninsula School alumni reported 12.5% of scores in the Basic category, but no scores in the Below Basic or Far Below Basic Category. Their peers at Summit and Menlo-Atherton High Schools reported scores in the Below Basic and Far Below Basic Categories at combined rates of 53% and 9% respectively.

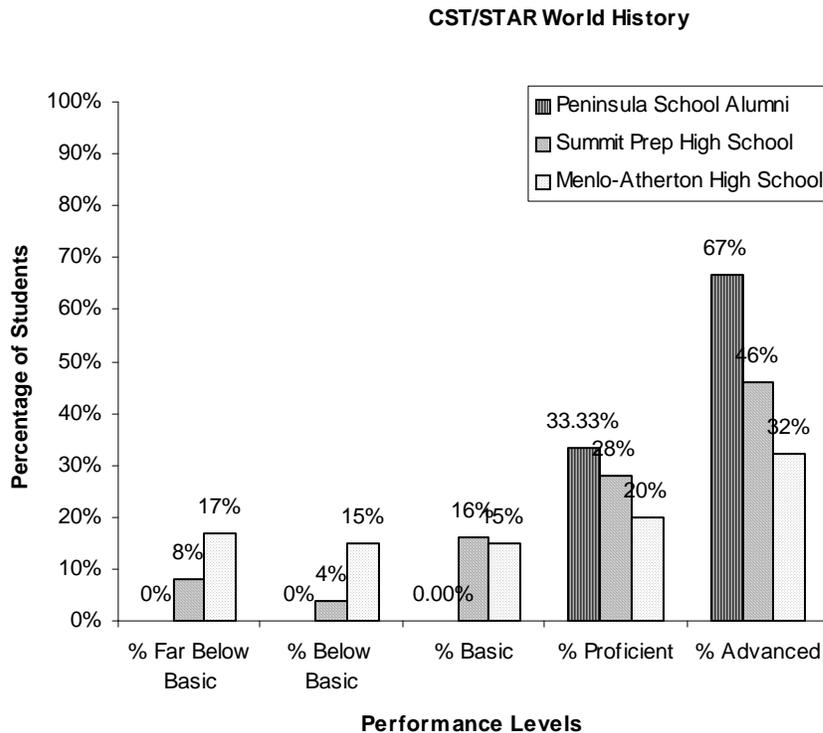


Figure 3 illustrates the comparative scores for the CST/STAR World History assessment. Again, as in the scores for the English-Language Arts and Summative High School Mathematics tests, the Peninsula School alumni achieved scores exceeding those of their non-Peninsula peers. All (100%) of the reporting Peninsula alumni achieved results in either the Advanced or Proficient categories. Of the two comparative schools, Summit High School students achieved a 64% combined score for the Advanced and Proficient categories, while Menlo-Atherton High School achieved a 52% combined score for these two categories.

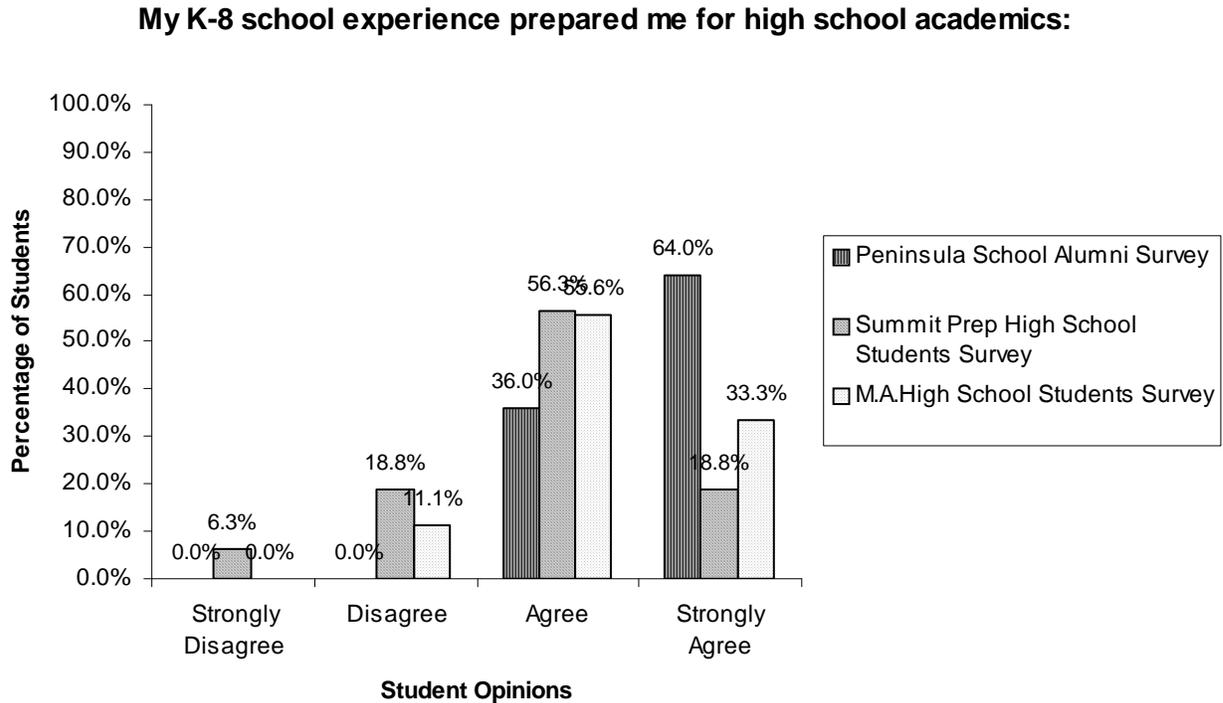
These data, derived from recent standardized tests given in high school (CST/STAR results) clearly show that Peninsula School graduates, as compared with public school K-8 graduates of the same age, perform at levels that exceed their peer counterparts in standardized assessments of English-Language Arts, Summative High School Mathematics, and World History.

What did the data derived from a survey of Peninsula School alumni currently in high school reveal about their academic subject preparation (i.e. math, science, arts, language arts, etc.) as compared with non-progressive school graduates attending the same high schools and responding to the same survey questions?

Our surveys and interviews showed that the judgment of Peninsula School graduates concerning their preparation for high school academics was exceptionally positive, especially in comparison with their non-Peninsula peers at Summit Prep Charter High School and Menlo-Atherton High School.

Figure 4 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools, regarding the statement, “My K-8 school experience prepared me for high school academics.”

Figure 4. Preparation for High School Academics

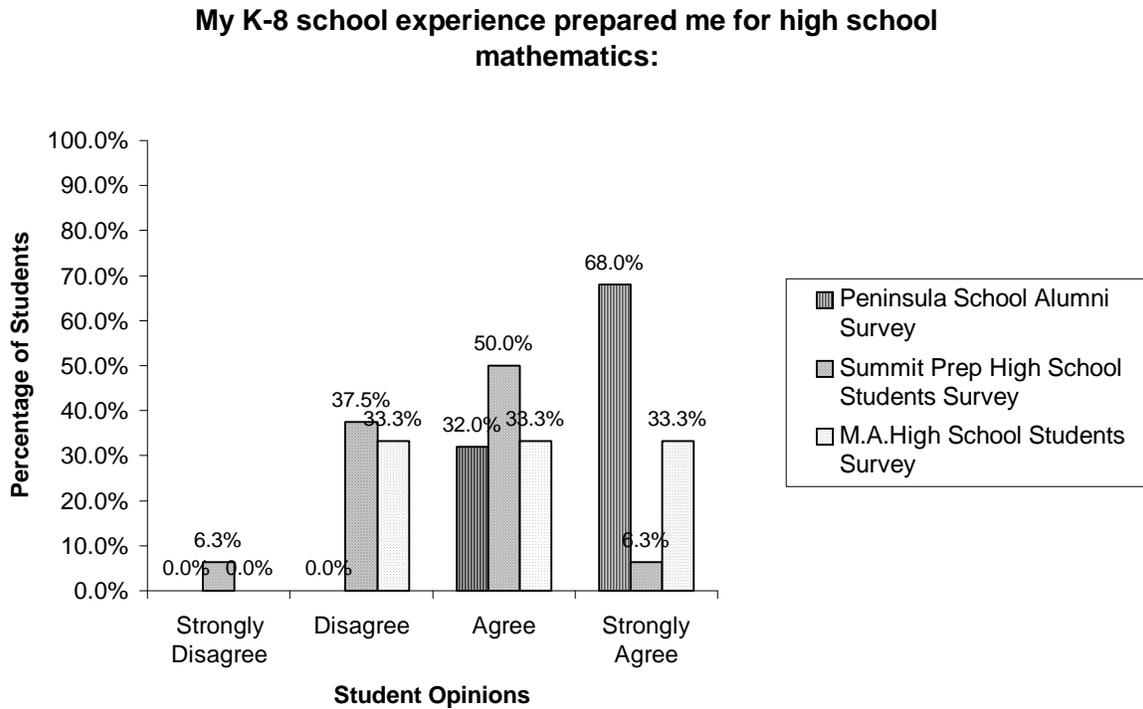


All (100%) of the Peninsula School graduates expressed their opinions in the positive Strongly Agree or Agree categories. In the two positive categories Strongly Agree and Agree, 75.1% of Summit High School students and 89.9% of Menlo-Atherton High School students affirmed their positive opinions. Of those who stated Strongly Agree, 64% of Peninsula School graduates compared conspicuously with their non-Peninsula peers, who affirmed 18.8% and 33.3% respectively in the Strongly Agree category.

For Summit High School, non-Peninsula students expressed a negative opinion (Disagree or Strongly Disagree) in 25.1% of all responses, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 experience in 11.1% of all responses. There was a 0% negative opinion among Peninsula alumni respondents of their K-8 academic preparation.

Figure 5 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “My K-8 school experience prepared me for high-school mathematics”.

Figure 5. Preparation for High School Mathematics

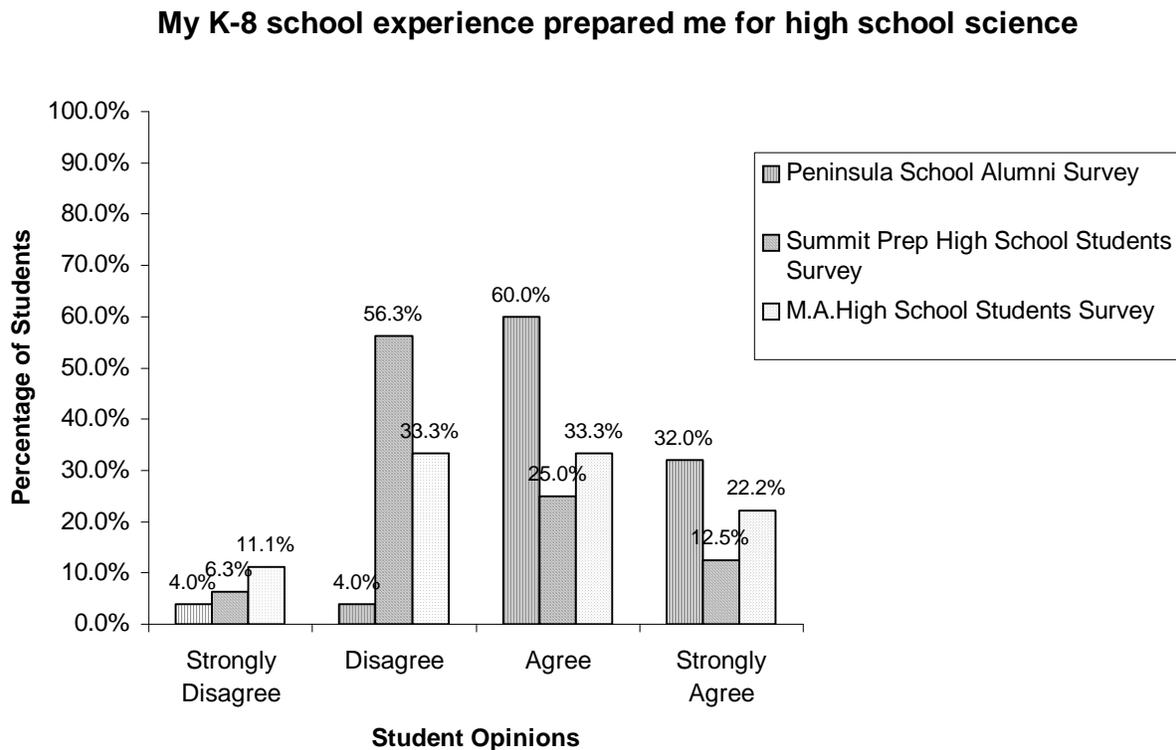


All (100%) Peninsula graduates expressed a positive opinion of their high school mathematics preparation, as stated in the Strongly Agree and Agree categories. There were no (0%) negative opinions of their K-8 experience among Peninsula alumni respondents. Summit High School students expressed positive opinions in 56.3% of their responses, while Menlo-Atherton High School students expressed positive opinions in 66.6% of their responses. Markedly, Peninsula alumni expressed a 63% Strongly Agree opinion, as contrasted with 6.3% and 33.3% Strongly Agree opinions of the comparing groups.

