Involvement + Data + Incentives = Student Success

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Why Talk About Student Involvement?

Everyone here knows that:

- Engagement matters
- Student activities promotes student engagement



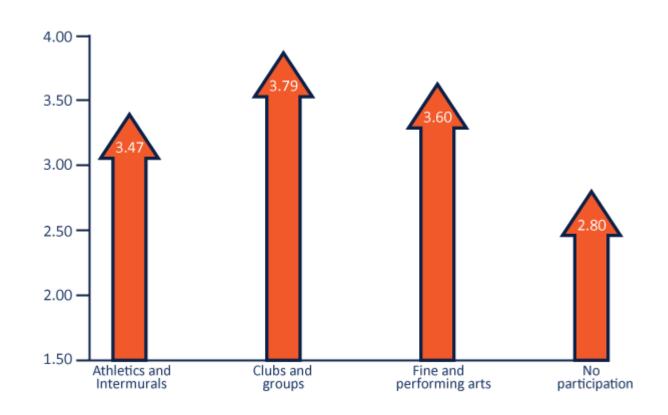
Having Data Can Protect and Expand Opportunities for Student Activities



Data proves that

- it's more than just a warm fuzzy feeling
- it's not just the "good" kids that participate
- participation makes ALL kids better, especially tough to reach students

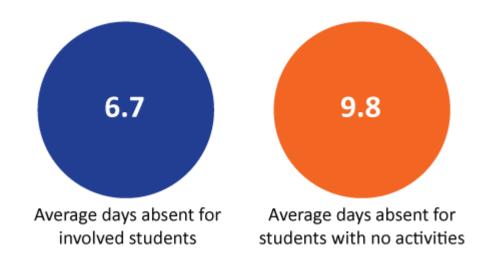
Correlation with GPA



* Initial research from 3 high schools (2014/15)

Correlation with Attendance

- Involved students missed 3 fewer days
- 8 out of 10 chronically absent students were not involved



^{*} Initial research from 1 high school (2014/15)

Correlation with Discipline

0.29

Number of referrals given to involved students 0.61

Number of referrals given to uninvolved students

* Initial research from 1 high school (2014/15)

The 4 Lists

Students with discipline problems

Students with attendance problems

Students with academic problems

Students that are not involved ✓ Data tells us if you remove students from the "not involved" list, you also remove them from the other lists as well



Track

Keep track of student involvement in school activities and events with web, mobile and barcode scanning technology

Drive

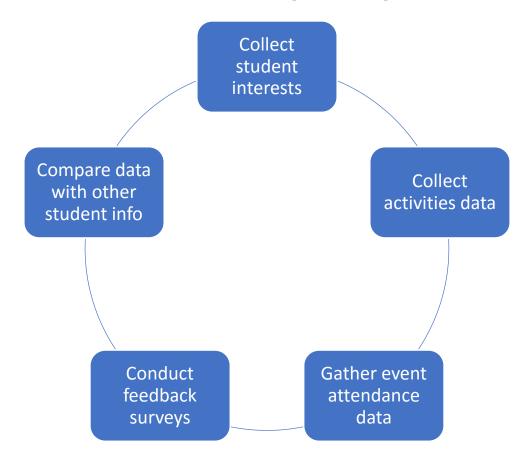
Assign point values and incentives to drive involvement

Recognize

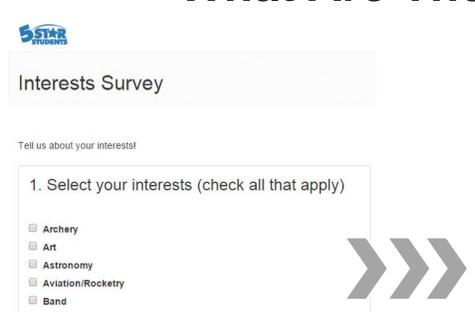
Manage programs to encourage and recognize school involvement. Publish results on-line

Keep Track of Involvement

"Follow the 5-point plan"



What Are Their Interests





Thank You

Based on your responses, here are some activities you might be interested in!

