

Challenge Success Schools Program Evaluation: Final Report¹

I. INTRODUCTION

This report presents results from a three-year evaluation project of the Challenge Success schools program. In Year 1 (2011-2012), data were collected from ten schools located in two states in the western United States, referred to in this report as “Wave 1 schools.” In year 2 (2012-2013), we continued to follow the Wave 1 schools through their second year of participation in Challenge Success, and also added data from a new cohort of eight “Wave 2” schools in the Midwest, which reflected our growing educational scope. In Year 3, we continued to follow the active Wave 1 and Wave 2 schools, and also added data from a third cohort of nine schools, primarily in California, in their first year of participation in Challenge Success. We refer to these as “Wave 3” schools. Adding the Wave 3 schools allows us to continue identifying trends and gain deeper insight into factors that foster change during the first year of participation in Challenge Success.

In this report, we also present comparison data from two schools that took the Challenge Success survey twice and two schools that took the Challenge Success survey three times within six years of participation in Challenge Success. We focus on areas that each school chose as “target areas” for Challenge Success intervention, and analyze student-level indicators in those areas. In this sense, we focus the evaluation on implementation-level program outcomes as well as student-level indicators over time.

This report is organized as follows:

- A description of the Challenge Success Schools Program
- Evaluation design and methods
- Background information on the 30 schools comprising our Wave 1, Wave 2 and multi-year comparison schools (one comparison school is from Wave 1)
- Analysis of implementation data from the first year of Challenge Success participation from Wave 1, Wave 2, and Wave 3 schools
- Analysis of Wave 1 and Wave 2 schools through their second and third year of Challenge Success participation
- A comparison of student-level outcomes and interventions of 4 schools across time
- Analysis of student self-report of changes at their schools
- Conclusions and future directions

Taken together, the data that comprise this report come from schools that serve a collected student body of more than 28,500 students. Our conclusions from this report will be instrumental in helping schools succeed in the Challenge Success program and for guiding program improvement.

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II. THE CHALLENGE SUCCESS SCHOOLS PROGRAM

The mission of Challenge Success is to work with schools and families to develop research-based strategies that provide youth with the academic, social, and emotional skills needed to succeed now and in the future. The primary goal of the Challenge Success schools program is to support school change that is aligned with the Challenge Success ideals of increasing student health, well-being, engagement, and academic integrity. Because Challenge Success works with each school individually in a coaching/consulting model, the implementation of changes to school policies and practices is variable. Schools choose which policies or practices to target each year, and therefore the school change process does not typically follow a linear or predictable path. Challenge Success staff may influence school changes simultaneously or sequentially at the school-, parent-, faculty-, and/or student-levels. Because of this and the variety of program components (described below), our interventions are best evaluated in a nuanced way that accounts for the unique features of each school.

The Challenge Success schools program is a complex school reform intervention designed to meet the needs of a diverse set of schools across the country. A distinguishing feature of the Challenge Success model is the use of an array of methods, points of contact, and levels of intensity, tailored to meet the unique needs and conditions of each participating school. Typically, a new school sends a team of administrators, teachers, counselors, parents, and students to a Challenge Success Fall Conference, meets with a coach during and after the conference to develop a comprehensive vision and action plan for change, and returns as a team again in the spring to a follow-up conference. Typically before attendance at the Fall Conference, a school has begun engaging with Challenge Success via a parent education or professional development workshop, and these activities may continue as components of the intervention after the conference as well. Thus, along with attendance at the conference(s), the Challenge Success schools' intervention may include any of the following components: faculty and parent workshops; informational presentations to students, parents, and school staff; student surveys; school team meetings with a Challenge Success coach; and informal conversations with Challenge Success staff members throughout the year.

III. EVALUATION DESIGN AND METHODS

We use an action-research methodology to guide our evaluation design. Action research is a systematic research methodology typically used in education and business in which the research involves a cyclical process: designing ways to address a problem or set of problems, taking action to solve the problems, gathering data about the process and outcomes, and then reflecting on those data, making changes to the approach, and beginning the process again (Stringer, 2007). Practitioners who are interested in a systematic evaluation or deep reflection on their practice typically utilize action research.

We gathered data for the evaluation from a variety of sources utilizing multiple methods. In all three years, we asked school team leaders to fill out a survey about their school's previous and current programs, activities, and structures. Challenge Success evaluators observed school teams at conferences in all three years, interviewing coaches about their school teams and collecting artifacts, including agendas, action plans, and notes. Challenge Success program

staff utilized a database to keep track of all contact with the schools including, but not limited to, informal conversations, presentations, meetings, and workshops. Challenge Success program staff observed meetings at each school when possible, and research staff interviewed the Schools Program Director and other Challenge Success staff members about each school's progress, the quality of the coaching, and any other pertinent information. In Year 2, research staff interviewed teachers, administrators, and parents at two of the Wave 2 schools to gather information from their perspectives. Research staff also analyzed data on a variety of indicators from the Stanford Survey of Adolescent School Experiences, analyzing student-level outcomes in the schools that took the survey two or three times during their multiple years of participation in Challenge Success. In Year 3, research staff also analyzed qualitative data from the Stanford Survey of Adolescent School Experiences to investigate students' experiences and perspectives in their own words.

In addition to action-research methods, we also consulted evaluation experts outside of our staff at multiple times: Stanford University Graduate School of Education Senior Lecturer Ann Porteus, Ph.D., Rebecca London, Ph.D., and a professional evaluator with a private evaluation research firm. All have extensive backgrounds in evaluation and provided consultation on the evaluation design, methodology, and analysis.

IV. BACKGROUND OF SAMPLE SCHOOLS

In addition to the ten Wave 1 schools involved in the first year of the evaluation, we added a new cohort of eight Wave 2 schools in the second year, along with four schools (one from Wave 1) that took the Challenge Success student survey twice. In the third year, we added a new cohort of nine Wave 3 schools.

Comparing Wave 1, Wave 2, and Wave 3 sample schools to over 30 other schools involved in Challenge Success over the past five years, we conclude that these schools are a representative sample of the schools with which Challenge Success typically works. As shown in Table 1, nearly half of the schools are public (13 of the 27 schools) while 5 of the 14 private schools are religiously affiliated. All but 5 schools are coed and suburban. Thirteen of the 27 schools are high schools, nine comprise both a middle and a high school, and five have a middle school only. The schools' enrollments range from small (215) to large (3,216), with an average of 1,528 students in Wave 1 schools, 1,127 in Wave 2, and 1,052 in Wave 3. The percentage of students receiving free or reduced lunch ranges from 2% to 53% in Wave 1 schools, from 0% to 3.8% in Wave 2 schools, and from 0% to 15% in Wave 3 schools.