For Summit High School, non-Peninsula alumni students expressed a negative opinion (Disagree or Strongly Disagree) in 62.6% of all responses, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 experience in 11.1% of all responses.

Figure 6 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “My K-8 school experience prepared me for high school science.”

Figure 6. Preparation for High School Science

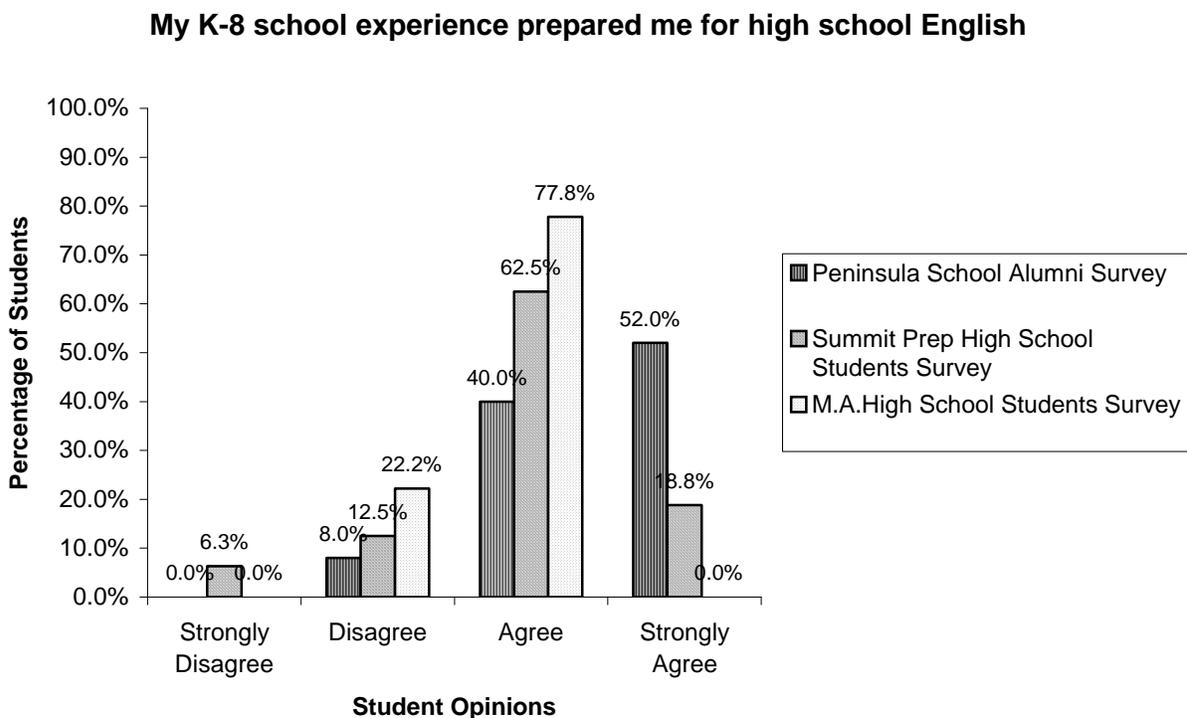


For this statement, 92% of Peninsula graduates expressed a positive opinion of their high school science preparation, as stated in the Strongly Agree and Agree categories. Summit High School students expressed positive opinions in 37.5% of their responses, while Menlo-Atherton High School students expressed positive opinions in 66.6% of their responses.

For Summit High School, non-Peninsula alumni graduates expressed a negative opinion (Disagree or Strongly Disagree) in 62.6% of all responses, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 experience in 11.1% of all responses. There was an 8% negative opinion of their K-8 science preparation among Peninsula alumni respondents.

Figure 7 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “My K-8 school experience prepared me for high school English.”

Figure 7. Preparation for High School English



For this statement, 92% of Peninsula graduates opinion of their high school English preparation, as stated in the Strongly Agree and Agree categories. Summit High School students expressed positive opinions in 81.3% of their responses, while Menlo-Atherton High School students expressed positive opinions in 77.8% of their responses.

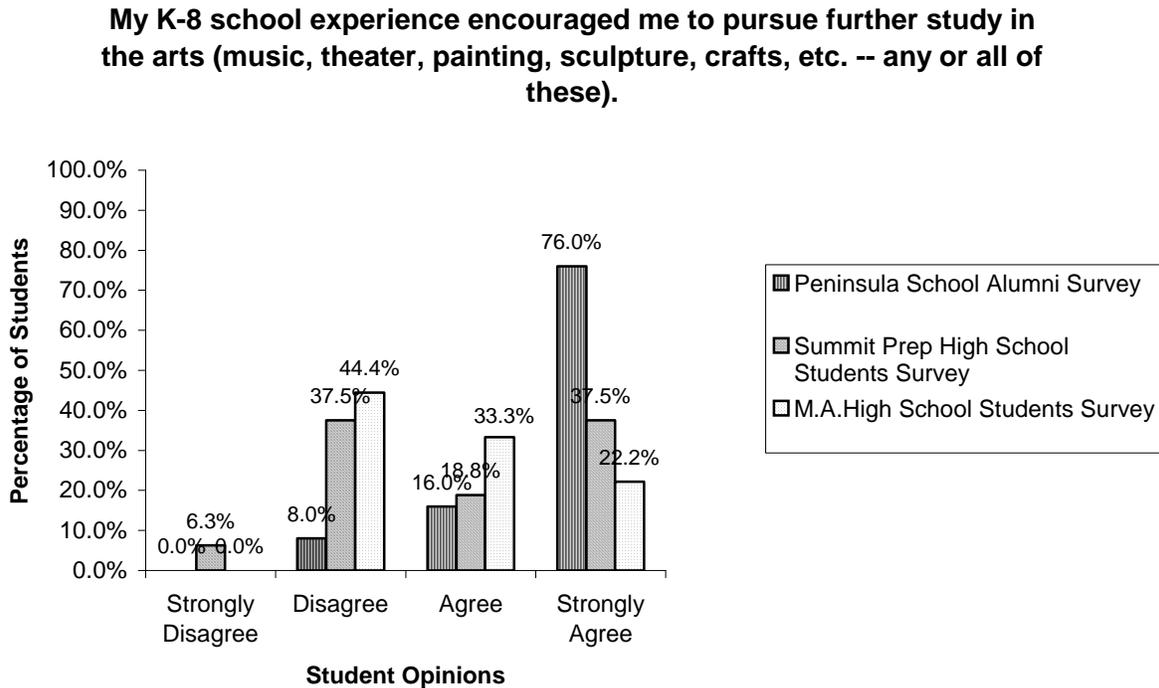
Peninsula graduates expressed a Strongly Agree opinion in 52% of all responses, compared with 18.8% Strongly Agree opinions among Summit High School non-Peninsula respondents, and 0% among Menlo-Atherton High School non-Peninsula respondents.

For Summit High School, non-Peninsula students expressed a negative opinion (Disagree or Strongly Disagree) in 18.8% of all responses, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 experience in 22.2% of all responses.

There was an 8% negative opinion among Peninsula alumni respondents of their K-8 science preparation.

Figure 8 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “My K-8 school experience encouraged me to pursue further study in the arts (music, theater, painting, sculpture, crafts, etc. -- any or all of these).”

Figure 8. Encouragement of Further Arts Study



For this statement, 92% of the Peninsula graduates opinion of their encouragement of further arts study, as stated in the Strongly Agree and Agree categories. Summit High School students expressed positive opinions in 56.3% of their responses, while Menlo-Atherton High School students expressed positive opinions in 55.5% of their responses.

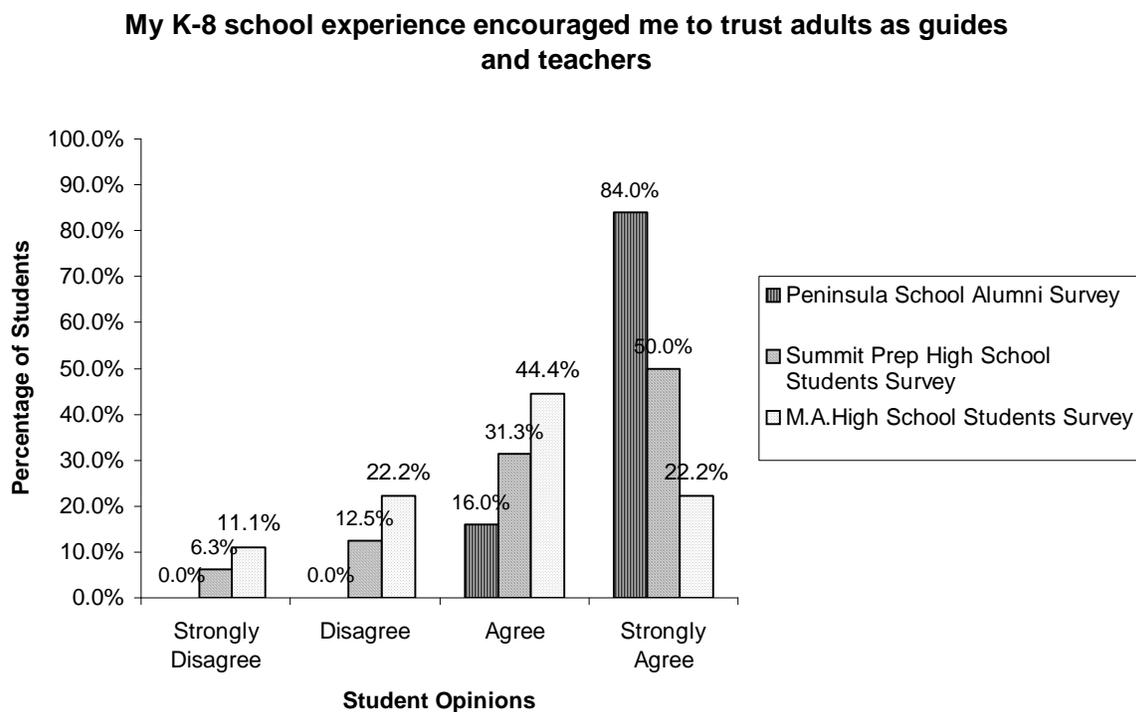
Peninsula graduates expressed a Strongly Agree opinion in 76% of all responses, compared with 37.5% Strongly Agree opinions among Summit High School non-Peninsula respondents, and 22.2% among Menlo-Atherton High School non-Peninsula respondents.

For Summit High School, non-Peninsula students expressed a negative opinion (Disagree or Strongly Disagree) in 43.8% of all responses, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 encouragement in 44.4% of all

responses. There was an 8% negative opinion among Peninsula alumni respondents of their K-8 encouragement for further arts study.

