

EFFECT OF TRACKING PROGRESS ON STUDENT'S % INCREASE OF KNOWLEDGE OF SKILL

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ABSTRACT

Many educators set goals not only for themselves, but for their students as well. Teachers want all of their students to be successful and to increase their knowledge level of a skill. Well, what if teachers challenged their students to set a goal for themselves and had them keep track of their own progress? Something different was tried this school year to help push students to the next level; they were asked to graph their progress with their Dolch Sight Words. At first, the teacher was a little hesitant due to the classroom being Self-Contained Special Education, but she really believed that her students were up for the challenge. Half of the students in the class were asked to do this (5 students) and they were successful. The other five students in the class were unable to complete this challenge due to their cognitive level of learning and understanding on the concept at hand. By asking the students to keep track of their own progress they were either able to move up to a new level of words or at least be able to maintain progress without regression, which is something that all of these students struggle with. The findings showed that the students, though significantly behind in their academic skills, could be successful by tracking their own progress and setting a goal for themselves.

INTRODUCTION

Background, Issues and Concerns

The point of the study was to see if students that receive less than 40% of their academic instruction in the General Education Classroom could be successful with tracking their own academic progress. The study would show that even with their cognitive IQ's being below 70 they could comprehend the power of setting goal and trying to obtain it and also maintain progress. In Special Education in this District there has become a big push for integrating some of the General Education teaching tools into the classroom. Special Education is being asked to step out of their comfort zone and use Common Core along with their alternative curriculum, participate with all District Wide Assessments if their IQ is about 50, and implement more RTI strategies along with what they do on a daily basis. So, with this being said SPED wanted to try a new strategy to help their students not only to become successful but to participate in a skill that the General Education Classroom had been doing for a year prior. The goal was to have students to learn how to track their own progress data and be able to understand what it all meant. The hope was to see improvement due to the visual motivation that comes with creating a graph.

Practice under Investigation

The practice under investigation is whether or not students tracking their own academic progress is beneficial to their academic success or not.

School Policy/Practice to be Informed by Study

The practice being informed by the study is to decide if whether or not the practice of tracking benefits student progress or not.

Conceptual Underpinning

Tracking student progress has shown that it is a huge motivator for students to continue to progress. Tracking engages student learning because they can see their progress and want to continue to do better. John Dewey believed that hands on learning and building relationships with students because it causes them to be more likely to work harder in class. By having students track their own progress they are able to visually see their progress going up which in turn helps to build a better relationship with the teacher due to positive feedback!

Teachers want to find ways to motivate their students to want to do better and to want to be successful; with tracking this is possible. It has been proven that it boosts moral in the classroom and motivates students to want to succeed. Tracking is a way of the future for encouraging student success and goal reaching!

Statement of the Problem

The problem is the influence of tracking on student achievement.

Purpose of the Study

The purpose of this study was to see if students that receive less than 40% of their academic instruction in the General Education Classroom could be successful with tracking their own academic progress and maintain academic growth.

Research Question

RQ: Is there a difference in academic performance between students tracking their own progress compared with students not tracking their own progress?

Null Hypothesis

Ho: There is no difference in academic performance between students tracking their own progress compared with students not tracking their own progress

Anticipated Benefits of the study

The anticipated benefits of the study is that Special Education students can make progress by tracking their academic progress just like their General Education peers, even though their cognitive ability is significantly below grade level and below a 70 IQ.

Definition of Terms

RTI (Response to Intervention): the practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying child response data to important educational decisions ("Response to intervention," 2007)

Tracking: the practice of having students keep track of their own individual progress with their academic goals

Summary

Tracking began in the mid-19th Century and ever sense the 1990's we have been studying the effects of tracking and non-tracking. The studies show that tracking boost motivation and progress for student achievement, and as educators this is what we want to see every day! Teachers want to see their students excited to learn and to see them succeed.

Tracking is the practice of having students keeps track of their own individual progress with their academic goals. The purpose of this study was to see if students that receive less than 40% of their academic instruction in the General Education Classroom could be successful with tracking their own academic progress and maintain academic growth. The question that is asked is whether or not there truly is a difference between academic performances of those students who track their progress than of those students who do not track their progress. With this question being asked it raises the Null Hypothesis to be that there is no difference between academic performances of those who track vs those who do not track.