Table 1. School Background

Variables	Percentage of W1 schools N=10	Percentage of W2 schools N=8	Percentage of W3 schools N=9	Notes
School type				
Public	60%	37.5%	44%	All 3 W1 private religious schools are Catholic. W3 includes one Catholic and one non-denominational Christian school.
Private religious	30%	0%	22%	
Private non-religious	10%	62.5%	33%	
School Gender				
Coed	80%	87.5%	100%	Both W1 all-female schools are private and Catholic; 1 W2 all-female school is private and non-sectarian.
Female only	20%	12.5%	0%	
School Location				
Suburban	80%	75%	89%	8 W1 schools are in suburban regions of the west coast; 6 W2 schools are in Midwestern suburbs and 2 are in an urban area of the Midwest. 8 W3 schools are in suburban regions of California.
Urban	20%	25%	11%	
School level				
High school	70%	12.5%	56%	High school is defined as grades 9-12.
Middle and high	20%	62.5%	22%	
Middle only	10%	25%	22%	
Enrollment	1,528	1,127	1,052	Mean enrollment; W1 range is from 394 to 2,601; W2 range is from 215 to 3,216. W3 range is from 515 to 2,423.
Free/reduced lunch rate	28%	2.4%	6.5%	Mean percentage at public schools only (6 in W1, 3 in W2, 4 in W3). W1 range is from 2% to 53%. W2 range is from 0% to 3.8%. W3 range is from 0% to 15%.
Students of color	56.5%	21%	49%	Mean percentage of students of color. Five W3 schools reporting. All W1 and W2 schools reporting

V. ANALYSIS OF CONFERENCE ATTENDANCE, IMPACT AND IMPLEMENTATION IN YEAR 1

In the first stage of our analysis, we added nine Wave 3 schools to the previous sample of ten Wave 1 schools and eight Wave 2 schools, for a total of 27 schools. We analyzed: 1) the degree to which conference attendance supported or hindered changes in school practices and policies (we call this **Readiness**), 2) the degree to which different components of the Challenge Success program impacted schools, faculty, students, and parents (**Impact**); and 3) the degree to which schools have implemented changes as a response to our intervention

(Implementation). Adding a new cohort of nine Wave 3 schools allows us to continue identifying trends in readiness, impact, and implementation in the first year of Challenge Success participation.

Table 2 presents data summarizing conference attendance in the first year of Challenge Success participation. We focus on this because previous evaluation results suggest that conference attendance may strongly influence the impact of Challenge Success program components on the school community, including the type, quantity, speed, and/or quality of changes that take place at a school. Thus, the degree of conference attendance may be a good indicator of the commitment and readiness of a school to the change process. We concentrate on a) the make-up of stakeholders represented on the school’s team at the Challenge Success Fall Conference and b) the school’s attendance at the Challenge Success Spring Conference.

When comparing conference attendance between schools, it is important to note that W2 schools differ from W1 and W3 schools in a number of ways, most importantly their geographic location in the Midwest and the higher number of private schools. Thus, it is most useful to compare W1 and W3 schools. Most notably, although all schools attended both conferences with at least a partial team, only 1 of the 9 W3 schools attended spring conference with a full team, defined as at least one principal or high-level administrator, teacher, parent, and student. A counselor’s presence is also preferred on a full team.

Table 2. Year 1: Conference attendance of all schools during the first year of Challenge Success participation

Variables	W1 Schools N=10	W2 Schools N=8	W3 Schools N=9	Notes
Attended Y1 fall conference	100%	100%	100%	
Attended Y1 fall conference with a full team	90%	100%	89%	Challenge Success recommends that a "full team" include a principal or other high level administrator, teacher, parent, and student (counselor also preferred).
Team make-up at Y1 fall conference				
Principal present	100%	75%	89%	
Counselor present	90%	87.5%	67%	
Other administrator present	40%	75%	89%	
Teacher present	100%	100%	100%	
Parent present	100%	100%	78%	
Student present	100%	100%	100%	
Attended Year 1 Spring conference	100%	100%	100%	Challenge Success Team attendance at the Challenge Success Spring Conference is required for local teams, and recommended but not required for out of town teams.
Attended Year 1 Spring conference with a full team	70%	62.5%	11%	

In Table 3, we present the data concerning the impact of Challenge Success schools program components on schools, team members, students, staff, and parents in the first year of participation for Wave 1, Wave 2, and Wave 3 schools. Table 3 also describes the number of schools and individuals involved in each component (please see Appendix A for further explanation of the purpose of each component). Schools can decide which component from the list below to implement based on their own needs and preferences. Each school receives the list of “Characteristics of Effective Challenge Success Teams” to consult in making this decision. See Appendix B for the complete list of characteristics.

As seen in Table 3, all 27 Wave 1, Wave 2, and Wave 3 schools were quite active in implementing components of the Challenge Success program during their first year. Almost all schools implemented parent education related to Challenge Success, most presented Challenge Success research and program information to their school communities, and most provided staff education about Challenge Success. The consistency of these trends is encouraging because it suggests that our findings from Year 1 are robust across all three waves of data collection.

As discussed above, W2 schools differ from W1 and W3 schools both geographically and demographically, so it is most useful to compare W1 and W3 schools. Table 3 shows that the school-based education components of the Challenge Success program, including faculty education and student assemblies, were lower among W3 schools. This may relate to changes within the schools program of Challenge Success, which was experiencing staff turnover that resulted in fewer presentations and professional development programs at new schools. Lower rates of educational initiatives may in turn have influenced the lower rates of full-team participation in the spring conference among W3 schools. Many teams report feeling energized after the conferences and eager to report back to students and school staff on what they have learned, which can in turn stimulate and motivate policy changes. Thus, Challenge Success will continue to prioritize its presentations and professional development endeavors, and encourage all schools to send a full team to both fall and spring conferences.

A significantly higher number of schools in Wave 3 surveyed their students about stress, health, and integrity compared to both other Waves. In previous years of our evaluation, schools identified that having survey data strongly influenced implementation of policy changes. It may be that the broader trend in education of using data to drive decisions about policy and practice changes has gained increasing influence over the last 3 years and may have influenced the Wave 3 schools more than the other Waves. It is also possible that the Challenge Success marketing of the survey was more successful with these schools than with the previous Waves, or that the Wave 3 schools were more able to afford the survey than schools in the other Waves.

Finally, Table 3 shows the lower number of student assemblies among the Wave 2 and some of the Wave 3 schools. It is possible that the geographical distance between the schools in the Midwest and in Southern California from Challenge Success headquarters made it more difficult for speakers from Challenge Success to present at school-wide meetings.

Table 3. Year 1: Impact of Challenge Success Program Components in Wave 1, Wave 2, and Wave 3 schools during the first year of Challenge Success participation

Program component	W1 schools: % in progress or accomplished N=10	W2 schools: % in progress or accomplished N=8	W3 schools: % in progress or accomplished N=9	Individuals affected across 27 schools in Year 1	Impact
Presented Challenge Success information to school community	90%	75%	78%	22,950 students, staff	School community members gained awareness and knowledge of Challenge Success and school issues.
Conducted student survey (Challenge Success survey or similar)	60%	50%	78%	13,500 students, staff involved in survey process and/or reporting	Students gained awareness of Challenge Success issues. School team gained knowledge of student perceptions and experiences related to Challenge Success issues and skills to improve student outcomes.
Provided parent education	80%	87.5%	100%	48,800 parents estimated	Parents gained awareness, knowledge, and skills.
Provided faculty education	100%	75%	56%	2,100 faculty estimated	Faculty gained awareness, knowledge, and skills.
Conducted student assembly (or dialogue)	80%	50%	67%	26,637 students	Students gained awareness, knowledge, and skills.