	Activity	Description	Contact
	Art Club	We meet every Wednesday!	Mrs Rogers, 858-321-0931, arogers@school.com
	Baseball	Tryouts are February	Coach Winters

Return









■ Baseball

Billiards
BMX
Bowling
Boxing
Cars

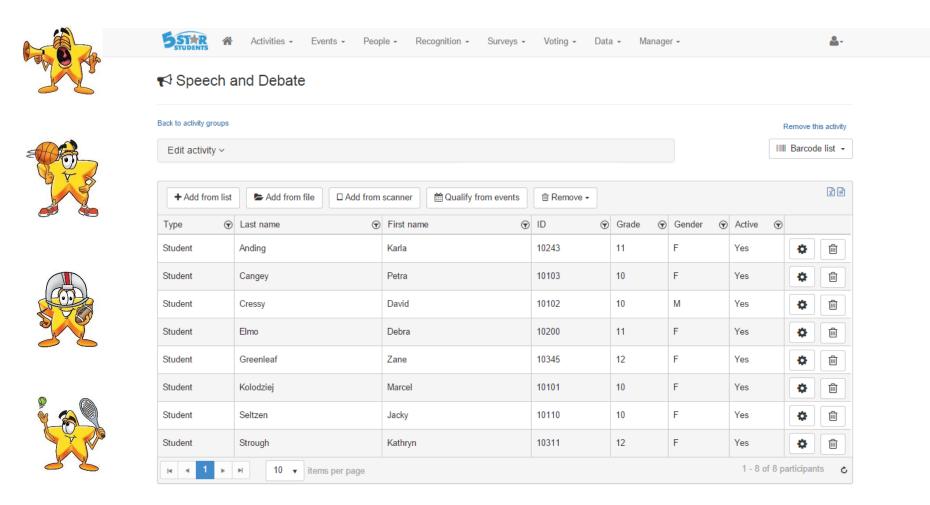
CheerleadingChessClimbingColor Guard







Add Activity Participants

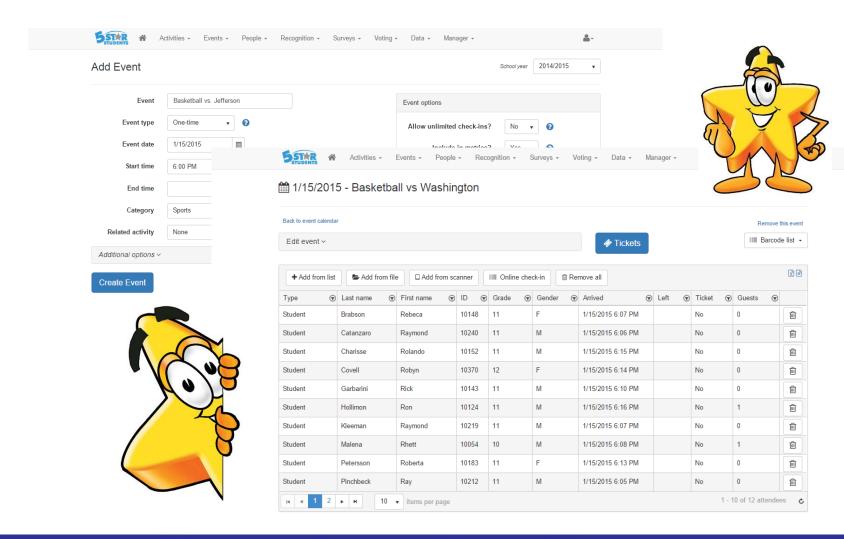




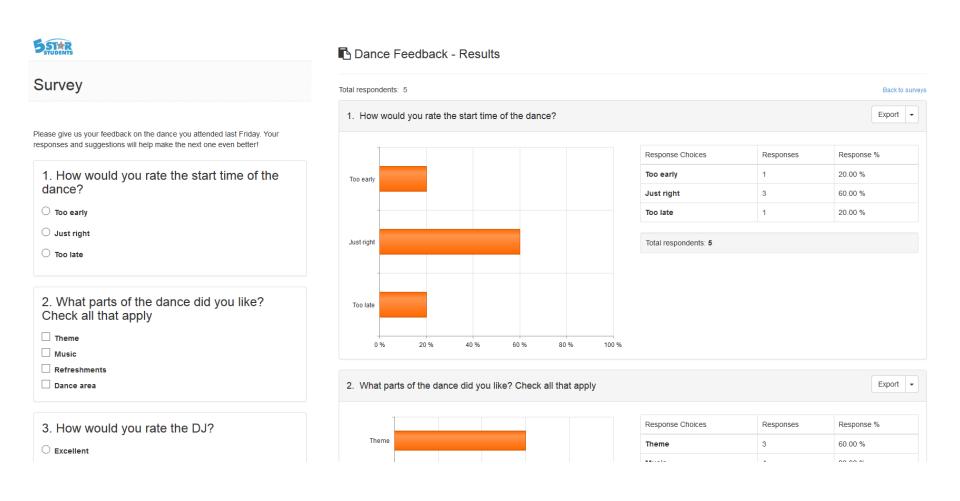




Track Event Attendance



Collect Feedback After Events



Reno, NV





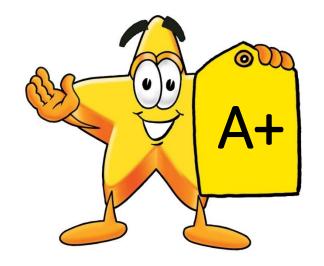




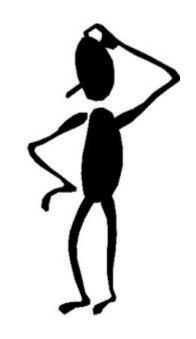
March 2-5, 2016

Compare With Other Student Information

- Grades
- Test Scores
- Attendance
- Discipline
- College Admissions



What Now?

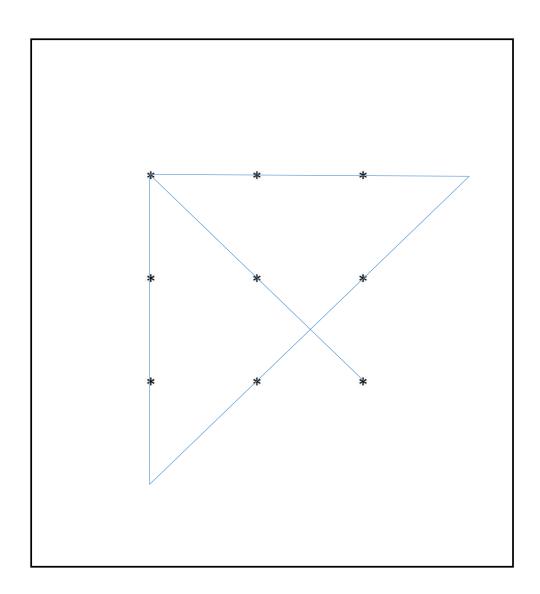


4 Generations and the Roast



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*	*	*
*	*	*

THINK OUTSID THE BOX



Unique Ideas

- Gaming Tournaments
- Unique Speaker Series
- International Soccer Games
- Dodgeball
- Fashion Shows
- Film Festivals
- Schools got talent
- Dance Lessons
- Crazy Decathlon

- Cooking Classes
- Garbage Art Show
- Sponsored Giveaways
- Car Show
- Side Walk Chalk Gallery
- Cook offs
- Quid ditch
- Mini Plays

Incentivize Your Events

The best prizes are what they can't buy..

Example Point System

Activities