The ultimate hopeful benefit of the study is that Special Education students can make progress by tracking their academic progress just like their General Education peers, even though their cognitive ability is significantly below grade level and below a 70 IQ. Students need to be

successful in school and this study is very hopeful in finding a way to help encourage success in all students (high or low cognitive ability) academic performance.

REVIEW OF LITERATURE

There are many benefits of tracking student progress. For example, tracking can increase student achievement for both high and low tracked groups (Glab & Stuart 2010). This method proves that no matter what the cognitive ability of the student tracking can be extremely beneficial to their success and future learning. Tracking also increases teacher motivation and it does NOT have a negative impact on self-esteem or self-concept of subject matter (Glab & Stuart 2010). According to Duflo, Dupas, and Kremer (2009) during their study in Kenya their results showed that test scores were higher in schools where student progress was tracked, and this was consistent in both the high and lower learning groups. This study also showed that the positive effects of tracking lasted for years. The most interesting fact that was found with student tracking was that the teacher attendance rate in the schools that tracked student progress (study in Kenya) was 9.6% better than the schools that were not tracking (Duflo, Dupas, & Kremer 2009). Glab and Stuart (2010) also did a study state side in Michigan and their results were very similar. They found that in math students that tracked improved by an average of 3%, whereas those who did not track dropped an average of 3%. These two studies have shown that the majority of progress that stems from tracking is with the lower achievement groups. This goes along with this study sense the study group was a group of Special Education students who are typically lower achieving and behind in grade level expectations. The self-esteem and confidence over a long period of time that are direct consequences from student tracking is off the charts (Duflo, Dupas, & Kremer 2009)!

RESEARCH METHODS

Research Design

A quantitative study was used to see if students tracking their progress make a difference in their academic progress and success. The independent variable is tracking student progress and the dependent variable is the students' academic progress.

Study Group Description

The study group was a small group of students that receive their academic instruction in a Self-Contained Special Education Classroom. The elementary school is one of eleven in this Midwestern suburban school district. The school district is made up of three cities that run together making the district student population 10,950 ("Frequently asked questions," 2013). The school district has grades Kindergarten through 12th grade, plus a "Gateway" program for Special Education Students to be a part of for job training until they are 21 years of age. This district has an overall student population of 11,078 (2012). The ethnicity breakdown is as follows: White-84.6%, Black-5.9%, and Hispanic-5.1%. The percentage of students in this district that qualify for Free and Reduced lunch is 20.3% (2,218 students). This district also has a high graduation rate of 88.97%.

Data Collection and Instrumentation

The data collection was taken from five students in both the 2011-2012 and the 2012-2013 school years. The data was based on sight word goals per their IEP's. During the 2011-2012 school year the teacher kept track of all of their data and during the 2012-2013 school year the

students' keep track of their own progress. They had to make a bar graph for each day so they could visually see their progress increasing or decreasing.

Statistical Analysis Methods

The statistical analysis that was used was a descriptive analysis. Two t-tests were done with an Alpha Level of 0.25. One t-test was measuring the progress of December scores from 2011 and 2012 and the other t-test was measuring the progress of March scores from 2012 and 2013.

FINDINGS

Student	September 2012	October 2012	November 2012	December 2012	January 2013	February 2013	March 2013
1	PrePrimer 93%	PrePrimer 89%	PrePrimer 98%	PrePrimer 100%	Primer 55%	Primer 68%	Primer 69%
2	Primer 82%	Primer 84%	Primer 89%	Primer 92%	Primer 92%	Primer 93%	Primer 94%
3	Primer 84%	Primer 89%	Primer 89%	Primer 92%	Primer 95%	Primer 98%	Primer 100%
4	Primer 78%	Primer 89%	Primer 94%	Primer 93%	Primer 94%	Primer 98%	Level 1 84%
5	PrePrimer 40%	PrePrimer 48%	PrePrimer 56%	PrePrimer 67%	PrePrimer 84%	PrePrimer 90%	PrePrimer 95%