Figure 9 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “My K-8 school experience encouraged me to trust adults as guides and teachers.”

Figure 9. Encouragement to Trust Adults as Guides and Teachers



One hundred percent (100%) of the Peninsula graduates expressed positive opinion of their encouragement to trust adults as guides and teachers, as stated in the Strongly Agree and Agree categories. Summit High School students expressed positive opinions in 81.3% of their responses, while Menlo-Atherton High School students expressed positive opinions in 66.6% of their responses.

Peninsula alumni expressed a Strongly Agree opinion in 84% of all responses, compared with 50% Strongly Agree opinions among Summit High School non-Peninsula respondents, and 22.2% among Menlo-Atherton High School non-Peninsula respondents.

For Summit High School, non-Peninsula alumni expressed a negative opinion (Disagree or Strongly Disagree) in 18.8% of all responses, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 encouragement to trust adults as guides and teachers in 33.3% of all responses.

A response of Strongly Agree to this statement prompted the following open question to the respondents: "What experience can you remember that was "most" helpful in allowing you trust adults as teachers and guides?" Table 1 illustrates the text responses to this question by school.

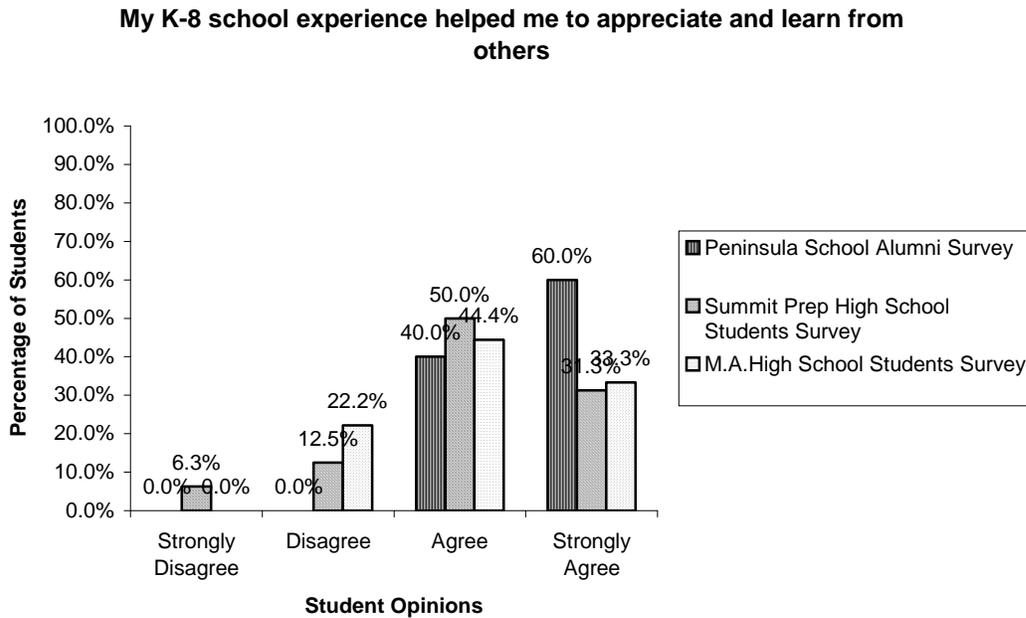
Table 1. Response to Survey Question 7 (What experience can you remember that was "most" helpful in allowing you trust adults as teachers and guides?)

Response Number	Response Text
Peninsula School Respondents	
1	Getting private time with teachers, in particular my 8th grade teacher.
2	There were too many times to count when I experienced my increase in trust for teachers as guides. Whenever I'd go to any of my teachers with a question or a problem, I always knew I was guaranteed support. Even if I was in a "sticky situation" I knew that I'd get help and they would always try to do what was best for me.
3	I don't have a specific example, but in general all the teachers at my school trusted us. When they are honest and trusting to you, you feel like doing the same thing for them.
4	Realizing that teachers were able to assist me in almost every situation, because it was quite probable they had seen or experienced that situation before.
5	The respect that I felt from and had for all teachers. This was something that was present every day.
6	Being allowed to have a close relationship with my teachers encouraged me to trust adults, because it eliminated the fear they can instill when you are in middle school. I was able to get past that fear and think of them and trust them as equals.
7	Being able to get to know all of our teachers personally.
8	Camping trips are amazing student and teacher bonding experiences. Also

	hanging out with close friends that I made at Peninsula and getting to know and trust their parents has helped me to trust adults.
9	What experience at Peninsula? There was no one experience; it was about our entire trust based relationship between students and teachers.
10	Calling teachers by their first name makes it seem less of a power discrepancy and more intimate and trusting.
11	Most certainly my time with my Algebra teacher (And 6th grade teacher). He helped me find that math was not just a chore, but could be fun.
12	To get out of retaking algebra at summit, we had to take an algebra test. I was freaking out the day of the test because I really wanted to pass. I went to Jerry and he sat down with me until I felt confident with every concept that was going to be on the test. While taking the test I applied all of those concepts that I didn't know before. With Jerry's help, I passed.
13	Teachers being like equals and friends to me all throughout Peninsula.
Summit Preparatory Charter High School Respondents	
1	Mainly in middle school, they really cared about their students. They taught me to advocate for myself mainly.
2	My teacher was so dedicated to my learning.
3	I remember adults being there for me, as a student. They were helpful whenever I had questions or concerns, and I think the fact that I had good relationships with adults and teacher early in my education contributed to my trusting of adult figures now.
4	Just that the teachers would always tell us the truth. They would never lie to us. They told us all the good and bad thing that had happened in the school. No matter how hard it was for them to explain, they still told us.
5	The most helpful experience that helped me trust adults were when we went to Washington DC as a grade. I got to know my teachers better, and that helped me trust them more.
6	Our school was small and I was able to go in and just talk to teachers about problems and they would be there for me.
7	Talking with teachers about problems.
8	Teachers were always willing to help.
Menlo-Atherton High School Respondents	
1	My 8th grade science teacher always talked about life and important emotions, she emanated a caring attitude that made me want to trust her with my thoughts.
2	The experience that I remember is that it is okay that you can trust your teachers on letting them know if you have a problem at school.

Figure 10 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “My K-8 school experience helped me to appreciate and learn from others.”

Figure 10. Help to Appreciate and Learn From Others



One hundred percent (100%) of Peninsula graduates expressed positive opinions of their encouragement to appreciate and learn from others, as stated in the Strongly Agree and Agree categories. Summit High School students expressed positive opinions in 81.3% of their responses, while Menlo-Atherton High School students expressed positive opinions in 77.7% of their responses.

Peninsula alumni expressed a Strongly Agree opinion in 60% of all responses to this statement, compared with 31.3% Strongly Agree opinions among Summit High School non-Peninsula respondents, and 33.3% among Menlo-Atherton High School non-Peninsula respondents.

For Summit High School, non-Peninsula students expressed a negative opinion (Disagree or Strongly Disagree) in 18.8% of all responses, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 help to appreciate and learn from others in 33.3% of all responses.

A response of Strongly Agree to this statement prompted the following open question to the respondents: “What experience can you remember that was "most" helpful in allowing you appreciate and learn from others?” Table 2 illustrates the text responses to this question by school.

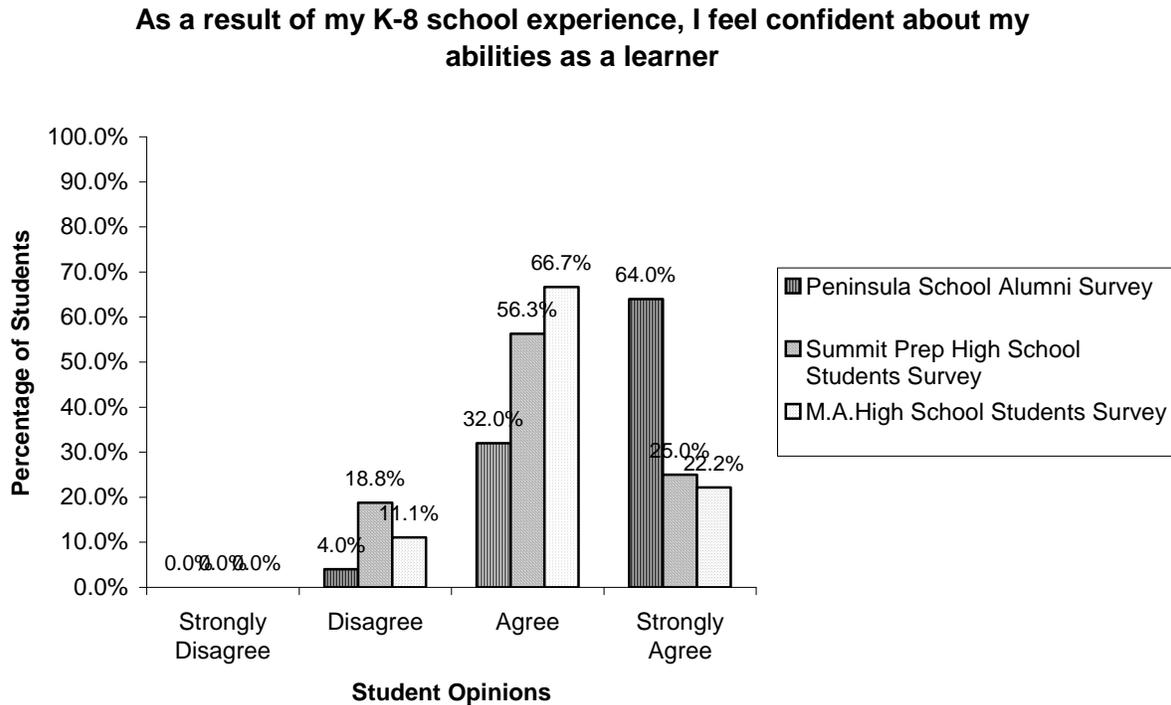
Table 2. Response to Question 9 (What experience can you remember that was "most" helpful in allowing you appreciate and learn from others?)

Response Number	Response Text
	Peninsula School Respondents
1	We had small meetings at the end of the day and kids got a chance to talk about their lives and experiences. It brought us closer and let me learn from others and understand them better.
2	I particularly remember one time in science class when we had to do something with graphing (a personal weakness). I didn't understand how to do it at all, but my group pulled through just fine because with my classmates' help I was able to understand what to do.
3	There was a very strong sense of community in my class. This helped me appreciate and learn from others.
4	In Peninsula I was encouraged to work with the others in my class, as well as ask them if I needed help. This helped me because I could comfortably use my friends as a resource, and sometimes they can explain a concept in a way I can understand, when the teacher does not.
5	The fact that getting along with others was taught a lot and encouraged
6	The kindness of teachers at Peninsula gave me a sense of respect for them, and respect for others has taught me to open my eyes and learn from others, because they always have something to teach you.
7	At Peninsula we learned respect for our peers and what they had to offer. This respect continued throughout my education.
8	Musical learning is a constant stream of learning from others through interaction.
9	I remember in Garv's we would write stories every other week and read them aloud to the class on Fridays. I was always nervous when my turn came around, but it was always awesome to hear my classmates' stories, and listen to their creative approaches. It taught me that anyone can surprise you with a wonderful creative idea
10	When my entire class would work together as a group to plan a camping trip or decide what we do for P.E
11	I loved playing music with friends - it was really cool to pick songs together, figure out ways to arrange the songs, then make the music together.
12	None in particular, just being taught to be open to learning.