Sports Participation = 50 pts
Performing Arts Participation = 50 pts
Leadership Activities = 50 pts
Scholastic Groups = 50 pts
All Clubs = 20 pts



Events

Sports Game / Meet / Match = 10 pts
Premium Sports Game / Meet / Match = 25 pts
Performing Arts Production = 20 pts
Bucket of Points = 100 per season (300)

Recognize and Reward

50 Points = Free Churros at Churro Night Football Game and or Basketball game

75 Points = 2 free tickets to Sporting event or performing arts production

100 Points = Early Entrance Pass to Sporting Event or Performing Arts

125 Points = Pre Game BBQ Free pass and early entrance

150 Points = 2 Tickets to Special School only night at the movies

300 Points at Trimester 1 = Entrance to Drawing for Spirit Prizes

600 Points = Super Fan T-Shirt

600 Points at Trimester 2 = Entrance to Drawing for Spirit Prizes

800 Points = Premium Parking (Carry over to next year)

1000 Points = 2 Extra Graduation Tickets (Underclass will carry over to senior year)

1200 Points = EXTREME FAN Hoodie

Over 1200 Points = Entrance to Drawing For Super Fan Prizes (Everyone wins)

Top 10% = Velvet Rope Access to all events

Top Point Person = Best Seat in the House at Football game

Top Point Senior = First to Walk Across the Stage at Graduation





Geniel Moon – Murrieta Valley HS



Thank You!



