

Research Paper: Increasing Graduation Rates with Positive Behavioral Interventions and Supports

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Abstract

Multi Tiered System of Supports is the new way to teach students how to behave in class. It involves teaching all the students a basic level of behavior. For those students who don't respond to that basic level they are given more support in class and on campus. The idea is to keep the student in class more which would lead to better outcomes academically. One of the more successful models has been the Check In Check Out form. The goal of this research is to find how well the CICO form does in reducing recidivism on a large, culturally, behaviorally, and intellectually diverse campus.

Problem

Schools today use enormous amounts of data to create a picture of what is going on inside that is then broadcast out to the rest of the world. For the state of California that broadcast mechanism is referred to as the California Dashboard. The state of California measures six areas that they believe are essential to knowing what is going on inside the school. Of those six areas two of them can have a huge impact on the other four areas, graduation rates and a school's suspension rate.

Schools today are scrutinized for their graduation rates. Student graduation rates at some schools are low. Palmdale High School in the High Desert of Southern California is one such school. According to the most current numbers available the graduation rate at Palmdale High is 82%. Marking them as orange on the California Dashboard overall. One sub group, students with disabilities, is marked as red. As we attempt to boost our school's rating we need to boost graduation rates.

The other metric that can do a lot to boost the school's Dashboard rating is looking at the suspension rate. If students aren't in class because they are being disciplined for various reasons then they aren't learning and the school's ratings will go down across the board. Changing the behavior of the students so that teachers don't want to kick them out of class is essential to improving not only the suspension rate that the school is judged on but also the academic categories as well.

Students that are not in class are not learning. It is essential for the students to be in class. Reducing the number of times and the amount of time that a student is not in class will help the student see increases in academics and therefore will also increase graduation rates.

Significance of the Problem (literature review)

Graduation rates as well as grades have always been seen as a measure of how well or badly a school looks. It hasn't been until recently that the commonly held belief that removing kids from class was the best way of dealing with issues centering around behavior. Now in an attempt to increase graduation rates we now see how removing students from class can actually be to the detriment of the student and to the school's graduation rates and academic success rates.

Increasingly throughout the US schools are being trained in multi-tiered systems of support (MTSS) for students' academic, behavioral and social needs. At our site, Palmdale High School, the model of MTSS implemented is Positive Behavioral Intervention and Supports (PBIS). The purpose of the MTSS interventions is to keep students in class so that they have as many opportunities to learn as is possible. Creating more opportunities to learn for students who are especially at risk of dropping out and not graduating.

The PBIS model has three tiers of support for our students. Tier 1 supports, or universal supports, are the foundational positive behaviors and expectations that are defined and taught schoolwide. They are provided to every student. Tier 3 supports, or intensive supports, are the most intensive and take an individualized approach for developing and carrying out interventions. Tier 3 supports require the most resources to address behavior that is sometimes dangerous and often highly disruptive of learning and social settings. In a fully functioning tiered system, no more than 5% of the student population is expected to need Tier 3 supports (Hoyle, Marshall, & Yell, 2011; Stormont & Reinke, 2013). Tier 2 supports, or targeted supports, are supports for students that do not respond to the primary prevention strategies. In addition to Tier 1 supports, these students receive individualized interventions that develop social skills, self-management, and academic advancement. It is estimated that approximately 10 to 15% of a school's population will need the level of support provided in Tier 2 (Hoyle, Marshall, & Yell, 2011; Stormont & Reinke, 2013). It is within this tier that our previous research had us seeking out the characteristics of properly implemented and effective Tier 2 interventions. By far, the most referenced, implemented and effective Tier 2 intervention we found in our research was Check-In Check-Out (CICO).

Amongst that research, several articles showed CICO to be a contextual fit for students of low socio-economic status, of which the majority of our student population is. Adaptations and protocols of the CICO form can be easily modified to be more engaging and appealing to ethnically diverse students and easier to administer in low-income schools (Eiraldi, R. et al., 2019). The fluidity and adaptability of the CICO forms is absolutely essential in reaching students of various cultures, backgrounds and socio-economic statuses (Swoszowski, N, 2014).

Children with emotional and behavioral disabilities are at risk and have great difficulty succeeding in their public education and often interfere with teachers' efforts to educate other children in the classroom. These students are more likely to fail more courses, have higher school dropout rates, are unlikely to attend college, and have great difficulties with social relationships and employment as teenagers and adults. There are several characteristics that make PBIS compatible with mental health services, for example, both share the “importance and need to increase availability, access, and range of services” to improve “social and adaptive functioning” (Cheney, D. et al., 2010). Similarly, PBIS interventions are delivered in levels/tiers, and delivered according to problem severity and child's response to previous, less intensive interventions. A considerable amount of our student population are students with behavioral/emotional disabilities.