VI. IMPLEMENTATION OF POLICY CHANGES OVER TIME

Turning to implementation, we found that all 27 of the Wave 1, Wave 2, and Wave 3 schools made at least one change to their practices and policies as a result of their first year’s work with Challenge Success, and many schools made more than one change in the first year. Given the slow nature of school change in general (Cuban & Tyack, 1997), the fact that all schools made at least one substantive change to school practice and policy is a testament to the strength of the Challenge Success intervention. Additionally, since schools are free to choose which changes to target according to their vision statements and action plans, we were not surprised to see several different kinds of policy and practice changes from our different schools.

Adding new cohorts of Wave 2 and Wave 3 schools allows us to begin identifying trends in the type of research-based changes that schools are more likely to make during subsequent years of Challenge Success participation. Table 4 shows the implementation of policy changes

in different years, along with cumulative implementation across all three years of the evaluation.²

As Table 4 shows, the number of particular policy changes implemented over time does not necessarily follow a linear progression because each school decides on its own priorities based on its unique set of needs and resources. By year three, more than half of the Wave 1 schools had implemented substantive changes in all of the major policy and practice areas except for test/exam calendars. The most common areas of change were to advisory programs, homework policies, project-based learning, and assessment practices. In part VII, we focus on the Wave 1 schools in order to examine more closely patterns of change over time.

Table 4. Implementation of School Policies and Practices in All Schools as a Result of Work with Challenge Success

Had in place prior to CS		% of schools implemented or modified in Year 1	% of schools implemented or modified in Year 2	% of schools implemented or modified in Year 3	Total % of schools implemented	Approximate number of individuals affected
	Number of schools	27	18	10	--	--
W2:1	Homework policy	41%	33.3%	30%	63.0%	16,013 students
0	Test/exam calendar	26.9%	33.3%	10%	40.7%	9,664 students
0	Created project-based learning or non-traditional assessments	55.6%	22.2%	40%	63.0%	19,025 students
W1:1	Modified school schedule	44.4%	38.9%	50%	59.3%	18,130 students
W1:2	Created advisory period for more faculty-student interaction	51.9%	44.4%	50%	66.7%	19,490 students
W1:1 W2:1	Modified college counseling practices³	31.8%	17.6%	50%	53.8%	17,791 students

VII. CHANGES IN WAVE 1 SCHOOLS DURING YEARS TWO AND THREE

² Columns 3 through 6 in Table 4 include only new initiatives since beginning participation in the Challenge Success program, and do not account for initiatives or policies that existed at the schools prior to working with Challenge Success.

³ 5 schools excluded because they are middle schools only. Percentages reflect remaining 22 schools.

In this section, we focus on the Wave 1 schools that have participated in the Challenge Success schools' program for 3 years, and we follow their progress in five areas of focus known collectively as the SPACE framework. Challenge Success encourages schools to examine their unique needs and circumstances before making policy and practice changes and suggests five areas of focus, based on best practices from research on effective schools, which comprise the acronym SPACE: 1) Students' schedule and use of time, 2) Project- and problem-based learning, 3) Alternative and authentic assessment, 4) Climate of care, and 5) Education on well-being and engagement for parents, students, and faculty.

In Table 5, we present changes in the Wave 1 schools using the SPACE framework. As the results show, by the time they had reached the second year of Challenge Success participation, the ten Wave 1 schools had introduced initiatives addressing most or all of the SPACE areas. All ten schools had made changes in the areas of Students' schedule and use of time, and Education, while eight out of ten had introduced alternative and authentic assessment practices and made efforts to improve the school's climate of care. By year 3, the percentage of Wave 1 schools with alternative assessment practices increased to 90%, and 100% of the schools improved their climate of care through a variety of wellness initiatives and changes to the way students are recognized for accomplishments. The consistent upward trajectory of SPACE initiatives across years 2 and 3 provides encouraging evidence that continued participation in Challenge Success can result in cumulative changes over time.

Project-based learning remains the area with the greatest room for improvement, although the percentage of schools with PBL initiatives did increase from 40% to 50% by year 3. The biggest challenge of PBL is likely found in the constraints that schools, particularly public schools, experience as a result of testing. It may also be that teachers are implementing their own small-scale project-based assignments that are not reflected in our school-level data collection. It may also be that this area is much more difficult to implement because it requires extensive professional development and teacher motivation.

Notably, public schools account for the majority of schools that made changes in the SPACE areas during years 2 and 3. This is a departure from our year 1 results, in which private schools made more changes than public schools. Years 2 and 3 results suggest that while small or private schools may be able to make changes with greater speed or flexibility in year 1, perhaps due to fewer external district-level constraints, public schools can "catch up" in subsequent years, and these changes have the potential to impact a greater number of students, teachers, and parents as well as reverberate through a district.

Table 5. SPACE initiatives in Wave 1 Schools as a Result of Work with Challenge Success by Year 3

Area of focus within SPACE framework	% of W1 schools accomplished or in progress by Year 2 N=10	% of W1 schools accomplished or in progress by Year 3 N=10	Examples of initiatives accomplished or in progress in W1 schools
Students' Schedule and use of time	100%	100%	<ul style="list-style-type: none"> ➤ Revised exam or project calendars ➤ Changed homework policies ➤ Provided students with organizers ➤ Changed to a later start time ➤ New bell schedules ➤ Moved to modified block scheduling ➤ Revised athletics schedules ➤ Homework-free vacations with finals before winter holiday ➤ Used scheduling tools to prevent overscheduling of AP/honors courses
Project-based learning	40%	50%	<ul style="list-style-type: none"> ➤ Added community-building school-wide project ➤ Modified final exams to incorporate project-based learning
Alternative Assessment	80%	90%	<ul style="list-style-type: none"> ➤ Modified grading policy ➤ Gave ungraded assignments in first quarter (comments only/no letter grade) ➤ Lowered significance of mid-term and final exams ➤ Implemented "revision & redemption" policies
Climate of Care	80%	100%	<ul style="list-style-type: none"> ➤ Implemented new advisory periods ➤ Initiated student mentorship programs ➤ Offered extra help periods/tutorials ➤ Established a Student Union ➤ Established wellness programs ➤ Conducted senior exit interviews ➤ Modified awards assemblies
Education	100%	100%	<ul style="list-style-type: none"> ➤ Organized parent book club discussion groups ➤ Held school-wide health fairs ➤ Implemented faculty professional development in effective homework practices and teaching for engagement ➤ Started student-run Challenge Success clubs ➤ Developed parent education programs

VIII. STUDENT-LEVEL OUTCOMES ACROSS TIME

Introduction

For this phase of the evaluation, we collected student data using the Stanford Survey of Adolescent School Experiences from four schools during the first year of their participation at a Challenge Success conference and again after the school had participated in Challenge Success for one to five years. The schools were selected because they conducted the survey twice or three times at different points in their multiple years of Challenge Success participation, allowing us to examine changes in student-level outcomes across time. These longitudinal data give us a unique opportunity to identify patterns in student outcomes at different times during implementation of change. Whereas having results from two time points is helpful and can indicate the beginning directions of changes, having three time points of data allows us a more confident understanding of the direction of the pattern of change. However, because we do not collect student names, we were not able to look at individual student change over time. In this final year of our evaluation, we have two schools that have taken the survey twice (see Table 6), and two schools that have taken the student survey at three time points (see Table 7). The multiple time points allow us to begin seeing indications of improvements that have been sustained. While these schools are in many ways representative of other Challenge Success schools in terms of size, diversity, and location, it should be noted that all four are private schools, and two of the four are single-sex schools, thus together are not representative of our larger sample of schools.