Improve Student Outcomes by Incentivizing Involvement for At-Risk Students

Too many children slip through the cracks. In 2013, seven percent of all Americans aged 16 to 24 had dropped out of high school. 35 percent of students reported they had used alcohol within the last 30 days and 73.8 percent of schools reported at least one violent crime to the police. As troubling as these indicators are they only hint at the true cost to both individual children and to society when students fail to reach their full potential.

To help reach students before trouble starts, the professional education community identifies students considered to be "at risk." An at-risk student has at least one characteristic associated with a high probability of repeating a grade, dropping out, or demonstrating some other form of academic failure. The U.S. Census Bureau estimates that 46 percent of K-12 students should be considered at risk. In 2014, that meant that 33.7 million students were at risk. Simply put, that number is unacceptable.

Our country has tried countless interventions to put at-risk students back on the track towards success. In 2013, the federal government spent \$14.7 billion to offset educational disadvantages caused by poverty and \$11.8 billion to offset academic failure associated with learning disadvantages. vi

These enormous figures only hint at the true costs to communities of helping at-risk students. The federal government, after all, only contributes about 10 percent of the total \$600 billion taxpayers spend on K-12 public education each year. The other 90 percent comes from state governments and school districts, who must fund their own programs to get students back on track and deal with such consequences, as bullying, teen pregnancy, and drug and alcohol abuse. Best estimates suggest that in 2014, private donors including charities and foundations gave \$30.9 billion towards education.

The financial commitment to helping at-risk students is there. Funded programs make a real difference in millions of children's lives. However, the bottom line is that children are slipping through the cracks more than ever before. We need to try something more, something different.

Something New: Student Activities

When most adults think of student activities, they may remember the dances, pep rallies, and proms of their youth. They usually do not think of student activities as an effective intervention strategy.

However, all empirical evidence suggests that student engagement is an effective intervention for at-risk students. Over 100 studies appearing in peer-reviewed academic journals confirm that participation in student activities leads to better student outcomes across every conceivable indicator. Top researchers have proven that student activity participants have higher self-esteem, get better grades, get better standardized test scores, attend and complete college more frequently, and even make more money over the course of their adult careers. These studies employ rigorous statistical controls for other factors, conform to the quality

standards of various social science fields, and represent the most professional and unbiased examination of the effect of student activity participation available.

These studies also suggest that student activities have a disproportionate positive effect on at-risk students. Multiple studies have found that participation in at least one student activity in middle or high school significantly reduces the likelihood that a student will drop out. One found that this effect is most pronounced among at-risk students. Figure 1 shows the results of a study that found that if an at-risk student participated in just one student activity in middle school, it reduced the likelihood of dropping out before 11th grade by half. At-risk students who participate in at least one student activity in high school reduced their risk of early dropout from 52 percent to 5 percent.

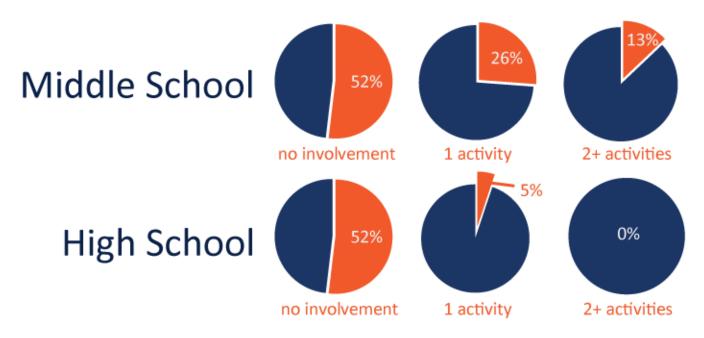


Figure 1: At-risk students less likely to drop out when involved in student activities

Note: Authors of study define early school dropout as failure to complete 11th grade

In addition to reducing the risk of dropping out, evidence proves that students who participate in student activities avoid other negative behaviors. Studies have linked greater participation to later onset of sexual activity, reduced chances of teen pregnancy, and lower consumption of tobacco, alcohol, and marijuana.xii

Student activities also prepare students to attend and succeed in college. Students who participated in middle-and high-school student activities were more likely to want to attend college and submitted more college applications. Once in college, they were more likely to stay enrolled, graduate, and pursue graduate school education.

Unfortunately, research also suggests that most students do not participate in enough student activities to reap the associated benefits. One study finds that the average 10th grader spends less than one hour a week in student activities.^{xv} How can schools create more participation and unlock the full power of student activities as a remediation strategy for at-risk students?