13	We did lots of things together. It was natural to work together on projects. We also talked about books and art together
Summit Preparatory Charter High School Respondents	
1	I was around kids of all ages and so I learned to appreciate them and what they taught me
2	When we had to work in teams to identify chemicals in science class, it helped improve our teamwork and how we listened to other people's ideas.
3	Kids usually trust each other more than adults. I worked on plays and stuff with my classmates. I had lots of friends.
4	I had lots of friends and we helped each other. I think friends are really important to have.
Menlo-Atherton High School Respondents	
1	This girl I used to be friends with used to make very VERY bad decisions and after we stopped talking to each other I realized I didn't want to make those choices
2	Well, it is nice to talk to people and be friendly with others so that you can't have no problems with nobody.
3	Teachers helped me to trust again.

Figure 10 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “As a result of my K-8 school experience, I feel confident about my abilities as a learner.”

Figure 10. Confidence About Abilities as a Learner



For this statement, 96% of Peninsula alumni expressed confidence in their abilities as learners, as stated in the Strongly Agree and Agree categories. Summit High School students expressed positive opinions in 81.3% of their responses, while Menlo-Atherton High School students expressed positive opinions in 88.9% of their responses.

Peninsula graduates expressed a Strongly Agree opinion in 76% of all responses, compared with 25% Strongly Agree opinions among Summit High School non-Peninsula respondents, and 22.2% among Menlo-Atherton High School non-Peninsula respondents.

For Summit High School, non-Peninsula students expressed a negative opinion (Disagree or Strongly Disagree) in 11% of all responses to this statement, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 experience in 44.4% of all responses. There was a 4% negative opinion among Peninsula alumni respondents of their K-8 encouragement of confidence as learners.

A response of Strongly Agree to this statement prompted the following open question to the respondents: “What experience can you remember that was "most" helpful in improving your abilities as a learner?” Table 3 illustrates the text responses to this question by school.

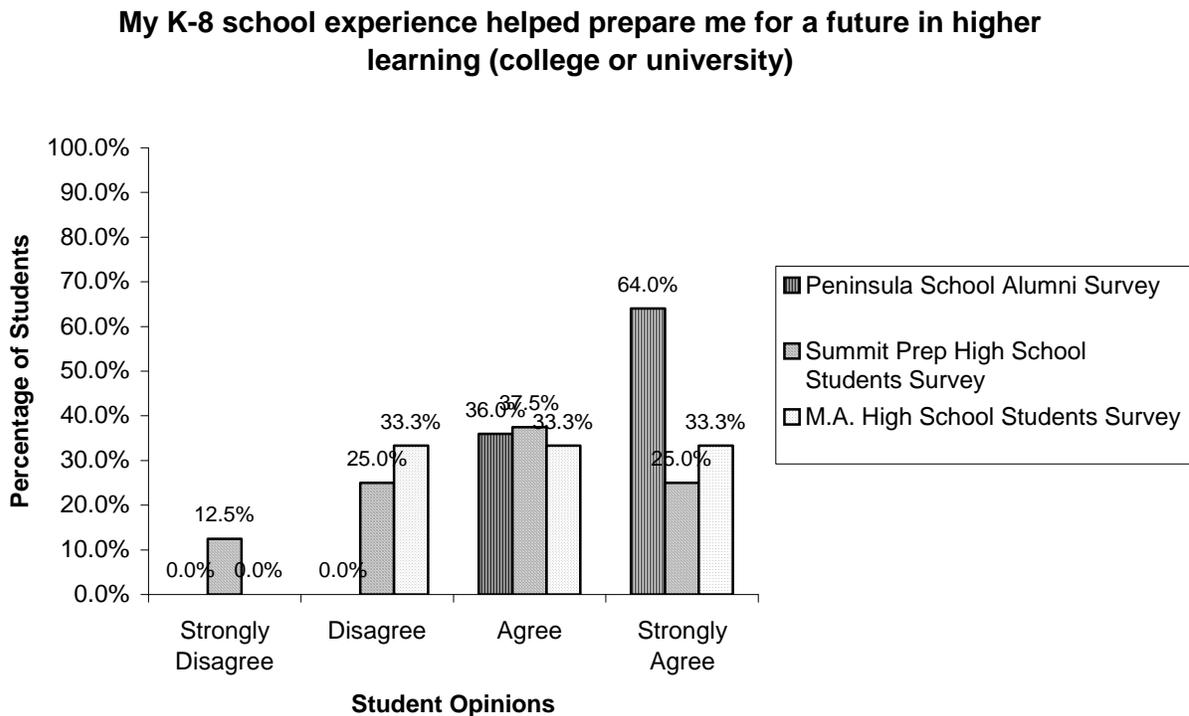
Table 3. Response to Survey Question 11 (What experience can you remember that was "most" helpful in improving your abilities as a learner?)

Response #	Response Text
Peninsula School Respondents	
1	We had the opportunity to choose a few special learning activities throughout the year, called Choice, and this allowed me to experience things I wouldn't have learned otherwise and get in depth in the subjects.
2	My 8th grade math teacher showed me that my ability to learn was up to me. He would put the answers to the test up on the board so that we could check our selves when we were done. He made it very clear that we could cheat but then we just would not learn and we would not be ready for high school.
3	My success in 8th grade math and the general focus on learning rather than testing improved my abilities as a learner.
4	The teaching style
5	I am eager to listen and learn what a teacher has to tell me in class, because learning was always presented as something fun at Peninsula. School was not just a place where I had to memorize useless facts, it was a place that I could gain more knowledge about the world and my surroundings, and I went to school every day eager to learn.
6	The modest amount of homework and assignments given at Peninsula allowed me to get a good understanding of the material. Without the pressure of many hours of homework, deadlines, and grades, it became much easier to focus on actually learning the material.
7	Recognizing my methods and style of learning, how they vary from others, and how I can use the resources of a school to maximize my abilities.
8	Math and English in 8th grade were great
9	In Roger's when every day he would sit us down and lecture us about some aspect of life for an hour. It made me open to learning new information, and looking at it from every angle.
10	Me and my friends studying after school and having fun with it
11	At Peninsula, the teachers are always encouraging and they encourage different kind of strengths
12	Jerry was amazing teaching history -- he taught in a way that made me really interested. It was easy to remember and want to think about the history he taught. Barb was so helpful teaching me math. Garv made history really fun. Lynn helped me a lot with English. Peninsula teachers made me feel I could really learn and be interested in their subject.
Summit Preparatory Charter High School Respondents	

1	My whole middle school experience because it was a school for students with learning differences and they made me realize that I can really advocate.
2	When we had to work in teams to identify chemicals in science class, it helped improve our teamwork and how we listened to other people's ideas.
3	On the first day of every year, our teachers gave us a test which helped find out which kind of learner we were, that helped us all see which ones we like to learn from.
4	Challenging me
Menlo-Atherton High School Respondents	
1	In 8th grade I had to go in at recess almost everyday to ask a ton of questions about the algebra homework for the previous night

Figure 11 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “My K-8 school experience helped prepare me for a future in higher learning (college or university)”

Figure 11. Preparation for Higher Learning



For this statement, 100% of Peninsula graduates expressed a positive opinion of their confidence as learners, as stated in the Strongly Agree and Agree categories. Summit High

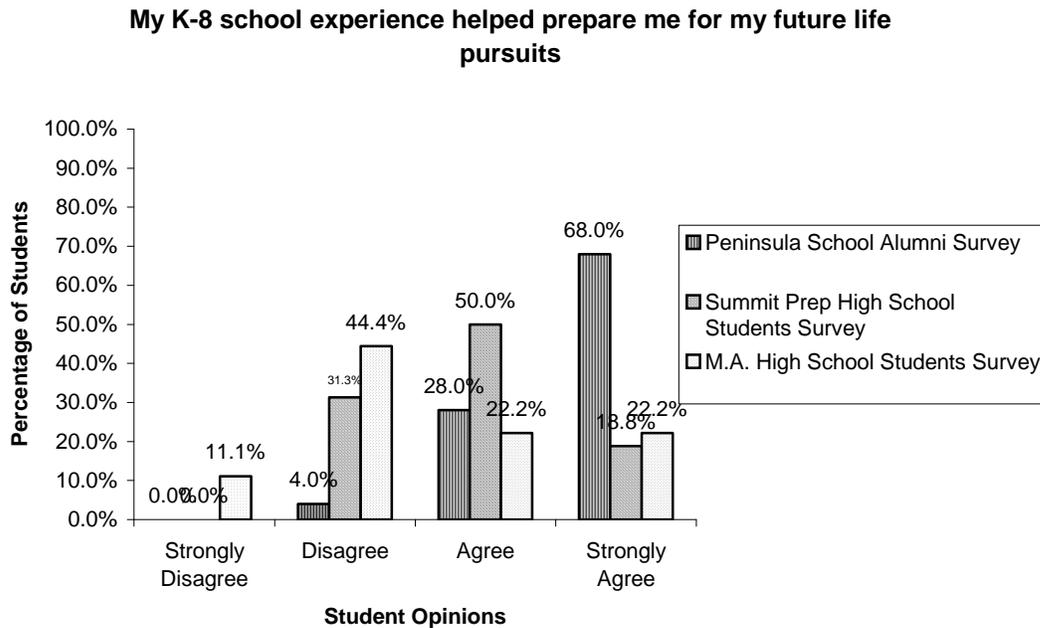
School students expressed positive opinions in 62.5% of their responses, while Menlo-Atherton High School students expressed positive opinions in 66.6% of their responses.

Peninsula graduates expressed a Strongly Agree opinion in 64% of all responses, compared with 25% Strongly Agree opinions among Summit High School non-Peninsula respondents, and 33.3% among Menlo-Atherton High School non-Peninsula respondents.

For Summit High School, non-Peninsula students expressed a negative opinion (Disagree or Strongly Disagree) in 37.5% of all responses to this statement, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 experience in 33.3% of all responses.

Figure 12 illustrates the comparative opinions of Peninsula School alumni and their non-Peninsula counterparts studying at the participating high schools regarding the statement, “My K-8 school experience helped prepare me for my future life pursuits”.

Figure 12. Preparation for Future Life Pursuits



For this statement, 96% of Peninsula graduates expressed a positive opinion of their preparation for their future life pursuits, as stated in the Strongly Agree and Agree categories.

Summit High School students expressed positive opinions in 68% of their responses, while Menlo-Atherton High School students expressed positive opinions in 44.4% of their responses.

Peninsula graduates expressed a Strongly Agree opinion in 68% of all responses, compared with 18.8% Strongly Agree opinions among Summit High School non-Peninsula respondents, and 22.2% among Menlo-Atherton High School non-Peninsula respondents.

For Summit High School, non-Peninsula students expressed a negative opinion (Disagree or Strongly Disagree) in 31.3% of all responses to this statement, while non-Peninsula Menlo-Atherton High School students expressed a negative opinion of their K-8 experience in 55.5% of all responses. There was a 4% negative opinion among Peninsula alumni respondents of their K-8 preparation for future life pursuits.

The final survey question asked all high school student participants to reflect, “How else does your K-8 experience guide you?” Table 4 illustrates the text responses to this question by school.

Table 4. Response to Survey Question 14 (How else does your K-8 experience guide you?)