The student survey measures middle and high school students' perspectives on homework, extracurricular activities, sleep, physical health, stress, parent expectations, academic engagement, academic integrity, and teacher support. The findings illustrate the variety of ways that school-level changes influence students. The results presented herein are based on *independent samples t-tests* comparing the whole school averages from the first year each school participated in Challenge Success to the averages from the subsequent year(s) of Challenge Success participation.⁴ We indicate differences that are statistically significant and present only the areas related to the interventions in which the schools engaged. We do not take into account differences, such as ethnic background, income, and grade point average between the students who took the first survey and those who took the second or third survey.

Maple Valley Academy and St. Anthony

Maple Valley Academy⁵ is an all female, religiously-affiliated high school in a suburban area in the western United States. The high school has approximately 200 students, comprised of just over 50% Caucasian students, 30% Asian students, 7% African American students, and 10% other students of color. A full school team attended the Challenge Success Conference in fall 2011, spring and fall 2012, and fall 2013. Students at Maple Valley took the survey in the winter of 2012 and again in the winter of 2013.

⁴ Detailed grade-level comparison results for Maple Valley and St. Anthony are included in Appendix C. Detailed grade-level comparison results for Bay Area High and College Prep School are included in Appendix D.

⁵ Names of all schools have been changed to maintain school confidentiality.

St. Anthony's is an all-male religiously-affiliated high school in the western United States. St. Anthony's approximately 700 students are 50% Caucasian, 25% Asian, and 11% Latino. A full school team attended the Challenge Success Fall Conference in the fall of 2010 and the returning conference in the spring of the same school year. The students at St. Anthony's took the survey in fall 2009, one month after attending the Challenge Success conference, and then again in the fall of 2012.

Table 6. Comparison of survey results at two time points at Maple Valley Academy and St. Anthony

Area of focus	Maple Valley Academy N=200		St. Anthony N=700	
	Time 1	Time 2	Time 1	Time 2
Behavioral Engagement	4.35	4.33	4.15	4.19*
Affective Engagement	3.15	3.21*	2.99	3.15**
Cognitive Engagement	3.52	3.56	3.47	3.71**
Hours of Sleep per Weekday Night	6.59	6.79**	6.77	7.00**
Academic Worry	3.81	3.72*	3.61	3.59
School Stress	4.38	4.10**	3.88	3.80*
Weekday hours spent on Homework ⁶			3.50	3.23**
Teacher support			3.84	4.03**
Cheating	1.65	1.46**		

*indicates significant difference at the .05 level; **indicates significant difference at the .01 level.

Academic engagement and sleep

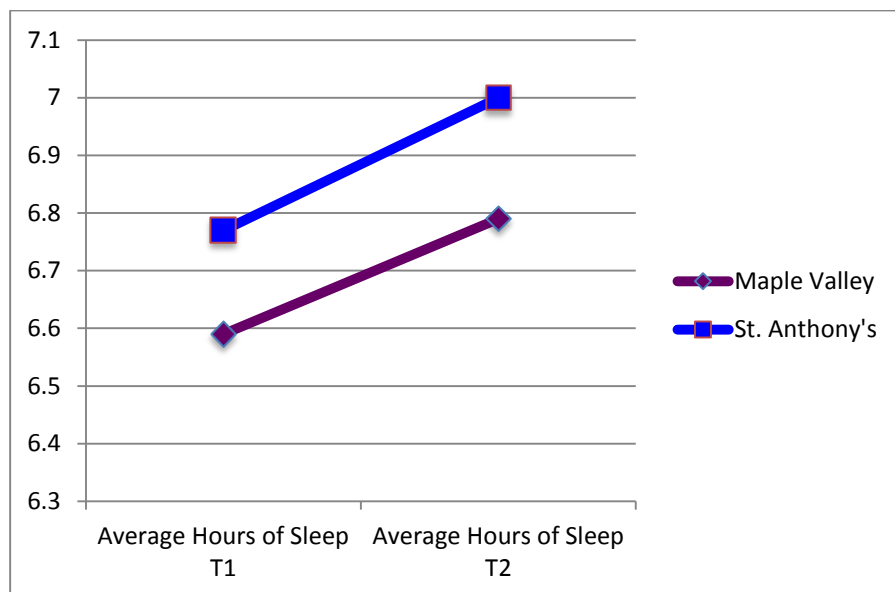
As shown in Table 6, students at both Maple Valley Academy and St. Anthony experienced improvements in engagement during the time period between their two surveys. At Maple Valley, engagement was addressed primarily through faculty and professional development. Maple Valley invited Denise Pope to present her workshop on “Teaching for Engagement” to faculty, and discussed ways of improving assessments. Assessment practices was one of the major areas that Maple Valley chose to address as a result of the school’s Challenge Success conference and coaching process. As a result of this sustained dialogue, Maple Valley adopted a learner profile system in order to help teachers understand students’ individual learning profiles and more accurately and appropriately differentiate their instruction.

⁶ Boxes shaded in grey represent areas that were not focal points for the school interventions. See Appendix C for grade level means for both timepoints for all areas measured in the survey.

The faculty also decided not to grade students' first major assignments of the school year; they commented on student work but did not put a final grade or score on the assignment, and they implemented a test and assessment calendar to prevent student overload of major assignments. While student engagement did not increase from 2012 to 2013 across all grade levels, it did increase across all four dimensions of engagement in 9th grade, and 12th graders were more likely to find schoolwork meaningful and interesting (cognitive engagement) and enjoyable (affective engagement) (see Appendix C). These improvements are important because the positive benefits of engagement have been shown in education literature to be vast and wide-ranging. Engagement is associated with positive teacher-student relationships, lower levels of school stress, lower incidence of cheating, and reduced internalizing, externalizing, and physical symptoms of stress (Conner & Pope, 2013). Engagement has also been linked to positive outcomes in student achievement (Akey, 2006; Marks, 2000) and reduced likelihood of engaging in risky behavior such as substance abuse (Guo, Hawkins, Hill, & Abbott, 2001; Shochet, Dadds, Ham, & Montague, 2006). Maple Valley continues to work on increasing academic engagement, as the results from the student survey did not reflect as much of an improvement as the school would have liked. They are hiring new faculty over the summer and introducing new professional development aimed at this effort.