5-Star Students can be an effective tool to encourage greater activities participation. The program allows schools to monitor individual engagement and identify those students with low participation. In addition, the system supports a school's ability to incentivize and manage programs to drive more participation. Over the past 6 years, more than 250 schools have used 5-Star Students to track and promote student participation in activities and events on campus. Initial efficacy research confirms that data from 5-Star Students is easily linked to outputs from other systems, including student information systems (SIS), and activities participation as recorded by the program correlates with better student academic and psychological outcomes.

Gathering Student Involvement Data

Activities and Events

The first step to understanding the details of involvement at a school, is to **gather data about student participation**. Not all forms of participation are equal. A student who works ten hours to help plan and execute a pep rally has a very different experience from another student who simply attends the same pep rally. To be effective, involvement should be measured at various levels and data collected about participation in both co-curricular activities as well as attendance at school-sponsored events.

Activities generally require an "on-going" level of engagement, and include membership in school clubs, athletic teams, performing arts, scholastic groups, and service groups. By participating in activities, students are "doing" something, whether it's engaging in a club with like-minded individuals, playing a sport, performing in a play, or volunteering their time for a cause. Typically, school activities impose certain minimum requirements on students in order to participate. This may include a minimum GPA level or upstanding discipline record.

Events include things that students attend outside of the classroom. With events, students are "watching" something happen, which can often include their classmates participating in activities. Examples of events include school dances, school plays, recitals, and sporting events. Even club meetings and dress-up days are considered events, since participation only occurs on a specific date. Attending events generally require less effort and fewer restrictions on students than participation in activities. However, they still offer insights into the breadth of individual student involvement. In addition, events provide a low-risk level of participation for students.



- On-going participation
- · Students are "doing"
- Clubs, athletic teams, performing arts, scholastic groups, sevice groups

Events



- · School-sanctioned attendance outside of a classroom
- Students are "watching" or participating only on a specific date
- School dances, plays, recitals, sporting events, dress-up days, club meetings

5-Star Students software offers a variety of methods to capture and store data regarding participation in activities and attendance at events. Most activities data is readily available from existing sources. Athletic rosters can usually be obtained from student eligibility lists. School club rosters can be requested from the associated club advisor. Other groups on campus generally keep membership rosters that could provide upon request. Lastly, the school information system (SIS) may contain information about students and their activity participation. These lists can be inputted manually or imported directly into the 5-Star Students program for storage and association with student involvement profiles.

The ability to track attendance at the countless individual events occurring in modern schools is one of 5-Star Students' most distinctive and popular features. In most of today's secondary schools, barcoded ID cards are distributed to students for identification. These cards can be scanned by barcode scanners or mobile devices in order to "check-in" students at an event. Besides the ability to quickly capture a student's attendance, the use of scanners can provide important timestamp information as well. For best results, schools are advised to track attendance at a cross-section of selected events involving clubs, performance arts, sports, and popular school functions. All event attendance data, whether captured through barcode scanners, mobile devices, or other methods can be stored within the 5-Star Students program.

The 5-Star Students program not only provides a platform for storing data but more importantly offers the ability to view and analyze results. Built-in metrics and dashboards are available to quickly measure student engagement levels by grade, gender or individual. Detailed reports and custom reporting options also allow educators and administrators to dive deeper into details about specific activities, events, or students.

Surveys, Voting, and Measuring Student Engagement

Besides activities and events, several other types of involvement are worth measuring to gain a complete picture of student engagement.

Surveys can facilitate additional student participation and solicit feedback on the very activities and events that the school is tracking. For example, sending out a school-wide survey after a school dance can provide valuable insights about the event, from both students who actually attended and those who did not. Another effective use of surveys is to ask students about their interests. Gathering information about what students like can help educators match students to existing school activities and generate ideas for new activities targeted towards a broader range of interests. 5-Star Students provides the ability to create custom online surveys for distribution to any cross-section of students. The program also offers a dedicated *Interests Survey*, for use in capturing and analyzing individual student interests.

In secondary schools, voting is a common practice to elect student representatives, fill out yearbook superlatives and nominate classmates for homecoming and prom. Each time a student votes, they are participating in the process and contributing towards a healthy school climate where everyone's voice can be heard. 5-Star Students allows schools to conduct online voting polls that are easily administered to students via computer or personal mobile device. Schools can monitor and encourage individual voting participation, which promotes civic engagement habits that will continue into adulthood.