The chart shows that EVERY student made progress! All five students also met their IEP goal of mastering the list with 95% accuracy. Some of the students were able to move to the next level of words because of their progress. The school year before this, all of the students struggled with inconsistency with their word knowledge and none of them moved up to a new level. All of the students started this school year with the list that they worked on throughout the entire year of the previous school year. The results of this challenge to see if tracking would help improve students' academic progress are just amazing. It is wonderful to see that they were motivated by

their own goal and wanted to keep doing better to reach the next level of words. Student #1 raised 7% in four months and was able to move to the next level of words. This student has currently made a progress of 14% in three months on the new sight word list. Student #2 has made a progress of 12% since September and is currently 1% away of meeting the 95% IEP goal to move to the next level. Student #3 has increased their sight word knowledge by 16% since September and is currently working towards starting a new sight word list. Student #4 made a 20% increase in their sight word knowledge in 6 months and is currently working on a new sight word list, in which they already have achieved an 84% in mastery of the words. The final student #5 has made an increase of 55% (largest gain) since the beginning of the school year and is also in the process of starting a new list of sight words. This study has shown that tracking does improve student learning and this is something that should continue to be implemented in the classroom.

t-Test Analysis Results for Students Tracking and Not Tracking 2012-2013

Source	Mean	Mean D	t-test	df	p-value
Dec. 2012 (n=5)	73.2				
Dec. 2013 (n=5)	88.8	-15.6	-1.09963	4	0.333228

Note: Significant when $p \leq 0.25$

The mean of December 2012 was 73.2% and the mean of December 2013 was 88.8% which caused the mean difference to be -15.6%. The t-test results were -1.09963 with a D.F. of 4. The p-value was 0.333228 which is NOT less than or equal to the Alpha Level 0.25 so there is no significant benefit for tracking vs. non tracking in the month of December for the two school

years. The null hypothesis was accurate as there is no difference in the academic performance between students tracking their own progress compared with students not tracking their own progress.

t-Test Analysis Results for Students Tracking and Not Tracking 2012-2013

Source	Mean	Mean D	t-test	df	p-value
March 2012 (n=5)	72				
March 2013 (n=5)	94.6	-22.6	-2.36445	8	0.04564

Note: Significant when $p \leq 0.25$

The mean of March 2012 was 72% and the mean of March 2013 was 94.6% which caused the mean difference to be -22.6%. The t-test results were -2.36445 with a D.F. of 8. The p-value was 0.04564 which is less than or equal to the Alpha Level 0.25 so there is a significant benefit for tracking vs. non tracking in the month of March for the two school years. The null hypothesis was rejected as there is a difference in the academic performance between students tracking their own progress compared with students not tracking their own progress. This second t-test proves that with continuous tracking the progress students make throughout the school year is significant.

CONCLUSIONS AND RECOMMENDATIONS

The results of the data and two t-tests show that over time the process of having students track their own progress is extremely beneficial to their academic success. Students are more motivated by the visual stimulation of seeing their percentage of correct words continue to increase. The students also form stronger bonds with teachers because there is more positive reinforcement due to their continued success in the classroom. As stated in the Conceptual Underpinning tracking student progress has shown that it is a huge motivator for students to continue to progress. Tracking engages student learning because they can see their progress and want to continue to do better. The findings prove this theory because the t-Test shows that there is a significant benefit to tracking with the p-value being 0.04564, which is less than the Alpha Level of 0.25. The findings also show that with continued practice of tracking student achievement does improve. The findings show that once March comes around and students have been tracking all school year their percent gain is incredible!

It is recommended that more classrooms, both General Education and Special Education, have their students track their own progress. Educators want all students to become successful and make continuous progress, this practice of tracking will help educators do that with their students. It will help each student make a realistic academic goal for themselves and then in turn allow them to reach it. This is an old theory and practice that is just now getting into our school systems and we need to continue to reinforce this practice to help motivate our students.

A future study that could be performed to only enhance the knowledge that has been attained from this study would be to test tracking on the middle and high school levels. If there is

a benefit in the elementary level for tracking it is only best assumed that the trend will continue as the students get older and continue to track personal progress. Since, tracking has also been proven to enhance student motivation and self-esteem it would be great to implement it at the upper levels where students are more active in extra curriculums and need the self-confidence.

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