CICO has demonstrated to be efficient and effective, that is, inexpensive and successful...two things that we are in demand of at our site. As previously mentioned, the easy adaptability of the CICO form for the particular student to include, amongst other details, participant goal setting, choice of adult mentor, number of check-ins and procedural fidelity is a benefit (Fallon & Feinberg, 2017). The fluidity and ability to easily change the protocols and interventions to the individual student is vital for success.

Based on the populations of convenience, our students at Palmdale High School, and the effectiveness of CICO found through our research on that particular population, our choice was to move forward and test its validity on a small sample size.

Research Question

One of the first questions that comes up when looking into graduation rates is why are students not passing. One of the more interesting statistics when looking at student grades is the amount of time spent out of class. The longer that a student is out of class the lower their grades are. This could mean missing class for any reason; for example lengthy illness or chronic behavioral problems. Schools can control a lot of things but illnesses and pandemics are not things they can control. Schools however can educate and instruct students on how making good choices can benefit them. If schools can limit the number of suspensions out of class that a student has a better chance to do better academically in that class.

In an attempt to reduce time spent outside of class the Positive Behavioral Intervention and Supports (PBIS) team have created an intervention that can be aimed at students who are generally a behavioral problem. The intervention which is used widely across the United States is called a Check In Check Out (CICO) form. This form when used in conjunction with a brief meeting twice a week with the student can see dramatic decreases in recidivism rates among those students with behavioral issues.

Our question is can a semi-weekly meeting with a mentor teacher and the use of a check-in check-out form reduce rates of students missing classes and thus increase academic achievement in core classes increasing the graduation rate.

Population

Palmdale High School (PHS) is one of eight comprehensive high schools serving students in the Antelope Valley. Established in 1957, PHS currently serves approximately 2,500 students. The city of Palmdale, known as a commuter city, has a diverse population of nearly 160,000

residents. Over the past few years, the school has seen higher transiency rates, likely due to an increase in people relocating to and from the Los Angeles area. These changes have made the school's student population more economically, linguistically, and ethnically diverse.

Palmdale High School is essentially a microcosm of the Antelope Valley when considering the demographic composition. According to the most recently published numbers on the California Dashboard, the two largest race/ethnicity groups are Hispanic or Latino and Black or African American, which represented 76.7% and 15.8% of the total enrollment respectively. Other student groups represented include White at 4% and Two or More Races at 2%. American Indian, Asian, Filipino and Pacific Islander, collectively comprised the remaining 1.5% of the student population.

According to the student group percentages on California Dashboard, Palmdale High School has amongst the highest percentages of socioeconomically disadvantaged students and English learners, with 85.5% and 15.3% respectively. PHS also has a high percentage of students with disabilities at 18.2% and foster youth at 1.9%.

As was mentioned earlier, Palmdale High's graduation rate is 82%, putting us in the orange statewide. In addition, the suspension rate, although it declined 6.3% in the last year alone, is in the yellow at 7.6%.

Design

A mix of both quantitative and qualitative approaches will be used to find answers to our questions. On the quantitative side we are studying the number of suspension rates, grades, and graduation rates. On the qualitative side we are looking to find reductions in stress levels in both teachers and students, as well as the amount of positivity felt on campus.

In order to achieve this research we are going to pull a sample of 80 students. They will include 20 from each grade level at Palmdale High School. Of those 20, 10 from each grade will be selected at random to be in the experimental group that will receive the CICO form and the control group which will not be given the independent variable. Tracking will include several data points including grades (pulled from PowerSchool on a weekly basis), attendance (also pulled from PowerSchool weekly), number of suspensions received (pulled from referral form), and graduation rates (pulled from the California Dashboard website).

Check-In Check-Out is a Tier 2 intervention that regularly checks students' progress using weekly progress reports. Core elements of CICO include students' checking in with a school staff member at the start of the day to review behavior expectations and goals, the adult providing feedback to the student throughout the day, and finally, the students' check out with the adult at the end of the day to review their progress toward their goals. CICO is meant to be an efficient and effective Tier 2 intervention in providing targeted behavioral support (Fallon & Feinberg, 2017). Indeed, CICO, specifically, has been proven to effectively produce positive outcomes in various studies (Debnam, Pas & Bradshaw, 2012; Reinke, Stormont, Latimore & Herman, 2013). The article by Bruhn, Lane & Hirsch (2014) that looked into studies that used CICO as their Tier 2 intervention found that, in the majority of the studies, "students demonstrated decreases in office discipline referral rates, increases in academic engagement, and decreases in problem behaviors" (p.182).