As an additional service offering, 5-Star Students allows schools to administer the *Survey of Student Engagement (SSE)*, designed by **Advanced Education Measurement (AEM)**. The SSE was created to allow schools to quickly and accurately measure the aspects of student engagement that education research has shown most strongly correlate with future student success. Measured engagement factors include how students feel about themselves, their academic career, their friends, their teachers, their future, and more. So that schools can evaluate changes in these critical factors. The 10-question SSE should be administered to students online via computer or mobile device at the beginning and end of the school year. As part of the SSE service, each school also receives five hours of data analysis from AEM to help better understand SSE results, trends in student activities participation, the relationship between activities participation and student attitudes, and more.

Identification of At-Risk Students

As described earlier, numerous independent studies have found that lack of participation in student activities is an early warning indicator that a student may be "at risk". The ability to record and monitor student participation with 5-Star Students allows a school to use actual data to identify less involved students and develop a strategy to help them become more involved.

Schools can use 5-Star Students report capabilities to determine which students lack adequate involvement in school activities and events. Educators and student leadership groups can then make efforts to understand why certain students participate less. This could be accomplished via surveys, counseling sessions, or other interpersonal communications.

Students may participate less for any of the following reasons:

- Involvement in activities outside of schools such as scouting, church groups, club sports, etc. Such students may be considered less at-risk than those not participating for other reasons, although research suggests that in-school student activities provides benefits that activities out of school do not.xvi
- Other time or personal availability constraints
- Lack of awareness of available school activities or events
- Belief that no school activities or events related to specific interests are available
- Feelings of social exclusion

In addition to identifying individual students, 5-Star Students provides reporting options that allow for analysis of particular grades, genders or racial/ethnic groups that participate less. Any identifiable groups of students that lack significant engagement can be further evaluated.

Schools can use involvement data from 5-Star Students in tandem with other at-risk indicators to form highly nuanced at-risk profiles for students and groups on campus. Measures such as past GPA, number of absences, and number of discipline interventions can not only be used to identify risk but also monitor progress after the implementation of involvement incentive programs.

Implementation of Involvement Programs

As at-risk students and groups are identified, educators and student leaders can begin to make efforts to include previously uninvolved students. These efforts may include forming new activities tailored to a more diverse array of student interests, scheduling events and activities at a broader range of times, and/or initiating programs designed to counter feelings of exclusion.

As a school puts their plans into action, they can use 5-Star Students features to manage incentives for students and groups to increase their participation.

Schools are advised to create a student involvement incentive program with the following five components:

- 1. Point values associated with different activities and attendance at different school events
- 2. Incentives to drive participation
- 3. Publicity of activities, events and associated incentives
- 4. Publicity of participation results and incentive winners
- 5. Regular data reviews to monitor program progress and adjust strategies as needed

Programs should promote additional participation from all students, with the goal of improving spirit and the overall school climate. Experience has proven that a system with these components will harness students' competitive instincts in a healthy way to make activities participation more desirable and instill a sense of pride and accomplishment.

Point System

The 5-Star Students program allows schools to choose a point value for each activity, event, survey, or voting poll. Typically, schools will select point values for activities and events based on a variety of factors. Participation in some activities requires a large time commitment, whereas attendance at most events is completed within an hour or two. Point values can also be used to provide extra incentive to participate in certain activities or events. For example, an event that student leaders and educators believe to be more important might be worth "double-points".

\geq	POINTS	DESCRIPTION		
SYSTE	100	Participation in sport, performing arts or service organization		
POINT	50	Participation in school club		
بس	10	Attendance at sporting event or performing arts production		
SAMPL	5	Spirit day dress-up		

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Schools can offer points for activities and events designed specifically to increase the participation. For example, educators and student leaders might decide that a car show is the best way to reach a previously uninvolved segment of the student body. To incentivize participation, they can offer points to all students who attend planning meetings and the car show itself. This point system allows school leadership to communicate to the attending students that they value their interests and will reward them for pursuing them in a healthy fashion.

Incentives

When a school decides which students receive incentives, it should keep in mind the distinction between **competitive** and **threshold** incentives. Competitive incentives are those where only a limited number of students can receive the reward. For example, one school might allow the seniors who have earned the most involvement points to receive their diplomas first at graduation. Threshold incentives are those where any student who achieves a certain level of points for participation can qualify. For example, a school could award free doughnuts to all students who earn a certain number of points each quarter or semester.