Respondent Number	Response Text
Peninsula School Respondents	
1	It made me very optimistic in life because of the way that Peninsula teaches.
2	Everyday at public school I'm surrounded by cliques, and social groups. When I came to Gunn in my freshman year I had various opportunities to be part of one of those groups, but Peninsula made me realize how having a bunch of expensive clothes and some pretty friends would not make me happy. So instead I hang out with people who are accepting of everyone. I had a unique experience at Peninsula, and it had its ups and downs. But I wouldn't trade it for the world, because I'm so happy with the person it made me.
3	I was encouraged to do art and music by the programs that were offered. I also could play basketball on the team even though I was not very good, because Peninsula does not exclude people.
4	It did not overwhelm me with work, allowing me to appreciate the courses for what they were, instead of disliking them because of the workload.
5	It did not overwhelm me with work, allowing me to appreciate the courses for what they were, instead of disliking them because of the workload.
6	Morality
7	It has made me more aware of what kind of a future I may want, because all the freedom in self-discovery they allow you. I was always strongly encouraged to pursue any interest that I had, and my teachers and friends supported me in every way they could.
8	It gave me many general life skills
9	My experiences at Peninsula taught me sympathy and the ability to see from other people's points of view. It taught me to gather information and form my own opinions and thoughts as opposed to just accepting what anyone else tells me.
10	This is what I wrote my 5-page college essay on and cannot be summed up in 100 words.
11	Morally I feel that I make correct decisions thanks to many of the philosophical and theoretical class discussions
12	It helps me be confident in myself.
13	My K-8 experience will most likely have little effect on my life. I was only at Peninsula School for 3 years.
14	It has given me an outlook on life that a lot of people don't have. It has

	taught me that life can be beautiful and there are always people who want to love and support you
15	It taught me how to trust teachers and friends.
16	I feel that it has made me more open to other peoples' opinions
17	Taught me to always try my best to do my work
18	I felt very encouraged at everything I did, and I was interested in pursuing different things.
19	At Peninsula I could not be shy -- there was no hiding out, people would find you and be friendly.
20	I am not afraid to speak up for what I believe in.
21	It makes me interested in lots of things. I think I can learn about anything I want to.
22	It made me confident about my talent and willing to take chances in art
23	It made me curious about lots of things. Peninsula really shaped the way I think and act.
24	I think I can do anything I want to in education. Peninsula made me appreciate my own abilities and to have tolerance and empathy for others.
25	I realize I had a kind of unique experience, where I felt good about school and what we were doing. It made me much more positive in my outlook than some of my friends.
	Summit Preparatory Charter High School Respondents
1	That's about it
2	I have a grounding of character along with schooling
3	I went to Waldorf, mainly focused on art. But looking back it has not helped me
4	It helps me realize that all children are different and unique, some require different needs. And I have come to appreciate everyone for who they are
5	The teachers knowing our different abilities to teach us and learn
6	I remember all of the rules that my teachers had and put them to use, because they all had good reasoning behind them.
7	My k-8 school helped me grow and stand up for myself if I needed something.
8	It doesn't -- except some funny memories. I guess it helped me, but I couldn't say how.
9	I think I might forget about it. It wasn't a really good memory.
10	To be independent.
11	It prepared me to be a contributing member of society.
12	Taught me what not to be.
13	It could have been better if I applied myself. I wasn't that interested and we moved a lot.
14	My k-8 helped me understand that college and a good career is very important so I want to do that
15	We moved and I had some bad experiences. Teachers didn't give a ****
16	I guess I'm a better student because I did try to get good grades. Otherwise ???

Menlo-Atherton High School Respondents	
1	It helped me to be a better person and to not slack off. Also, it taught me that education is the key to success.
2	It helped me realize what I really enjoy doing
3	It guides me by thinking things before I take actions.
4	It guides me to learn more in school.
5	It taught me what I DON'T want in my life. Lots of rules and people who don't care.
6	It helped me prepare myself and have my guard up for high school. It helped me mature a bit more and learn that we are here to learn and study and have a career
7	To help me make my choice
8	It doesn't
9	It guides me to forget about it

What was the perception of Peninsula School graduates, both high school students and adults, regarding the influence of their experience at Peninsula? How well did they consider they were prepared for learning; how did the Peninsula progressive curriculum influence their trust for adults as guides and teachers; how did it influence their abilities to learn from others; and how did their Peninsula experience affect their later careers and interests?

Our interviews with adult Peninsula School alumni showed that the judgment concerning their preparation for high school academics was exceptionally positive. Our findings derived from the interviews showed that Peninsula School alumni felt that their K-8 experience helped to shape who they have become as adults and the choices they have made in their lives.

Peninsula alumni felt that they have a strong sense of self, and enjoy learning to this day. These former students learned collaboration, problem solving skills, and thought of teachers as trusting friends who trusted them as learners. Alumni were found to be adventurous, risk takers, engaged with science, math, reading, and writing, enjoyed appreciating and experiencing the arts, and were appreciated for who they were as unique individuals. What they were able to gain from their Peninsula experience is a strong love of learning, a desire to work for social justice, and to use their time creatively in their careers as well as for personal fulfillment.

In the areas of math, science, and formal writing skills, some interviewees felt these were weak areas in their primary school experience. However, as we have shown by the responses from students presently in high school, these gaps have been addressed and continue to be addressed and improved on by the present staff at Peninsula. Even with these gaps for some alumni, many former students went on to excel in high school, taking AP classes as well as excelling in their college experiences.

Table 5 illustrates the opinions of adult Peninsula School alumni regarding the question, “What is your overall perception regarding the significance of your experience at Peninsula School on your later career and life choices?” In answer to this question regarding college, career, and life choices, more than one-third of all interviewees felt that their Peninsula School experience had inspired them to be lifelong learners, and to take risks with their higher education choices. One-fourth of those interviewed felt that social justice and science were important in their school experience and present life choices. Half of those interviewed viewed community, collaboration, reading and writing, the arts, and relationships as significant in their later life choices.

Seven of the twenty-five alumni interviewed chose to become teachers. Six others chose careers in law with a social justice emphasis, science, and psychology. Three chose careers in business and finance. The majority of respondents expressed happiness in their chosen life path, and most expressed that they continue to study and grow into adulthood.

More than one-third of those responding conveyed that their teachers at Peninsula were strong and positive role models who inspired them in their later life choices and helped to encourage them to have a positive self-concept. Two respondents felt their experience at Peninsula had either had no impact on their life, or had been negative. However, upon further

discussion in the interview it was clear from both of these interviewee's responses that, in fact, they both had many positive things to say about Peninsula's impact on their lives, including connecting with a teacher who mentored them through hard situations, and realizing later in life that their primary school experience colored many of the choices they made.

Table 5. Response to Interview Question 1 (What is your overall perception regarding the significance of your experience at Peninsula School on your later career and life choices?)

Interview Response Text	Number of respondents who said this was important
Inspired lifelong learning I learned the love of learning. I was inspired to try new things and take risks with my higher education and life choices in general.	8
Encouragement of social justice Social Justice is very important to me.	4
Inspired me to be a teacher Teachers at Peninsula modeled a passion about the profession of teaching. This inspired me to want to give back and become a teacher	7
Influenced most everything I do.	8
I gained self confidence	6
I developed a positive self concept	6
I have a strong interest in writing, reading, and books	6
I had positive relationships with my teachers	7
Relationships and community are an important part of my life.	10
I learned collaboration	10
My experience impacted my life choices	8
Developed my interest in art	10
Developed my interest in Science	5
Peninsula experience is fundamental to who I am	5
I learned to explore many subjects, experience different things, and take risks.	5
Creativity is important to my life	5
The experience at Peninsula had no impact on my life	2

Table 6 illustrates the opinions of adult Peninsula School alumni regarding the question, “How do you feel about the lack of formal academic assessment and measurement at Peninsula School?”

A consensual majority of the respondents to this question felt a lack of formal assessments was not a problem for them. They also felt that because they did not have the stress of testing that they were not “burned out” like their non- Peninsula classmates. One fifth of the alumni interviewed felt they had initial anxiety about this, but soon found they could take the tests required in high school and do well. Three out of the twenty-five respondents wished that they had been given a few more opportunities to experience tests at Peninsula. A majority of alumni felt that having feedback through teacher-student one-on-one meetings and conferences provided them with an opportunity to work with their teachers to gain knowledge and understanding about how they best could learn and improve. Four out of the twenty-five stated that because the structure of their Peninsula experience provided them with a lot of options for learning they felt comfortable with and ready to take on the more formal structure of high school. Four out of the twenty-five stated that because they hadn’t had this kind of structure they did not get caught up with it in high school.

Table 6. Response to Interview Question 2 (How do you feel about the lack of formal academic assessment and measurement at Peninsula School?)

Interview Response Text	Number of respondents who said this was important
Didn’t affect me. Not a problem.	10
I wasn’t burned out like my non-Peninsula classmates	7
I wish we would have had a few tests to get ready for high school.	1
Initially this caused me anxiety, but I soon got over it. This made me who I am. Transition was hard, but I found that I had the tools.	4
Helped me to be strong about meeting new challenges.	3
I liked the teacher conferences better than tests.	6

This gave me a sense that formal assessment wasn't a reason to learn.	3
Went to high school and enjoyed the structure because I hadn't had as formal a structure in my elementary experience.	4
Because I hadn't had it, I didn't get caught up in it.	4
I think that it's much better to do formal testing in high school.	4
This helped me to be self motivated.	5

Table 7 illustrates the opinions of adult Peninsula School alumni regarding the question, “Do you think that Peninsula School prepared you for high school and college and beyond? Why or why not?”

Thirteen out of the twenty-five alumni interviewed felt that they were definitely prepared for high school, and that they felt valued as a person. Ten out of the twenty-five said they felt prepared to learn, and if they did not know something they knew how to ask and get help. Ten of the respondents expressed that they felt joy in what they were being taught, and that they felt that their teachers were collaborators, helpers, and friends who they could trust and who trusted them. Eight out of twenty-five felt supported in developing their intrinsic motivation, and were prepared for Algebra. Seven out of the twenty-five stated that they had learned critical thinking skills. One person felt that Peninsula had prepared her socially and emotionally, and that her high school prepared her academically. Another felt that nothing in his experience compared after Peninsula, “Everything else has felt like a let down.” One alumnus felt totally prepared for each step she had to take, and another felt that at Peninsula you were supported for whatever choice and step you would take next. This did not necessarily mean college after high school. Some alumni have taken time to have adventures, travel, and experiment with different life choices.

Table 7. Response to Interview Question 3 (Do you think that Peninsula School prepared you for high school and college and beyond? Why or why not?)

Interview Responses	Number of respondents who said this was important
Yes definitely!	13
I felt valued as a person	13
I learned joy in the content of what I was being taught.	10
My teachers were collaborators, helpers, and friends.	11
Peninsula prepared me for life.	3
In some ways yes, and some ways no	1
Freedom and independence were encouraged.	8
I was weak in grammar.	4
I was weak in formal writing skills (writing essays)	4
I learned intrinsic motivation	8
I felt ready to be engaged in the next step in my life	8
I felt prepared in how to learn, and if I didn't know something, how to ask for help.	10
Some friends didn't go to college, but they didn't want to go. If you're college driven, you'll make it fine. If you're not, you're not.	1
Peninsula prepared me socially and emotionally, high school prepared me academically.	1
I learned the value of learning, not just jumping through hoops like I saw non-Peninsula kids doing.	3
I learned critical thinking	7
I was prepared for Algebra	8
I was excited to get to high school. Each step I took prepared me for the next.	1
No it didn't. Nothing was ever as good after Peninsula. It was like a utopia. Everything else was a let down afterwards.	1

Table 8 illustrates the opinions of adult Peninsula School alumni regarding the question, “How did your experience at Peninsula School affect the way you learn?”

The widely held response to this question was very positive. Half of the respondents stated that Peninsula definitely affected the way they learn; “I learned to be motivated by internal things”, and “I was working from my own interests. This continued into high school and college.” Five alumni out of the twenty-five felt that Peninsula made them who they were, and that they wanted the work that they engaged to have meaning. They also felt that they began to

learn about their own learning style and what was important to them. This was a kind of self-discovery that was encouraged in their Peninsula experience. About one-fourth of all respondents expressed that it wasn't until they attended college that they really felt allowed to blossom into the person they felt they were becoming at Peninsula.

Table 8. Response to Interview Question 4 (How did your experience at Peninsula School affect the way you learn?)

