THE EFFECT OF STUDENT ORGANIZATION ON CLASSROOM SUCCESS

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Holt High School
Yes, we love our Indians, deep down in our hearts
Home of the Indians

MONTANA STATE UNIVERSITY
MSSE

INTRODUCTION AND BACKGROUND

The district is the fastest growing in the state of Missouri, with an approximate total of 16,000 students enrolled. Wentzville is made up of 83% white, 7% black and other minority populations are too small to account for. Holt has the largest student population of the three high schools with 1,693 total students enrolled. 19.3% are on free and reduced lunch. With growth happening at such an accelerated rate the boundaries for the high schools have changed several times within the last four years and may be changing again with the addition of a fourth high school.

With all of the changes that are occurring and the influx of students from other districts, it is vitally important that teachers set up a solid foundation of expectations and routines for students to follow. This is a common practice for all teachers but need to be designed with careful planning so it can help students who transfer into a new district acclimate efficiently. Many teachers at Holt have noticed students coming into high school; either from our own feeder schools or from other districts, with completely different skill sets in the area of study and organization. It is not yet clear if student's struggles are due to transfers from other districts or the necessary changing in boundary lines that causes many students to change schools from year to year. With students lacking in a solid foundation in the area of organization, many students could feel lost in how to keep track of homework, how to use organizational skills, how to study or how classwork is important to succeed within the classroom. Our district requires teachers to have learning goals up on the board or posted somewhere that the students can see them in an effort to address students understanding of the daily agenda. Even though the learning goals are clearly stated, many students still have confusion, a different approach may be useful.

Another reason to teach students organization is to save them time in the long run. Time management skills is another weak point with incoming high school students. Allowing students to learn how to organize should help them focus their time on the content rather than feeling lost and overwhelmed.

Focus Questions

"How student organization affects success in the classroom and can the student take over their own education through organization?"

Sub Questions:
1. What is the impact of student organization on summative assessments?
2. What is the impact of student organization on formative assessments?
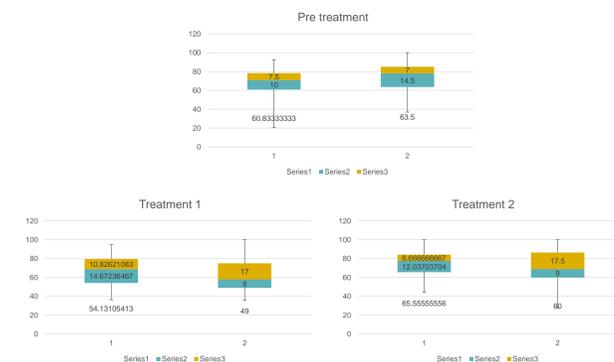3. What is the impact of student organization on classwork completion?

Methodology

This study consisted of 39 sophomore biology students (N=39). Classwork completion scores were averaged both pre-treatment and post-treatment. At the end of the pre-treatment unit the difference of the scores were taken to see if there was a net gain or loss. This same strategy was used to compare the formative scores. To further the data analysis on student success, normalized gains and a two tiered t-test was used to compare the formative scores to the summative scores.

Data and Analysis

Pre vs Post Treatment Units

	Average Summative Scores	Average Formative scores	Average Completion scores
Pre-treatment	74.7	68.05	75.5
Post-treatment	67.6	70.83	83.86
The difference (post-pre)	-7.1	+2.78	+8.36

When looking at the Pre vs Post data table, there are several pieces of data that stand out. Students completed approximately 8% more work during the treatment units and scoring almost 3% higher on weekly formative assessments. However, students scored about 7% lower on the summative assessments.

Pre treatment

Treatment 1

Treatment 2

Normalized gains were analyzed. Pre-treatment analysis indicates a positive 2.7% increase in mean average from the formative to the summative assessment. After the treatment was applied there was an average negative 5.5% decrease from the formative to the summative assessment.

T-test results for formative averages for unit compared to summative value for the same unit.

	T-stat	Critical value	Significance
Pre-treatment	-2.31	2.02	yes
Post treatment 1	1.93	2.02	no
Post treatment 2	0.92	2.02	no

The t-test was used to see if there was any significant difference between the average formative assessment scores during each unit and the summative scores of the same unit. Table to the left shows that the pre-treatment unit did have a significant difference between the assessment scores and when the treatment was applied it showed no significant difference between the assessment scores.

Conclusion

Overall this treatment is successful. This was found in both completion rates and in formative assessment scores. The only negative numbers that are present are when looking at the summative assessment scores. This was interesting because if the post treatment were truly a negative for the summative scores then the t-test would read significant. We would then be able to use the normalized gains to support that it was significant in a negative fashion. Since the t-test result was not significant then we cannot claim that the difference was large enough to cause a detrimental impact to student success. We also cannot say that the treatment helped increase summative scores. Other outside factors may play a role in student success between the formative and the summative assessment and those became evident during student interviews.

Value

This capstone research project has greatly impacted not only the way I approach organizing my classwork, but has emphasized great change in how my students utilize the organizational tools I put forth for them. I will continue to use unit binders with an index page and a calendar going forward. Not only did this help students keep track of when assignments were due, but it also helped keep assignments and classwork in one place. It was easy for me to open a binder to an index page and get a quick diagnostic on where a student was at. This helps tremendously with the amount of transfer students and absences that I have in my lower level classes. This also helped me be a better prepared teacher. An entire unit is planned and handed out at the beginning of the unit. I was then able to make it flow from one assignment to the next. I will continue to allow students to use the binder on their formative assessments since this was a great incentive for students to complete more class work than before. I also, believe that students saw more of a purpose for what they were learning because of the learning goals they had to write down on the index page. This opened up a dialect between myself and the class as a whole about what the goals for the class were. I believe this was a great framework on which to build. The missing piece to tie it all together seems to be teaching students how to use their class work to study for their summative assessments and utilizing their teacher as a tool not as the main source of knowledge.

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