Schools that wish to encourage more at-risk students to get involved should make sure that ample threshold incentives exist. Research shows that at-risk students generally have lower levels of activities participation. At the beginning of an involvement-based intervention, they are unlikely to win any competitive incentives. However, they can still qualify for threshold incentives and see immediate benefits to their increased participation. Experience suggests that as previously at-risk students become more involved, they become more likely to win competitive incentives in the future.

Schools must also set challenging but realistic target point totals for students to receive incentives. Rewards that are too easy to attain may fail to offer students a sense of accomplishment and pride. Incentives that are too difficult to attain may not be earned and may discourage students from participation in the future.

The incentives themselves should consist of either tangible rewards or special privileges that increase as the point levels get higher. Many of the most effective rewards are things a student cannot buy themselves and/or provide a unique opportunity to spotlight school involvement.



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Publicity

In addition to establishing point values and incentives, schools should advertise the program to ensure students have enough information to change their participation patterns. Many schools give their points/incentive program a unique name so it can be easily promoted and remembered.

Schools also must publicize the results of the program. Students should be able to easily locate their own point totals and progress towards incentives. Students should also be able to view the results of grade level or other group competitions. Publicizing the results on an individual or group basis can often encourage more widespread participation in future activities, events, surveys, and voting. 5-Star Students provides an online option for schools to post program information, incentives, points leaderboard and student points lookup.

Data Review

To assess involvement program effectiveness and discuss next steps, student and faculty leaders should meet and review relevant data every 2-3 months. Consider the following data points at each meeting:

- Growth patterns in all relevant involvement data, including overall participation in activities and events AND the same data for targeted individual students and groups of students
- Progress patterns for at-risk students and groups of students on key academic indicators such as GPA, attendance, and discipline
- Relationships between involvement data and key academic indicators
- Participation rates, results, and growth patterns for recent survey and/or voting poll data, including the *Survey of Student Engagement (SSE)* if applicable.

Initial Research on Effectiveness of 5-Star Students

The beginning of this white paper describes the independent research that strongly suggests increased activities participation will lead to better outcomes across a host of indicators for all students, including and especially for at-risk students. In addition, 5-Star Students, LLC and its partners have conducted initial research that suggests an involvement program will help to improve student outcomes.

Correlation with GPA

Figure 2 shows the relationship between activity involvement and grade point average for 9,968 students in three schools using the 5-Star Students program. The average GPA for students who participated in varsity and intramural athletics is a 3.47 out of 4.00; participants in clubs and groups, a 3.79; and participants in fine and performing arts, a 3.60. Students who did not participate in any activity average a 2.80.

To determine the extent to which greater activities participation led to, as opposed to correlates with, better academic performance, further research is needed. However, this finding is consistent with the more rigorous studies described in Section 1 that show increased engagement in student activities leads to better academic performance. It also conveys that the 5-Star Students program can be used to track involvement for large numbers of students and resulting data can be linked with measures from student information systems to evaluate the impact of a school's involvement program on academics.

3.50

3.60

3.79

3.60

3.60

2.50

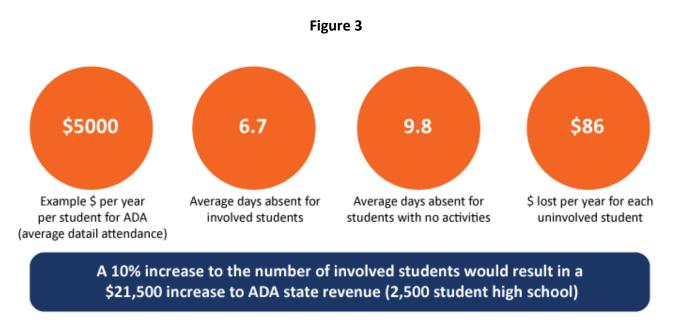
Athletics and Intermurals groups performing arts participation

Figure 2: Grade point average of students from 3 schools by type of activities involvement

Note: Some students may be counted in more than one activity category

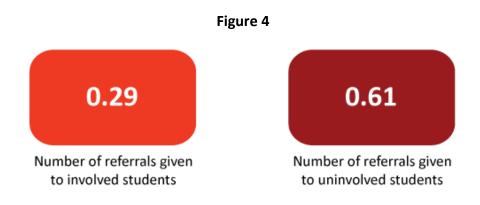
Correlation with Attendance

Figure 3 shows the relationship between activity involvement and attendance for 3,300 students in one school using the 5-Star Students program. The average days absent for students who participated in co-curricular activities was 6.7 days. Students who did not participate in any activity averaged 9.8 days absent. In addition, 8 out of 10 chronically absent students (those having more than double the average number of absences) were not involved. Based on this data, a modest increase to the number of involved students could significantly impact a school's ADA (average daily attendance) revenue.