Interview Responses	Number of respondents who said this was important
Made a conscious decision about what I wanted to learn.	5
A lot because I learn by understanding, not memorization	8
Open to learning new things. What I learned was foundational to how I learn. We learned how to be curious, and that learning happens everywhere.	12
I like learning. I did work I was interested in. When I made the transition from middle school, I found I was more of a hands-on learner. I liked collaborating in groups and working with other students. I missed that after Peninsula	15
What I learned was foundational to how I learn.	3
I took a lot of AP classes in high school and did really well. Because of Penn, I liked these classes because they were more engaging. I liked challenges. I felt interested to learn more.	13
I was very stubborn! I learned things the way that I wanted to learn them. I learned things the way my brain works.	1
Peninsula definitely affected the way I learn. I learned to be motivated by internal things. I was working from my own interests. This continued into high school and college.	12
I didn't expect one answer or solution to a problem.	3
Peninsula defined how I learned. I learned how to think for myself.	4
I had very little patience for meaningless work. I learned that I like things hands on. I learned how to express myself.	5
I felt like my teachers were approachable. I love learning. Everything had a purpose. What I learned was	7

foundational to how I learn.	
Peninsula kind of made me who I am, and gave me the idea that what I wanted to do or know was important. I learned what I wasn't interested in doing. I never found my rhythm in high school. I figured things out in college.	5
Peninsula had a huge impact on the way I learned. Peninsula fostered the idea that you could learn things in chunks or units. I ended up at Colorado College because they taught classes this way. This really worked well for me. I also use what I learned in my work today. I collaborate with other people and don't feel embarrassed to ask questions.	1

Table 9 illustrates the opinions of adult Peninsula School alumni regarding the question, “How did your experience at Peninsula School affect your academic work in science, mathematics, or engineering?”

Math and Science were two of the weakest areas expressed in our interview findings. In the area of math, a majority of alumni felt that they learned the basics in math, and about one fourth of those interviewed felt that the hands-on approach to the teaching of math was positive, but five out of the twenty-five interviewees felt either unsupported at times in their math experience at Peninsula or, in the case of one alumnus, completely turned off to math. One alumnus felt inspired to help start The Girls' Middle School, which has an emphasis on math and science.

In the area of science, four out of the twenty-five alumni felt excited by the hands-on approach to science and connected to the science teacher, but a majority of those interviewed felt that the teaching of science was really lacking once you got to the upper school. These former students all attended Peninsula School in the 1970s, 80s, and 90s. Since that time, the school has listened, responded, and has since improved these gaps in the curriculum.

Table 9. Response to Interview Question 5 (How did your experience at Peninsula School affect your academic work in science, mathematics, or engineering?)

Interview Responses	Number of respondents who said this was important
I was a math kid. In forth grade there was a small group of us that were good in math so we were given more challenging math to do. I loved this I felt the same way about science. I went to science as much as I could. Science became my profession so I really felt this began at Peninsula.	4
Math came easily to me, but I never really felt challenged in Math at Peninsula. Math was hard for me in High school so I don't feel like Peninsula did me any favors by not challenging me in math.	3
I didn't come out of Peninsula knowing much about Science and Math. I did know how to learn and how to get help. I did learn about science from Barney going on nature walks.	1
I excelled in Science and Geology and gained an interest in the wonder and exploration of both at Peninsula.	4
I enjoyed math at Peninsula. I felt challenged and prepared. I don't remember going to science Math wasn't my strong suit but I love it.	4
I really liked Math with Jerry in eighth grade. I didn't realize that I liked Science until High School.	5
I felt prepared for high school math and science. I assumed that what teachers had to teach me was valuable.	4
I found science at Peninsula that was based on inquiry very exciting. I enjoyed heaving an explorative view of science. I felt that I was lacking in math skills.	4
I never learned the basics in math. I found math on that level too boring, but loved higher level math. I felt I didn't have the same foundation as non- Peninsula kids.	7
I didn't jive with these subjects at Peninsula. I didn't feel that I was taught well.	1
I felt unsupported in the area of math. This inspired me to help start the Girls' Middle School which has an emphasis on Science and Math.	1

Table 10 illustrates the opinions of adult Peninsula School alumni regarding the question, “How did your experience at Peninsula School affect your academic work in language arts (reading and writing)?”

In the area of language arts, writing and reading, most interviewees expressed very positive responses. A majority of respondents felt that the teaching of creative writing and poetry at Peninsula was exemplary. Alumni expressed that they felt comfortable and encouraged in the area of expressive writing. This is an area that is very personal, and fifteen out of the twenty-five mentioned the level of trust that they felt from their teachers. Writing and reading were such a positive experience for half of the respondents that they went on to do writing in college, and as teachers themselves, and three alumni choose to major in comparative literature in college. Many of those interviewed expressed that they had received positive responses to their work from high school and college teachers alike.

Seven out of the twenty-five respondents complained that they did not learn how to write a formal essay, and three alumni felt that the teaching of grammar was weak during their time at Peninsula. This was interesting because three out of the twenty-five felt great about the teaching of grammar during their time at Peninsula. Many respondents expressed that their love of reading continues to this day because of their Peninsula experience.

Table 10. Response to Interview Question 6 (How did your experience at Peninsula School affect your academic work in language arts (reading and writing)?

Interview Responses	Number of respondents who said this was important
At Peninsula there was (and is) strong support from teachers and families in the areas of writing and reading.	6
I didn't learn how to write an essay until high school	7
I learned how to write expressively at Peninsula. We had a lot of opportunities to do creative writing.	15
I didn't burn out. It was great! I had great rapport with	11

all my teachers.	
The joy of reading carried forward. I read everything in sight!	12
I actually really enjoyed doing grammar. I had to learn how to write a formal essay. Grammar, reading, creative writing were fine,	10
Always felt comfortable with it. I felt encouraged and very competent.	10
I felt less inhibited in the area of creative writing. I was a better writer then most people.	5
Teachers and professors remarked about how interesting my work was.	5
I majored in comparative literature. I attribute this to reading at Peninsula.	3
I felt a level of trust with my teachers at Peninsula.	15
Always felt comfortable with it. I felt encouraged and very competent.	15
My family was very literate. I was able to not separate my home and school opportunities to enjoy books and reading.	3
The plays were really good. I liked the choices, and the way we read. It was really good	5

Table 11 illustrates the opinions of adult Peninsula School alumni regarding the question, “How did your experience at Peninsula School affect your respect for the arts (music, theater, painting, and sculpture)?”

Table 11. Response to Interview Question 7 (How did your experience at Peninsula School affect your respect for the arts (music, theater, painting, and sculpture)?

Interview Responses	Number of respondents who said this was important
You don't have to be an artist to try new things.	2
Arts are and were a part of my everyday life.	12
I have an openness to try knew things.	15
My interests in the arts have carried into my adult life	10
I took the arts for granted and didn't take advantage of it.	2
I learned this in high school. I took music, jazz, and music appreciation.	1
I have a appreciation for the arts because of my Peninsula experience.	12
If you make a mistake, you can take it out. I learned this in weaving.	1

I knew that this (exposure to the arts) was very special and that most kids didn't have this opportunity.	4
In high school I went on to try all kinds of music.	7
This was huge for me (my arts experience at Peninsula). I still do arts and crafts as an adult. My interests have carried on into my adult life.	10
I wish that I had taken more advantage of it. I took it for granted.	2
I took drama, music, and band in high school, and I sang too.	7
I appreciate the opportunity to explore art the way I did	10
Peninsula exposed me to a variety of arts, and materials to do creative work.	10
The arts are still a part of my daily life. I taught batik in college. I still have shudders with Billy Shaw's name scratched on them.	1

Table 12 illustrates the opinions of adult Peninsula School alumni regarding the question, “How did your experience at Peninsula School affect your participation in the arts in high school, college, and beyond?”

This was a very positive area of our research. Peninsula's hands-on approach to the teaching of the arts has had an important impact on the alumni we interviewed. Fifteen out of the twenty-five alumni we interviewed felt that the teaching of the arts helped them to be more open to all subjects, not just art, music, and theater. Ten out of the twenty-five alumni appreciated the opportunity to explore the arts, and experiment with a variety of materials while attending Peninsula. Ten out of the twenty-five respondents still create art as part of their professions and in their daily lives. Seven out of twenty-five alumni participated in theater, seven out of twenty-five alumni participated in music in the form of singing in a choir, playing in a band, or playing an instrument, and dance.

It was the special relationships with the many activities teachers at Peninsula that appears to have had a profound affect on many of the respondents. These teachers were the one-on-one

support for many of the respondents, especially in adolescence. Eight out of twenty-five respondents mentioned a personal connection with these teachers.

Over half of the twenty-five respondents expressed that they felt that they had more of an interest and appreciation in the arts because of their experience as a student at Peninsula. Ten out of twenty-five stated they were more inclined to try new things than their non-Peninsula classmates. Fifteen out of the twenty-five alumni felt that they automatically took art and music classes because it felt like a natural part of their school day. Ten out of twenty-five respondents participated in theater. Seven out of the twenty-five participated in Glee Club, band, ceramics, and photography. Four out of the twenty-five alumni majored in Art History in college. One alumnus stated that they never found anything that they liked as much (arts activities), after Peninsula, and one alumnus regretted taking the arts opportunities at Peninsula for granted.

Table 12. Response to Interview Question 8 (How did your experience at Peninsula School affect your participation in the arts in high school, college, and beyond?)

Interview Responses	Number of respondents who said this was important
I never found anything that I liked as much after Peninsula.	1
I did a lot of theater in high school.	10
I pursued arts in high school. This was something I automatically did	15
I had more empathy for the arts.	5
I did dance.	7
I did pottery, ceramics.	5
I was an art history major in college.	4
I sang in the glee club, choir, or played in a band	7
I took the arts for granted and didn't take advantage of it.	1
I was never afraid to try new things.	10
I had more interest in the arts and appreciation for the arts because of my experience as a student at Peninsula.	15
I did drawing and painting/ photography	4

Table 13 illustrates the opinions of adult Peninsula School alumni regarding the question, “How did your experience at Peninsula School affect your high school and college subject choices?”

Over half of the respondents felt that their experiences as a student at Peninsula lead them to love learning and want to take risks and explore new things. One alumnus described looking forward to reading her college catalogue and wanting to take every class described in it. Most of the alumni interviewed attended a liberal arts college, and credited Peninsula with their love of reading, science, math, theater, camping, writing, the arts, and learning in general.

Table 13. Response to Interview Question 9 (*How did your experience at Peninsula School affect your high school and college subject choices?*)

Interview Responses	Number of respondents who said this was important
It didn't affect me.	2
My love of reading continued.	11
It lead me to try new things.	15
It lead me to take a variety of classes that were available to me in high school, and especially college.	17
I learned my love for Science.	5
I learned my love for Reading.	12
I learned my love for Math	2
I learned my love for the Arts	10
I learned my love for Writing.	12
I learned my love of learning.	15
I went to a liberal arts college.	20
I was willing to take risks, and was open to a broad range of life experiences.	15

Table 14 illustrates the opinions of adult Peninsula School alumni regarding the question, “How did your experience at Peninsula School affect your passion and direction in life?”

Most respondents (twenty out of twenty-five) credited their Peninsula experience with their desire to be lifelong learners and with their career choices. Fifteen out of twenty-five stated that they love what they do for work. Twelve out of twenty-five responded that their love for

adventure, taking risks, and exploring life began at Peninsula. Twelve out of the twenty-five said that they learned to value collaboration, community, problem solving, and relationships at Peninsula.

Sixteen out of the twenty-five said that had strong relationships with their teachers who they trusted to know them, and who trusted them. This was one of the things they valued most about their school experience. Four out of the twenty-five alumni appreciated being able to write their own “script”.

Seven out of the twenty-five alumni interviewed have chosen to become teachers. Many of these respondents said that they wanted to give back to their community, and were inspired by their teachers. Four alumni talked about wanting their children to have the Peninsula experience. One alumna stated that the decision to move back to the Bay Area so her children could attend Peninsula had a profound impact on her, her children, and her husband as well.

A majority of respondents said that they learned that respect for others is a passion. Seventeen out of twenty-five alumni stated that they felt allowed and supported in being their unique selves, and that there were many possibilities for ones life.