From our own work with schools and the literature on engagement, we know that allowing students to sleep in and having more time during the school day to transition from one class to another increases cognitive processes and student engagement, which in turn can positively impact health and well-being (Kirby et al., 2011; Conner & Pope, 2013). At St. Anthony, the biggest change was a modification to the school schedule to address issues of stress and increase well-being and engagement in school. Specifically, the school allowed more time during the school day for students to work on homework and projects and collaborate with other students and faculty, and the school implemented a later start time for the school day to allow students to increase sleep hours and increase engagement. St. Anthony also held student and parent education evenings on the importance of sleep and well-being. When we compared the results from the 2009 and 2012 student survey, we found that average student engagement at St. Anthony's increased across all grade levels and on all dimensions of engagement (see Table 6). The time students reported that they spent sleeping on a typical weeknight also increased significantly for all grades, perhaps due to the later school start time. Sleep was addressed at Maple Valley through the formation of a Challenge Success club, which began a campaign to increase awareness and education around the value of sleep. See Figure 1. below for changes in sleep over time at both schools.

Figure 1. Changes in Student Sleep Over Time



Academic worry and school stress

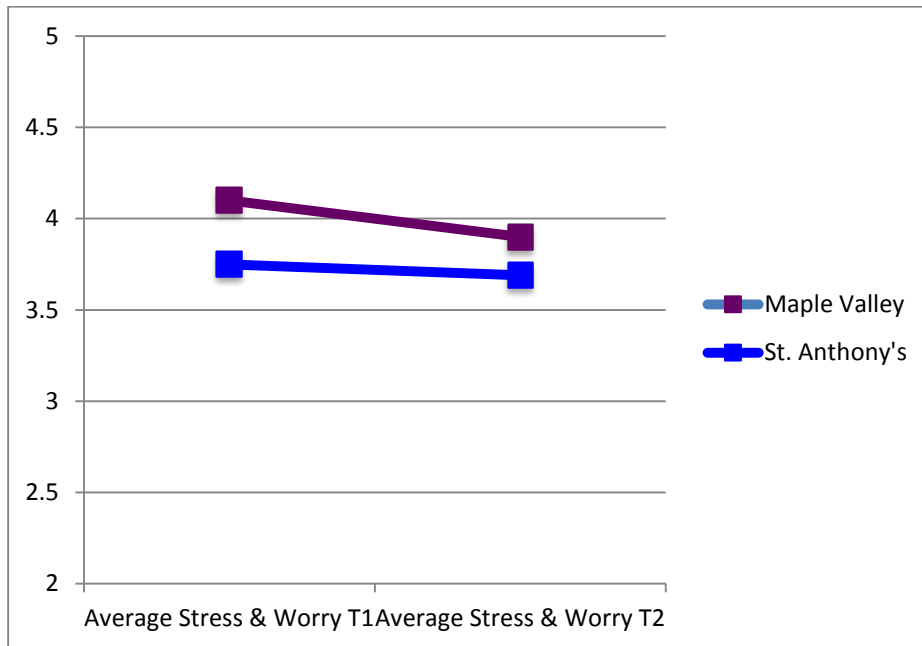
One of the major initiatives at Maple Valley in their first two years of Challenge Success participation was to address relatively high levels of student stress about schoolwork. In the results from Maple Valley's first survey in 2012, the average stress rating across all grade levels was 4.38; on a scale from 1 (not at all stressed) to 5 (extremely stressed). School stress was taking its toll on students' physical health and attendance, along with a drop in extracurricular activities due to stress.

To address these issues, Maple Valley worked on increasing awareness of student stress across multiple stakeholders. For instance, the school encouraged parents to read *Doing School* by Denise Pope, and Dr. Pope also presented the "The Well-Balanced Student" to parents, students, and faculty. Maple Valley also posted a test and project calendar in addition to daily assignments online, so that teachers were aware of assignments and due dates across departments. They also changed the school schedule to include a morning break, during which students could talk to teachers and collaborate with each other on projects. They added a daily meeting time and a club period to build in time for meetings and breaks throughout the day. The school faculty and administration also evaluated how they share college admission acceptances at graduation and decided not to publicly announce which colleges students planned to attend. Finally, the school also changed the grading schema to be more consistent with other schools in the area. As shown in Table 6, average school stress levels were reduced across all grade levels at Maple Valley from an average of 4.38 in 2012 to an average of 4.09 in 2013, and academic worry declined across all grades from an average of 3.81 in 2012 to an average of 3.72 in 2013 (significant grade level reductions in eleventh and twelfth grades).

At St. Anthony, levels of school stress and academic worry also decreased significantly for all grade levels, except 10th grade for school stress and 12th grade for academic worry (see Appendix C). St. Anthony primarily addressed stress and worry by modifying the school policy

on weekend and vacation homework assignments, so that students no longer had homework on many weekends and most vacations. They also provided parent and student education about homework issues, student stress, and positive coping strategies. See Figure 2 for average stress and worry over time at both schools.

Figure 2. Changes in Student School Stress & Worry Over Time



Student Support

St. Anthony's also improved school practices around student support between 2009 and 2012 as a result of working with Challenge Success. They created more opportunities for students to interact with faculty and receive academic support, and modified their college counseling practices so that students had a more individualized approach. They added a "big brother" program so that 9th and 10th graders were paired with an older student who could mentor them during the school year. When we compared student survey results from 2009 to 2012, the results demonstrated that students felt more supported by teachers. There was a significant increase in the number of teachers students felt cared and supported them across all grades, except for 9th grade, in which there was no change.

Cheating

At Maple Valley, the frequency of cheating incidences decreased significantly across all grade levels. Although the school did not work specifically on academic integrity policies, we know from the research on academic integrity that improving academic engagement also influences student cheating (Conner & Pope, 2013). Students who are more engaged in school, tend to find schoolwork interesting, meaningful, and fun, and are also less likely to cheat.

Student perceptions of changes at their school

The Challenge Success survey asked students to name the significant changes (if any) they noticed in the school over the past year. At both Maple Valley and St. Anthony, students were aware of changes the school made, and took steps towards making changes themselves. At Maple Valley, 72% of students named the school schedule change, and 60% of those students reported that this change was quite or very effective in improving student health and well-being.

63% of St. Anthony's students reported that their school had made changes to address student health and well-being in the past year. Of those that reported changes had been made, the majority (75%) reported the most significant change was the schedule change, specifically, a late start on Wednesdays and longer passing time between classes (10 minutes instead of 4 minutes to get to class). St. Anthony students also noted the increase in counseling staff, additional focus on health and stress reduction ("relaxation and breathing time at the beginning of class"), "more time to relax" during the day, and healthier food.

Table 7. Comparison of survey results at three time points at Bay Area High School and College Prep School

Area of focus	Bay Area High School N=400			College Prep School N=600		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
General engagement	3.41	3.57**	3.61*	2.96	3.12	3.32**
Cheating ⁷				1.65	1.88	1.62**
Teacher support	3.92	4.07**	4.14*	3.64	3.78	3.92**
Weekday hours spent on homework	3.35	3.30				

*indicates significant difference at the .05 level; **indicates significant difference at the .01 level.