Measures and Procedures

Our procedure will follow a basic scientific experimental method. We first need to pick our sample. We will look up student intervention information looking for students who have a

history with multiple interventions being used on them. We will pick out 20 top offenders from each class for an overall total of 80 students. We will then flip a coin to decide whether they will fall into the experimental group or the control group. Once we have our groups selected those in the experimental group will be assigned to one of the at risk coordinators for mentoring. The at risk coordinators will then begin meeting with them one on one twice a week, once on Monday for 15 minutes and once on Friday for 15 minutes. The student will then be given the CICO form and a goal will be set for them to reach by the end of the week. The form is to be filled out by their regular classroom teachers each day stating what their behavior was like. At the end of the week on Friday the mentor will go over their goal and whether they achieved it or not and any interventions that were used on them or suspensions they received. The at risk coordinator will also log that information along with their grades and attendance for each of their classes. That information will then be collected so we can generate the information that proves the effectiveness of the CICO form. At the end of each quarter the students and faculty will have an opportunity to have their opinions heard through the use of a brief survey available online. That information will also be collected and logged for analysis.

At the same time the control group's statistics will also be collected. At the end of each week grades, attendance, and behavioral issues will be cataloged for the control group as well. Using a control group like this will show to the researchers whether or not the reduction in referrals is because of the CICO form or something else.

These steps are the basis of a scientific study that will show the effectiveness of the CICO form.

Results

After running the program for two months we will then collect the data. We will disaggregate the data looking at the differences in academic performance between the control and experimental groups. We are going to pay extra attention to whether or not the student's grades improved in the short term and how much time is spent outside of class. If using the CICO form reduces recidivism and increases grades then we can conclude that the CICO form can and will increase academic performance and thus graduation rates.

Another result to look out for are those interventions used on the students both in and out of the experimental group. Another effect of the CICO form is a reduction in the number of interventions needed to correct behaviors in classrooms. By tracking the number of interventions being used we can also see the effectiveness of the CICO form in altering behavioral patterns in students.

On the qualitative side we can ask some stress level questions of the students and staff to see if those levels decrease as well. We would collect data on a Likert Scale attempting to find the level of satisfaction students and staff feel about their environment.

Many of the statistics will be able to be organized using different charts. Many of the results that show decreases or increases can use bar charts to illustrate those changes. For the qualitative data we will use divergent bar charts. That will help us to view differences in the Likert Scale responses that we will receive.

Analysis

Much of the collected data is going to be numerical in nature. Interventions being used should go down in the experimental group as students become more self regulatory. As students

who receive the CICO form are talked to about behavioral norms on campus they will internalize them and begin to show them outwardly. There should also be a drop in the amount/number of times spent outside of class due to behavioral issues. As the now internalized behavioral norms become more second nature the issues that arise in class will be fewer and further in between. Spending more time in class should show improvements in grades as the student is able to be in class for instruction. Before when they were removed from the learning environment they would miss out on instructional time in class. Improvements in academics will improve chances of graduation as fewer students should fail fewer classes. All of these statistics we will be watching for.

Some of the data will be more qualitative than quantitative. In trying to understand what the temperature of the school climate is it will require us to collect information from surveys and interviews both formally and informally. This data will have to be interpreted by the researchers to get an overall view of how things are proceeding on campus. Surveys will be given to the students and faculty and a 5 point Likert Scale rating will be used to figure out the overall climate of the campus.

Not everything is going to work out well however, and we can expect to see a few things not turn out as they should. One of the main things that we will probably see is the lack of follow through from the students in regards to the meetings. This will certainly reduce the effectiveness of the program. Another problem that could arise is the student's behaviors might not change. If there are students who don't see an improvement in their behavior they could be candidates for a tier three intervention. However, if the majority of the students don't respond to

the CICO form then we can start looking at the CICO form being at fault and not something that works with our population.

Discussion

The results will ultimately show the effectiveness of the CICO form to reduce time spent out of class. If the CICO form does prove to be a cost effective way to alter student behaviors and ultimately make the campus climate better then we can implement it as a tier two intervention for all the students who need that little extra boost. However, on the other hand, if the results tell us that it doesn't effectively reduce recidivism rates for our population we can start looking to other resources to use for our particular population that will do what we are looking to do.

Ultimately I believe the answer to our research question is going to be that the CICO form is good at reducing interventions required for the students but that it might not have the desired effect on grades and graduation rates. Having another set of eyes on you is generally a good thing. Having a mentor teacher that doesn't have a stake in your academics can be a good place for students to turn to when they are having a problem with one of their teachers. Also reinforcing the behavioral norms that the school uses is a good thing when thinking in terms of reducing interventions needed and the need to suspend kids out of class. I do not foresee that keeping the kids in class will necessarily lead to a jump in grades. I'd like to think that grades will go up as students stay in class more and are out of class less but there is probably only correlative evidence of that and not a causal relationship.

Limitations/Future Research

This research study has its limitations. One of the biggest limitations is the sample size. In order to have a truly valid study of the effectiveness of the CICO form we would need to expand the study to include a much larger and more diverse population. Palmdale High School is a pretty good mix of many different racial, socio economic, and social groups but it isn't particularly representative of students in the United States as a whole. Another large limitation is the difficulty researchers would have in isolating the real cause of the change in behavior. There are far too many variables to control to find the true connection between antecedent and behavior.

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