Table 14. Response to Interview Question 10 (How did your experience at Peninsula School affect your passion and direction in life?)

Interview Responses	Number of respondents who said this was important
I felt “seen” and cared about, and that everyone mattered.	15
I was allowed to be my unique self. Allowed me to feel that there were a lot of different ways of being.	12
I learned a respect for others.	17
The Peninsula experience impacted my career choices	20
It made me decide to be a teacher and create progressive education opportunities for other kids, not just privileged kids, but all kids.	7
I was able to find my intrinsic motivation. I was allowed the freedom to do this.	12

I wanted to do something positive for society.	15
I felt very grateful and wanted to move back to the Bay Area so that my kids could go to Peninsula.	5
I learned that relationships with community, and the way we solved problems together, are very important.	12
I felt trusted by my teachers and I trusted my teachers to know me.	16
I developed life long relationships, and value my friendships with teachers and friends that I made at Peninsula.	12
I love what I do for work.	15
I learned the concept that I could write my own “script”.	4
Lifelong learning. When I went to college I couldn’t wait to get the catalogue of courses. I wanted to take everything!	20
I learned the love of exploring life and having a sense of adventure. I learned to take risks.	12
I have a passion to help people. I learned that at Peninsula.	5

Conclusions

Our research concluded that by all measurements Peninsula School alumni surpassed their high school peers, both in performance on CST/STAR assessments and in their analysis of their K-8 experience and academic preparation. Moreover, our interviews with Peninsula School adult alumni confirmed their appreciation for their K-8 experience at Peninsula, finding that it influenced their abilities to learn, encouraged trust and collaboration, affected their later careers and interests, and encouraged their passion and direction in life.

For the research question, “What did the data derived from recent standardized tests given in high school (CST/STAR results) reveal about Peninsula School graduates as compared with public school K-8 graduates of the same age?”, the CST/STAR data we collected clearly reveal that Peninsula graduates not only exceed the assessment standards for all California students, but outperform their non-Peninsula, non-progressively educated peers in local high schools. These

data, derived from recent CST/STAR results, show that progressively educated Peninsula School graduates, as compared with public school K-8 graduates of the same age, perform at levels that exceed their peer counterparts in standardized assessments of English-Language Arts, Summative High School Mathematics, and World History. This research should put to rest any concerns about the academic preparation of Peninsula School alumni as far as the standardized CST/STAR tests given in high school are concerned.

Moreover, these results should serve as a beacon for those who resist the “high-stakes assessment” culture currently in vogue in American public education and embodied in the No Child Left Behind (NCLB) legislation and funding regime. Progressively educated students who experienced Peninsula’s “no grades” and “no standardized testing” learning environment exceeded the performance of their non-progressively educated peers, who have likely been relentlessly tested and graded, loaded with homework, and ranked according to “achievement” in standardized assessments throughout their K-8 years. This stark reality should give pause to those who believe in the discredited notion that external rewards and punishments (high-stakes assessments) are appropriate learning tools for young children, and encouragement to those who know that children learn quite well when they are taught how to learn in an environment of collaboration, tolerance, trust, and love of learning.

Answering the research question, “What did the data derived from a survey of Peninsula School alumni currently in high school reveal about their academic subject preparation (i.e. math, science, arts, language arts, etc.) as compared with non-progressive school graduates attending the same high schools and responding to the same survey questions?” our research showed that the judgment of Peninsula School graduates concerning their preparation for high

school academics was exceptionally positive, especially in comparison with their non-Peninsula peers at Summit Prep Charter High School and Menlo-Atherton High School.

In their opinions of their preparation for high school academics, preparation for high school mathematics, encouragement to trust adults as guides and teachers, and help to appreciate and learn from others, Peninsula School alumni graduates expressed a 100% positive judgment of their K-8 experience. This unanimous positive vote was unequaled by their non-Peninsula peers in any of the categories measured.

Notable differences in aggregate judgments were apparent when comparing the Strongly Agree opinions for Peninsula School alumni and their non-Peninsula peers in the areas of preparation for high school academics, preparation for high school mathematics, preparation for high school English, encouragement of further study in the arts, encouragement to trust adults as guides and teachers, help to appreciate and learn from others, and confidence in their abilities as learners. These data clearly show that Peninsula School alumni have an unambiguous respect and high regard for the progressive curriculum and collaborative learning environment of the school. This high regard was not matched by their non-Peninsula educated peers in any of the categories measured. The conclusion to be drawn from these important differences is that the progressive curriculum and learning environment of Peninsula School not only prepares students for further academic study in high school, but have a lasting positive influence on their attitudes towards the arts, towards trusting adults, towards collaborating with and learning from others, and towards their confidence as learners.

The in-depth questions of the survey of current high school students, permitted for a Strongly Agree response to a previous question, reveal that Peninsula School graduates willingly, and often quite eloquently, articulated the pedagogical values of progressive education and of

Peninsula School. These questions asked, “What experience can you remember that was “most” helpful” in allowing students to trust adults as teachers and guides, to appreciate and learn from others, and in improving their abilities as a learner. A final open-ended question, required of all survey takers, asked “How else does your K-8 experience guide you?”

It is notable and important to our research that the non-Peninsula alumni survey takers were conspicuously more reticent to complement their K-8 experience in answer to the final question, “How else does your K-8 experience guide you?” Negative responses such as, “It taught me what I DON'T want in my life. Lots of rules and people who don't care”, or “It guides me to forget about it”, or “Taught me what not to be”, are entirely absent from the Peninsula alumni responses to the same question.

Even the positive responses of non-Peninsula alumni are, by comparison, unenthusiastic and do not reflect a love of learning or appreciation for their K-8 experience. Examples of such responses are, “It prepared me to be a contributing member of society,” and “I remember all of the rules that my teachers had and put them to use, because they all had good reasoning behind them”, or “It helped me to be a better person and to not slack off. Also, it taught me that education is the key to success”, or “I guess I'm a better student because I did try to get good grades. Otherwise?” In fairness, there were some positive sentiments articulated by the non-Peninsula alumni survey takers, such as, “I have a grounding of character along with schooling”, and “It guides me to learn more in school.” However, many of these positive expressions are notable for their external orientation, such as “It helped me prepare myself and have my guard up for high school. It helped me mature a bit more and learn that we are here to learn and study and have a career”.

Peninsula School alumni expressed their appreciation for their K-8 education in moving sentiments such as, “It has given me an outlook on life that a lot of people don’t have. It has taught me that life can be beautiful and there are always people who want to love and support you”, or, “I think I can do anything I want to in education. Peninsula made me appreciate my own abilities and to have tolerance and empathy for others.”

These progressive and humane values expressed by young Peninsula alumni currently in high school are professionally articulated by Stanford University’s Nel Noddings and cited by Alfie Kohn (2004):

How they (students) feel—about themselves, about their teachers, about the curriculum and the whole experience of school—is crucially related to the quality of their learning. Richer thinking is more likely to occur in an atmosphere of exuberant discovery, in the kind of place where kids plunge into their projects and can’t wait to pick up where they left off yesterday. (p. 37)

Regarding the “most” helpful” experience allowing trust and equality of teachers and students at Peninsula, students had extremely coherent views such as, “There were too many times to count when I experienced my increase in trust for teachers as guides. Whenever I'd go to any of my teachers with a question or a problem, I always knew I was guaranteed support. Even if I was in a "sticky situation" I knew that I'd get help and they would always try to do what was best for me”; and, “Being allowed to have a close relationship with my teachers encouraged me to trust adults, because it eliminated the fear they can instill when you are in middle school. I was able to get past that fear and think of them and trust them as equals.”

Concerning the “most” helpful experience allowing appreciation for and learning from others, Peninsula graduates again had magnanimous things to say about the progressive

philosophy of collaboration taught there. “At Peninsula we learned respect for our peers and what they had to offer. This respect continued throughout my education.” “We did lots of things together. It was natural to work together on projects. We also talked about books and art together”, and, more bluntly, “The fact that getting along with others was taught a lot and encouraged” are only three examples of these students understanding of and appreciation for collaborative learning.

The question, “What experience can you remember that was "most" helpful in improving your abilities as a learner?” attracted some extremely insightful responses from the Peninsula graduates. For example, the responses “My success in 8th grade math and the general focus on learning rather than testing improved my abilities as a learner”, and “The modest amount of homework and assignments given at Peninsula allowed me to get a good understanding of the material. Without the pressure of many hours of homework, deadlines, and grades, it became much easier to focus on actually learning the material”, and “Recognizing my methods and style of learning, how they vary from others, and how I can use the resources of a school to maximize my abilities” clearly demonstrate these graduates’ understanding of and appreciation for the progressive-inspired curriculum at Peninsula. They know, even as teenagers in high school, that these controversial innovations of progressive education, at odds with the prevailing notions of assessment-oriented teaching, improved and cultivated their abilities as learners.

The non-Peninsula respondents to the question also echoed these progressive education fundamentals. Some of their answers such as, “When we had to work in teams to identify chemicals in science class, it helped improve our teamwork and how we listened to other people's ideas” express an unknowing appreciation for the collaborative learning taught at Peninsula and other progressive schools.

Our interviews with Peninsula School alumni lead to the conclusion that they are profoundly affected to the present day by their exposure to progressive education at Peninsula. Responding to the question, “How did your experience at Peninsula School affect the way you learn?” these adults reflected in near-consensus that, “I like learning. I did work I was interested in.” They also reported, “What I learned was foundational to how I learn. We learned how to be curious, and that learning happens everywhere.”

Peninsula alumni felt that they have a strong sense of self, and enjoy learning. These alumni learned collaboration, problem solving skills, and thought of teachers as trusting friends who trusted them as learners. Alumni were found to be adventurous, risk takers, engaged with science, math, reading and writing, enjoyed appreciating and experiencing the arts, and were appreciated for who they are as unique individuals. What they were able to gain from their Peninsula experience is a strong love of learning, a desire to work for social justice, and to use their time creatively in their careers as well as for personal fulfillment.

On a less positive note, some adult alumni criticized their science, mathematics, or engineering preparation at Peninsula, stating, “I never learned the basics in math”, “I felt unsupported in the area of math”, and “I didn’t jive with these subjects at Peninsula” and “I didn’t feel that I was taught well. I felt that I was lacking in math skills. I felt I didn’t have the same foundation as non- Peninsula kids.” These statements were also qualified by such statements as, “I found math on that level too boring, but loved higher level math.” There were also a number of positive expressions to the same question, such as “I enjoyed math at Peninsula”, and “I felt challenged and prepared.” Concerning science, one person reported, “I excelled in Science and Geology and gained an interest in the wonder and exploration of both at

Peninsula.” Another said, “I found science at Peninsula that was based on inquiry very exciting. I enjoyed having an explorative view of science.”

As we have shown by the responses from students presently in high school, these gaps in the math and science curriculum have been addressed and improved, and continue to be addressed and improved by the present staff at Peninsula. Even with these gaps for some alumni, many former students went on to excel in high school math and science, taking AP classes as well as excelling in their college experiences and choosing careers in these areas. These former students all attended Peninsula School in the 1970s, 80s, and 90s. The school listened, responded, and has since improved these gaps in the curriculum.

Adult alumni commented, and our other research concurs, that they were definitely prepared for high school, and that they felt valued as a person. It was really important for this research how many times “feeling valued as a person” came up in our interview discussions. Adult alumni said they felt prepared to learn, and that if they did not know something they knew how to ask and get help. Respondents expressed that they felt joy in what they were taught, and that they felt that their teachers were collaborators, helpers, and friends they could trust and who trusted them. Peninsula alumni felt supported in developing their intrinsic motivation, and stated that they had learned critical thinking skills. One said that nothing in his experience compared with Peninsula, “Everything else has felt like a let-down.” Many respondents expressed that it was not until they attended college that they really felt allowed to blossom into the person they felt they were becoming at Peninsula. Such expressions, while not unique to Peninsula school alumni, are predictable articulations in our research of the progressive emphasis of Peninsula’s curriculum.