Bay Area High School and College Prep School

Bay Area High School is a coed, urban private high school in the western United States. There are approximately 400 students in grades 9 through 12 with 60% Caucasian, 18% Asian, 4% Latino, 2% African American, and 16% other ethnic background. Students at Bay Area High School took the survey after attending their first Challenge Success conference in 2009, a second time in the spring of 2013, and a third time in the spring of 2014. College Prep High School is a coeducational, religiously-affiliated private school in an urban location. College Prep has a student body of about 600 in grades 9-12 with about 40 faculty members. The student body is diverse with about 35% students identifying themselves as Caucasian, 30% African

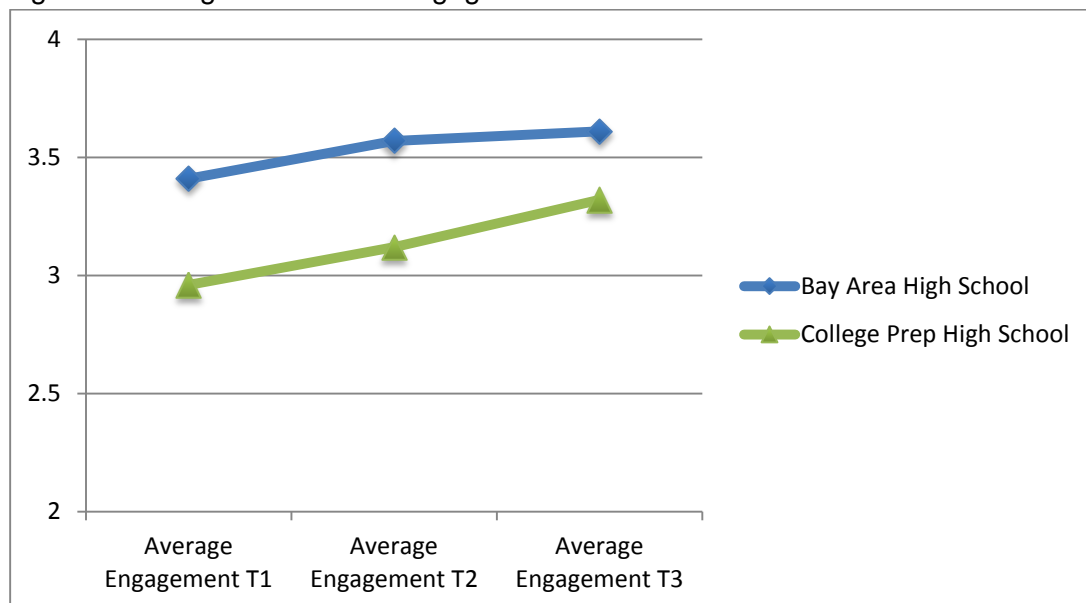
⁷ Boxes shaded in grey represent areas that were not focal points for the school interventions. See Appendix D for grade level means for all three timepoints for all areas measured in the survey.

American, 12% Latino/Hispanic, 12% Multiracial, 6% Asian/Pacific Islander, and 5% Filipino American.

Engagement

During their first year working with Challenge Success, Bay Area High School focused on increasing awareness of and education about student health and well-being for parents, faculty, and students through several presentations and workshops. In addition, Denise Pope presented to small groups of faculty on strategies to increase student engagement. This increase in awareness and knowledge facilitated changes in school policies and practices in the school's second and third years in the Challenge Success program. For instance, Bay Area High School hired 17 new teachers who have skills consistent with Challenge Success's approach to progressive teaching. This, combined with the increase in staff awareness of teaching for engagement and changes to the school schedule, may be linked to the significant improvements in engagement across all dimensions and grade levels (see Figure 3). As shown in Figure 3 (and Table 7), engagement also improved at College Prep High School, whose vision in working with Challenge Success included scheduled days for field trips, retreats, and projects, along with more professional development around "backwards planning" and alternative assessments. College Prep also implemented a trimester schedule during 2011-2012, along with late start days and homework holidays to promote engagement and reduce stress. Improved engagement is likely related to the associated decrease in cheating at College Prep, as shown in Table 7.

Figure 3. Changes in Student Engagement Over Time



Teacher Support & Mentoring

As shown in Figure 4, Bay Area High School and College Prep High School have both experienced significant upward trends in teacher support over time. Teacher support has been shown to have a positive impact on a wide variety of both academic and non-academic student outcomes, including staying in school (Tuck, 2012); deeper academic engagement (Murray & Zvoch, 2011), resiliency in the face of difficult life circumstances (Werner & Smith 2001), and lower incidences of health risk behaviors such as smoking and alcohol use (Darwich, Hymel & Waterhouse, 2012). Between 2009 and 2014, Bay Area High School focused on creating more opportunities for students to interact with faculty to receive academic support, and improving college counseling staff hiring and training. Comparing survey results from 2009 and 2013, students reported feeling that significantly more teachers supported them in 9th, 11th and 12th grades at Bay Area High School (see Table 7). The school also developed a comprehensive advising program for 9th graders, and 9th grade survey results improved from 2009 to 2013 in the areas of teacher support, engagement, school stress, and hours spent on homework. Students surveyed wrote the following about the advising program:

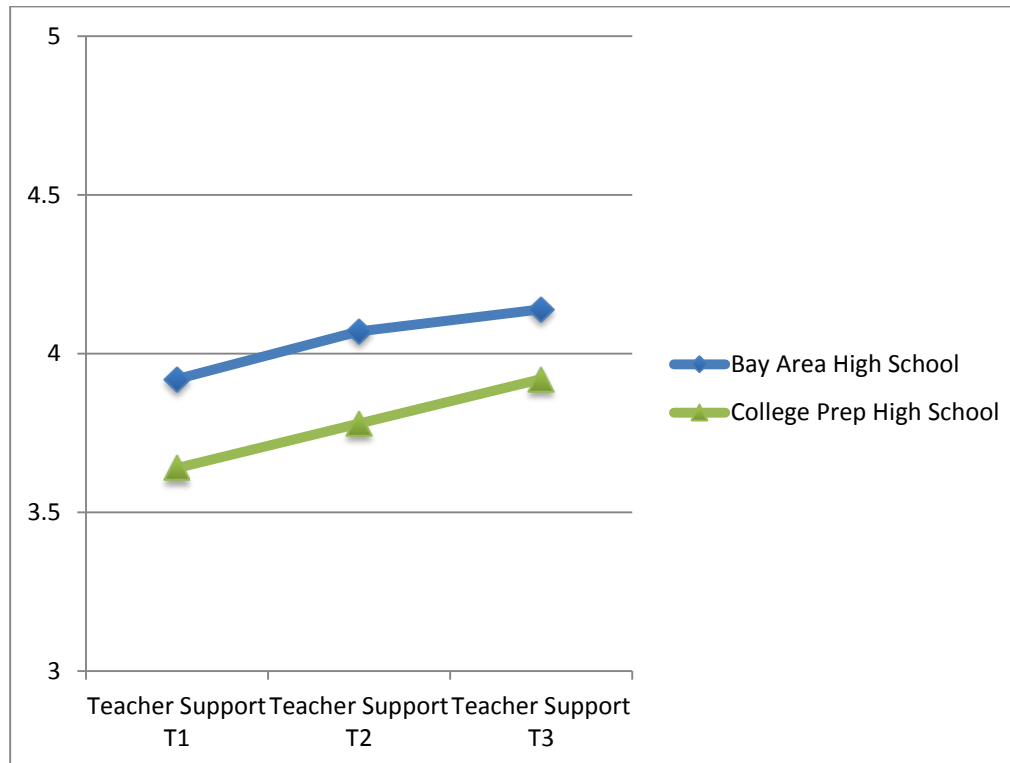
“I go to my advisor whenever I need someone to talk to or have a problem.”