Correlation with Discipline

Figure 4 shows the relationship between activity involvement and the number of discipline referrals given to students. The data was compiled from 3,300 students in one school using the 5-Star Students program. The average number of referrals given to students who participated in co-curricular activities was 0.29. The number given to students who did not participate was 0.61. Based on this data, uninvolved students received referrals at *double* the rate of students who were participating in activities.



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SSE Results and Effect of Activities Participation on Student Engagement

During the second half of the 2014-2015 school year 5-Star Students, LLC and Advanced Education Measurement (AEM) successfully piloted the *Survey of Student Engagement (SSE)* with 1,446 students in two schools. To preserve student data privacy, aggregate SSE results will not be disclosed until it has been administered to additional schools.

Perhaps the most notable finding was the existence of a gender divide in student engagement in both schools, with male students generally more engaged than female students. This finding mirrors similar studies and should increase confidence that the SSE is a reliable tool with which to measure engagement.

AEM's multivariate statistical analysis of the SSE and involvement data showed that greater activities participation led to higher levels of engagement in both schools. These results confirm studies cited in Section 1 and demonstrate the ability of 5-Star Students, LLC and AEM to provide schools with rigorous proof of the efficacy of their products.

Future Research Plans

5-Star Students, LLC is actively seeking support for several research projects designed to offer more definitive evidence on its program's effectiveness as a tool to drive better academic, psychological, and behavioral outcomes for all students, particularly those at risk.

These projects will analyze the effectiveness of activities involvement programs by combining a host of indicators including GPA, standardized test scores, absence and discipline rates, and student engagement. In addition, the ability to quantitatively identify at-risk students based on these indicators will be considered.

Endnotes

We would like to thank Advanced Education Measurement (AEM), who assisted in the preparation of this white paper.

For more information about AEM, visit aemkids.com



For more information about 5-Star Students, visit **5starstudents.com** or contact us at **info@5starstudents.com**



¹ "The Condition of Education - Elementary and Secondary Education - Student Effort, Persistence and Progress - Status Dropout Rates - Indicator April (2015)."

[&]quot;Percentage of Students in Grades 9-12 Who Reported Using Alcohol at Least 1 Day during the Previous 30 Days, by Location and Selected Student Characteristics: Selected Years, 1993 through 2013."

[&]quot;Percentage of Public Schools Recording Incidents of Crime at School and Reporting Incidents to Police, Number of Incidents, and Rate per 1,000 Students, by Type of Crime: Selected Years, 1999–2000 through 2009–10."

iv U.S. Census Bureau, "State and County QuickFacts."

^v Kominsky, Jamieson, and Martinez, "At-Risk Conditions of U.S. School-Age Children."

vi National Center for Education Statistics, "Digest of Education Statistics: Most Current Digest Tables."

vii Ibid.

[&]quot;Giving Statistics: Charity Navigator"; "Giving in Numbers: 2015 Edition."

ix Shelly, "When X=student Activities, Performance Follows. The Research Proves It!"

^x Zill, Adolescent Time Use, Risky Behavior, and Outcomes: An Analysis of National Data.; Mahoney, "School Extracurricular Activity Participation as a Moderator in the Development of Antisocial Patterns."

xi Joseph L. Mahoney and Cairns, "Do Extracurricular Activities Protect against Early School Dropout?"

xii Cooley et al., "A Study to Determine the Effect of Extracurricular Participation on Student Alcohol and Drug Use in Secondary Schools"; Miller et al., "Athletic Participation and Sexual Behavior in Adolescents: The Different Worlds of Boys and Girls."

xiii Marsh and Kleitman, "School Athletic Participation: Mostly Gain with Little Pain."

xiv Ibid.; Barber, Eccles, and Stone, "Whatever Happened to the Jock, the Brain, and the Princess? Young Adult Pathways Linked to Adolescent Activity Involvement and Social Identity"; Mahoney, Cairns, and Farmer, "Promoting Interpersonal Competence and Educational Success through Extracurricular Activity Participation."

xv Marsh and Kleitman, "Extracurricular School Activities: The Good, the Bad, and the Nonlinear."

xvi Ibid.