Kohn (2008) contends, and our research entirely supports, that progressive pedagogy easily outpaces traditional assessment-oriented curriculums on the basis of its effectiveness:

Across domains, the results overwhelmingly favor progressive education. Regardless of one's values, in other words, this approach can be recommended purely on the basis of its effectiveness. And if your criteria are more ambitious — long-term retention of what's been taught, the capacity to understand ideas and apply them to new kinds of problems, a desire to continue learning — the relative benefits of progressive education are even greater. This conclusion is only strengthened by the *lack* of data to support the value of standardized tests, homework, conventional discipline (based on rewards or consequences), competition, and other traditional practices. (p. 4).

Now in 2010, recantations of the most aggressive testing advocates and critics of progressive education in the public sphere, such as Diane Ravitch, are timely for this research. The acknowledgement of fact regarding the “close to complete failure” (Ravitch, 2010) of NCLB and other high-stakes testing regimes, as well as the entire pedagogical approach that advocates punitive outcomes for poor performance, business models for schools and teachers, and teach-to-the-test curricula, is welcome news to progressive educators because these revelations underscore the perennial value of progressive education's humane and thoughtful approach to learning.

Our conclusions end with a final note from John Dewey, referenced earlier in Chapter II, our Literature Review, which unmistakably evokes the outcome of our research.

"We have tried to show what actually happens when schools start out to put into practice ...some of the theories that have been pointed to as the soundest and best ever since Plato, to be then laid politely away as precious portions of our "intellectual heritage."

Certain views are well known to every teacher who has studied pedagogy, and portions of them form an accepted part of every theory of education. Yet when they are applied in a classroom the public in general and other teachers in particular cry out against that classroom as a place of fads and caprices; a place lacking in any far reaching aim or guiding principle." (Dewey, J, & Dewey, E, 1962.)

Chapter V

Recommendations

The research we completed should serve as a lasting benefit to Peninsula School. The Peninsula School Strategic Plan (2006), as part of the goal of engaging with the community beyond Peninsula School, advocates the following: "Through research and study, identify and articulate appropriate historical measures and examples of Peninsula students' life-success." This action research project accomplished this goal, and opened a dialog for the future about the value and benefit of a Peninsula School progressive education.

Teaching staff and all members of the Peninsula School community should be congratulated and appreciated for the excellent job they have done in cultivating young learners and building the school as a model of progressive education's ideals, as evidenced by this research. The outcomes demonstrated by this research are so strongly positive that all Peninsula educators should take great pride in their students and in their accomplishments as educators. We recommend that as part of its ongoing staff development efforts, Peninsula train its new teachers in the strength of the underlying pedagogy of progressive education embodied in the results of this research.

The further articulation of this research to the Peninsula parent community and beyond, to the professional education community (especially as it is embodied in the Progressive Educators

Network (P.E.N.) and Coalitions for Essential Schools (C.E.S.)), is recommended. The results of our research are of such a nature that progressive educators and likeminded parents everywhere will find them enlightening, possibly far into the future. Placing a link to the research in an accessible document on the Peninsula School website will attract scholars and parents to the research and to the school, and will articulate the school's progressive history, mission, and success. The school may also consider publishing an abridged version or interpretation of this study, as it has done for other works about the school, to provide archival information to future parents and alumni. We also recommend that Peninsula School, based on the results of this study, make a concerted effort to open itself as a model to progressive teacher training, to education research, and to the progressive education community at large, so as to broadly convey the effectiveness of its program and help others to learn its methods.

We recommend that the school undertake further studies and comparisons as an essential part of its mission to ensure the education and life-success of its alumni. The comparisons we made were drawn from data that was sometimes difficult to access. Because no one at Peninsula had focused on such a study before, the sample of Peninsula alumni, both high school students and adults, was difficult to acquire. Now that there is a good first example of how to obtain such data, we recommend that the collection of data from Peninsula alumni be ongoing, especially for comparison of Peninsula alumni and non-Peninsula high school students on standardized test scores in high school and opinions of their K-8 experience at Peninsula.

If, upon their graduation, alumni were asked to agree to provide test score information and opinion surveys to the school on a regular basis, this would greatly streamline the data collection process and allow the school to build an extensive database of information for each graduating

year. This information could provide a year-by-year snapshot of learning outcomes for Peninsula educators, and a wealth of analysis for future research in progressive education.

A larger sample group would provide opportunities for more extensive analysis including a larger range of comparisons, gender and other demographics, and socio-economic factors. Data collected more extensively and over a longer time period could be statistically examined for many factors. We also recommend that future research examine other academic subject areas, especially history and social studies, to get a fuller assessment of the academic outcomes for Peninsula alumni. Such ongoing research should be published every few years, say every five years, to document and articulate the school's ongoing health and adherence to its progressive ideals.

Finally, we recommend that all members of the Peninsula School community should advocate in the world of education for inclusion of progressive ideals in all children's education. The humane and effective model of Peninsula's program should be the norm for all students. The test-driven, standardized curricula of NCLB and other such regimes, having failed miserably to improve the crisis we now face in American education, are rapidly losing all credibility among educators. During the 1920s when education turned increasingly to "scientific" techniques such as intelligence testing and cost-benefit management, it was progressive educators who insisted on the importance of the emotional, artistic, and creative aspects of human development – "the most living and essential parts of our natures." Like Peninsula educators today, they also stressed the value of collaborative learning and training in democratic participation, of experimentation and freedom of choice, and of respect and trust between students and teachers. The results of our research now document the effectiveness of such education, which should be conveyed to the world as a way of educating all, students and teachers, with dignity and respect.

References

- Bradley, A. (2000) Open to innovation. In V. B. Edwards (Ed.), *Lessons of a century* (pp. 103-105). Bethesda, MD: Editorial Projects in Education.
- Darling-Hammond, L. (1995). Performance-based assessment and educational equity. *Harvard Educational Review*. 64, 5-30.
- Darling-Hammond, L. (1996). The right to learn and the advancement of teaching: Research, policy, and practice for democratic education. *Educational Researcher*. 25, 5-17
- Darling-Hammond, L (1998). Teachers and teaching: testing policy hypotheses from a national commission report. *Educational Researcher*. 27, 5-15.
- Dewey, J. & Dewey, E. (1962). *Schools of tomorrow* .New York: Dutton.
- Dewey, J. (1931). *Democracy and education*. New York: The Macmillan Company
- Dewey, J. (1959) *Dewey on Education*. Martin Dworkin (Ed). New York: Teachers College Press.
- Duveneck, J. W. (1978). *Life on two levels: An autobiography*. Los Altos Hills, CA: Trust for Hidden Villa
- Gatto, J.T. (2003). Against school: How public education cripples our kids, and why. *Harper's Magazine*, 307(184), 31-38.
- Gatto, J.T. (2002). *Dumbing us down: The hidden curriculum of compulsory schooling*. Philadelphia, PA: New Society Publishers.
- Gatto, J.T & Graham, J. (2000). *The underground history of American education: A schoolteacher's intimate investigation into the problem of modern schooling*. New York: Oxford Village Press.

- Gebert, A. and Joffe, M. (2007). "Value Creation as the Aim of Education: Tsunesaburo Makiguchi and Soka Education." In *Ethical Visions of Education: Philosophies in Practice* (pp. 65-82). David Hansen (Ed.). New York: Teachers College Press,
- Gregorc, A. (2003). *Gregorc mind styles*. Columbia, CT: Gregorc Associates, Inc.
- Hansen, D. (Ed.) (2007). *Ethical visions of education: Philosophies in practice*. New York: Teachers College Press.
- Hoff, D.J. (2000). Made to measure. In V. B. Edwards (Ed.), *Lessons of a century* (pp. 154-165). Bethesda, MD: Editorial Projects in Education.
- Hoy, W & Miskel, C (2008.) *Educational administration: theory, research, and practice*. 8th edition. N.Y.: McGraw Hill Higher Education.
- Ikeda, D. "John Dewey and Tsunesaburo Makiguchi: Confluences of Thought and Action." *Center for Dewey Studies*. Retrieved from http://www.siu.edu/~deweyctr/jd_makiguchi.pdf
- Kohn, A. (2004). Feel-bad education: The cult of rigor and the loss of joy. *Education Week*. 15, 36-37. Retrieved from <http://www.alfiekohn.org/teaching/edweek/feelbad.html>
- Kohn, A. (2001). Fighting the tests: A practical guide to rescuing our schools. *Phi Delta Kappan*. 82, 348-357. Retrieved from <http://www.alfiekohn.org/teaching/ftt.htm>
- Kohn, A. (1999). From degrading to de-grading. *High School Magazine*. 6, 38-43. Retrieved from <http://www.alfiekohn.org/teaching/fdtd-g.htm>
- Kohn, A (2000). Standardized testing and its victims . *Education Week*. 20, 60-62. Retrieved from <http://www.alfiekohn.org/teaching/edweek/staiv.htm>
- Kohn, A. (2002). Standardized testing: Separating wheat children from chaff children Retrieved from <http://www.alfiekohn.org/teaching/ohanian.htm>

- Kohn, A. (2008). Progressive education: Why it's hard to beat, but also hard to find. *Independent Journal*. Spring, 2008. Retrieved from <http://www.alfiekohn.org/teaching/progressive.htm>
- Kohn, A. (1999). *The schools our children deserve: moving beyond traditional classrooms and tougher standards*. Boston: Houghton Mifflin.
- Kohn, A. (2004). Test today, privatize tomorrow. *Phi Delta Kappan*. 2004, 568-577. Retrieved from <http://www.alfiekohn.org/teaching/testtoday.htm>
- Lewis, A. C. (2007). Looking beyond NCLB. *Phi Delta Kappan*. 88, 483-484.
- Makiguchi, T. (1989), *Education for Creative Living: Ideas and Proposals of Tsunesaburo Makiguchi*, Dayle Bethel (Ed.) and Alfred Birnbaum (Trans). Ames, Iowa, Iowa State University Press.
- Meir, D. (2002). *The power of their ideas*. Boston: Beacon Press.
- Noguchi, S. (2009, Feb 2). Can the achievement gap really be closed?. *San Jose Mercury News*,
- Olson, L. (2000a) Dewey: the misunderstood giant.. In V. B. Edwards (Ed.), *Lessons of a century* (pp. 102-103). Bethesda, MD: Editorial Projects in Education.
- Olson, L. (2000b) Tugging at tradition. In V. B. Edwards (Ed.), *Lessons of a century* (pp. 94-101). Bethesda, MD: Editorial Projects in Education.
- Orenstein, P. (2009, May 3). Kindergarten Cram: Toss out the no. 2 pencils and let them play. *New York Times Magazine*, 13-14.
- Peninsula School Strategic Plan (2006). *Light the way*. Menlo Park, CA: Peninsula School
- Piaget, J. (1952). *The origins of intelligence in children*. New York: International Universities Press.

(2009). Progressive education. Retrieved from

http://en.wikipedia.org/wiki/Educational_progressivism.

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York: Basic Books.

Resnick, L. B. (2000). Making America Smarter. In V. B. Edwards (Ed.), *Lessons of a century* (pp. 176-179). Bethesda, MD: Editorial Projects in Education.

Shepard, L.A. (2000). The role of assessment in a learning culture. *Educational Researcher*. 29, 4-14.

Strathern, P. (2002). *Dewey in 90 minutes*. Chicago: Ivan R. Dee

Vygotsky, L.S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.

Westwater, A, & Wolfe, P (2000). The Brain-compatible curriculum. *Association for Supervision and Curriculum Development*. 49-52.

Young, B., (1982). *The Coleman mansion: Peninsula school's big building*. Menlo Park: Peninsula School.