“[The advising program] creates an excellent rapport between myself and an adult at my school, and I feel that my advisor has my best interest in mind at all times.”

“It is really helpful to have a designated teacher that you can go to for problems whom you know personally. Especially in 9th grade when everything is new and slightly confusing. I mostly relied on my advisor just because I knew she was there in case I needed help.”

To promote teacher support of students' well-being, College Prep High School conducted staff education on SEL in 2011-2012, further revising and tweaking the program the following year. The program included mixing up students who would not otherwise be interacting in order to promote cohesion and a sense of support. Efforts in the area of support also included a social and emotional wellness series for students.

Figure 4. Changes in Student Perceptions of Teacher Support Over Time



Schedule Changes & Homework

Between 2009 and 2013, Bay Area High School changed the school schedule from a traditional schedule to a modified block schedule; they changed the exam and project schedule to allow for more flexibility and coordination among classes, and modified their homework policies to create more breaks over weekends and vacations. Results from the 2009 and 2013 surveys indicate that the time students spent on homework decreased significantly between 2009 and 2013 (see Table 7). This decrease may indicate progress towards the school's goal of focusing on the quality of homework instead of quantity.

IX. Implications

From this evaluation, we are able to draw a number of important conclusions that will help us improve our program and increase successful outcomes for schools and students. First, many school teams report feeling energized after the conferences and eager to report back to students, parents, and school staff on what they have learned, which can in turn stimulate and motivate policy changes. This evaluation project has also revealed that many students, parents, and faculty are impacted by these reports after the conference. Thus, Challenge Success will continue to prioritize its presentations and professional development endeavors, and encourage all schools to send a full team to both fall and spring conferences.

While there was broad participation across all Waves in parent education, student assemblies, and faculty education, the results of Challenge Success conference attendance and

the impact on the broader school communities indicate some differences that may help us improve our program in the future. More schools in Wave 1 reported having student assemblies and faculty education than in Waves 2 and 3, and more schools in Wave 3 surveyed their students about engagement, stress, homework, health, and integrity compared to both other Waves. Even though we do and will continue to support all schools to have student assemblies and faculty education, it may be that the geographic distance of Wave 2 schools impacted our ability to offer these programs. As we pursue efforts to widen our geographic reach, we need to consider the support systems we have in place to serve each region.

It also may be that the higher number of schools in Wave 3 that took the survey may have off-set the lower number of student assemblies and faculty education events due to the nature of our survey process. A critical part of the survey process both prior to survey administration as well as after the results are reported is for schools to share information about the survey with students, parents, and faculty. This may have compensated for the fewer student assemblies and faculty education events that schools reported. In any case, these results indicate that marketing the survey as well as supporting schools to engage students, faculty, and parents in discussions about the issues they are facing is an important part of the role we play.

Over the course of three years, all schools made significant improvements in practices and policies in all five areas of the SPACE framework. By year 3, the percentage of Wave 1 schools with alternative assessment practices increased to 90%, and 100% of the schools improved their climate of care through a variety of wellness initiatives. Climate of care initiatives also improved student measures of feeling supported and cared about by their teachers as seen in the longitudinal survey results.

Project-based learning initiatives did increase by year 3 from 40% to 50% but there remains room for improvement in this area, and more support from Challenge Success in the form of professional development and teacher motivation may help. Despite this, we did see significant positive changes in student engagement in the schools surveyed over the course of three years, which gives us evidence that when schools do make changes to teaching practices, students are positively affected. Overall, the consistent upward trajectory of most of the SPACE initiatives across years 2 and 3 provides encouraging evidence that continued participation in Challenge Success can result in gradual and cumulative changes over time.

This evaluation also raises some insights into our theories about the path schools follow to make substantive changes to policies and practices. Our initial theory was that schools would focus on raising awareness and providing education to students, parents, and faculty in the first year after the fall conference, and then they would begin making more substantive policy and practice changes in subsequent years. We found that, while many schools did move in a linear path with smaller changes initially and more substantive changes by year 3, this was not the case for all schools. This could be because many schools arrive at the fall conference ready to make substantive changes in their school schedules, assessment practices, and so on, while others do not. This indicates that we need to continue to implement and improve our own assessment of individual school needs before attendance at the conference so that we can continue to effectively tailor our interventions. It also suggests that, for schools that come to the fall conference ready to make substantive changes, maintaining that momentum and evaluating

the changes they implement will be an important part of what we can offer them to sustain their success.

Overall, our conclusions from this evaluation will continue to guide program improvements and will help schools make meaningful changes that are informed by data and best practices while also meeting our schools' unique needs and circumstances.

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Appendix A

Schools Program Components and Purpose

Program component	Purpose
Meeting with Challenge Success team, including coach.	Increases knowledge of school change process and Challenge Success content. For example, coaches help the teams to navigate the school change process, discuss symptoms and root causes of stress and disengagement at their school sites, brainstorm ways to address root causes.
Creating a vision statement	Increases knowledge and skills of school change process. Developing a unified vision is a key part of effective school change.
Creating an action plan	Increases knowledge and skills of school change process. For instance, the action plan delineates next steps in the change process, including an examination of obstacles to change and resources to overcome these.
Presenting Challenge Success information to school community	Community members gain awareness and knowledge of Challenge Success content and school-specific reform information. For example, schools learn about the Challenge Success team and the process for deciding on key changes to policies and practices.
Conducting a student survey	Increases knowledge among Challenge Success team members of student perspectives and experiences in school. Increases awareness of Challenge Success content across school community.
Providing parent education	Parents gain awareness, knowledge, and skills. Parents hear about Challenge Success content such as current research on student health and school engagement, and are taught research-based tools for improving parenting skills.
Providing faculty education	Educators gain awareness, knowledge, and skills. For instance, faculty hear about Challenge Success research and are taught strategies for stress-reduction and increasing engagement with learning.
Conducting student assembly (or dialogue)	Students gain awareness, knowledge, and skills. For instance, students hear about Challenge Success research and are taught strategies for positive coping skills and social/emotional learning.

Appendix B

Since the inception of our project in 2004 (when we were known as the SOS: Stressed-Out Students Project), we have learned a lot about what makes an effective school team and the general progression that teams go through as they create changes to reduce student stress and increase health and engagement at their school sites. While the change process varies from school to school based on the unique circumstances and needs of each, we share below some characteristics of effective Challenge Success teams and the stages most teams go through as they create change.

An effective Challenge Success school team:

- Has a clear leader or champion and a stable core team that may include the principal, assistant principal, one or more teachers, one or more parents, two or more students, and one counselor or psychologist.
- Attends the Challenge Success fall conference and spring follow-up conference, and meets at least twice with the team coach between the fall and spring conferences.
- Regularly gathers information from and disseminates information to the school community about student health, engagement, and integrity, and encourages cross-stakeholder dialogue about this information.
- Develops an action plan that reflects a vision for change and that contains a clear but flexible schedule for moving forward.
- Holds meetings at least quarterly to review and push forward the action plan.
- Involves all stakeholders at each stage of the change process.
- Pilots discreet, incremental changes rather than trying to do too much all at once. Changes are based on the school community's needs and are known from research to improve engagement, health and/or academic integrity.
- Evaluates results of incremental changes before deciding to institutionalize reforms.

Typical stages in the Challenge Success change process

1. Evaluate current practices, including symptoms and root causes of the problems you are addressing.
2. Draw on research-based tools and strategies known to support the developmental and educational needs of youth.
3. Create a vision for change.
4. Develop and revisit your action plan.
5. Gather and disseminate information about student health, engagement, and integrity at your school to get buy-in and institutional support for your plan.
6. Investigate and pilot alternative policies and practices.
7. Measure results and decide whether to institutionalize the changes.

Appendix C

Grade-level results for schools taking the survey twice:

Table C1. Maple Valley Mean Student Outcomes from Surveys in 2012 and 2013.

	9 th grade		10 th grade		11 th grade		12 th grade	
	2012	2013	2012	2013	2012	2013	2012	2013
Behavioral Engagement	4.29	4.48**	4.37	4.28**	4.47	4.32**	4.26	4.24
Affective Engagement	3.14	3.26**	3.22	3.09**	3.35	3.22**	2.90	3.25**
Cognitive Engagement	3.47	3.71**	3.60	3.44**	3.68	3.47**	3.32	3.61**
Hours of Sleep per Weekday Night	6.77	7.06**	7.05	6.94**	6.03	6.72**	6.52	6.42*
Cheating	1.55	1.33**	1.54	1.47**	1.64	1.46**	1.85	1.57**
Academic Worry	3.86	3.82	3.73	3.71	3.90	3.68**	3.76	3.66**
School Stress	4.23	4.08**	4.30	4.06**	4.57	4.07**	4.40	4.17**

*indicates significant difference at the .05 level; **indicates significant difference at the .01 level.

Table C2. St. Anthony's Mean Student Outcomes from Surveys in 2009 and 2012.

	9 th grade		10 th grade		11 th grade		12 th grade	
	2009	2012	2009	2012	2009	2012	2009	2012
Teacher Support	4.14	4.14	3.75	4.11**	3.63	3.98**	3.82	3.87*
General Engagement	4.00	4.04	3.78	3.97**	3.75	3.79*	3.66	3.71**
Behavioral Engagement	4.34	4.38	4.16	4.28**	4.15	4.16	3.95	3.95
Affective Engagement	3.17	3.31**	2.92	3.26**	2.85	2.99**	3.01	3.05
Cognitive Engagement	3.80	4.01**	3.48	3.87**	3.26	3.57**	3.32	3.39*
Hours of Sleep per Weekday Night	7.41	7.31*	6.83	6.94**	6.36	6.85**	6.48	6.91**
Academic Worry	3.54	3.49*	3.62	3.57*	3.76	3.67**	3.50	3.61*
School Stress	3.70	3.63**	3.84	3.92*	4.09	3.89**	3.90	3.76**
Weekday hours spent on homework	3.18	3.08**	3.41	3.52*	4.21	3.43**	3.20	2.90**

*indicates significant difference at the .05 level; **indicates significant difference at the .01 level.

Appendix D

Grade-level results for schools taking the survey three times:

Table D1. Bay Area High School Mean Student Outcomes from Surveys in 2009, 2013 & 2014.

	9 th grade			10 th grade			11 th grade			12 th grade		
	2009	2013	2014	2009	2013	2014	2009	2013	2014	2009	2013	2014
Teacher Support	4.01	4.19**	4.39**	3.97	3.93	4.04*	4.04	4.12**	4.04*	3.66	4.05**	4.08
General Engagement	3.92	4.11**	4.25**	3.88	3.98**	4.07*	3.88	3.92*	3.95	3.69	3.93**	3.78*
Behavioral Engagement	4.21	4.33**	4.48**	4.17	4.29**	4.35	4.20	4.24	4.25	3.96	4.17**	4.03*
Affective Engagement	3.25	3.49**	3.66**	3.21	3.27*	3.42**	3.29	3.26	3.24	3.09	3.28**	3.17*
Cognitive Engagement	3.72	4.02**	4.10*	3.61	3.74**	3.87*	3.67	3.71*	3.74	3.42	3.79**	3.69*
School Stress	3.87	3.83	3.98*	4.16	4.31**	4.29	4.16	4.32**	4.18*	3.93	3.99	4.07*
Weekday hrs homework	3.15	2.80**	3.51**	3.64	3.79*	3.32**	3.45	3.29**	4.12**	3.15	3.32**	3.60**
Cheating	2.29	1.27**	1.23	2.37	1.48**	1.39*	2.37	1.45**	1.52	2.41	1.55**	1.52

*indicates significant difference at the .05 level between one year and the most recent previous year and **indicates significant difference at the .01 level between one year and the most recent previous year.

Table D2. College Prep Mean Student Outcomes from Surveys in 2011, 2012 and 2014.

	9 th grade			10 th grade			11 th grade			12 th grade		
	2011	2012	2014	2011	2012	2014	2011	2012	2014	2011	2012	2014
Teacher Support	3.80	3.89*	4.03**	3.56	3.75**	3.97**	3.65	3.59*	3.89**	3.58	3.69**	3.80**
General Engagement	3.62	3.96**	3.98	3.58	3.75**	3.82*	3.48	3.62**	3.87**	3.43	3.35*	3.66**
Behavioral Engagement	3.97	4.25**	4.28	3.93	4.07**	4.11	3.79	3.89**	4.19**	3.72	3.59**	3.94**
Affective Engagement	2.83	3.16**	3.21*	2.66	2.80**	3.08**	2.72	2.80**	3.01**	2.69	2.81**	2.90*
Cognitive Engagement	3.32	3.74**	3.83*	3.17	3.39**	3.65**	3.11	3.17*	3.54**	3.16	3.10*	3.33**
School Stress	3.82	3.65**	3.68	3.95	3.69**	4.07**	3.90	4.13**	4.10	3.70	3.45**	3.84**
Weekday hrs homework	2.28	2.73**	2.16**	2.73	3.04**	2.60**	2.49	3.20**	3.05**	2.18	2.86**	2.97**
Cheating	1.43	1.51*	1.25**	1.64	1.76**	1.56**	1.70	1.97**	1.72**	1.82	2.29**	1.98**

*indicates significant difference at the .05 level between one year and the most recent previous year; **indicates significant difference at the .01 level between one year and the most recent previous year.