The effect of suspension on student achievement in Mathematics and English among high school students

Glen Howard Asch
Rowan University

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ABSTRACT
Glen Howard Asch
THE EFFECT OF SUSPENSION ON STUDENT ACHIEVEMENT IN MATHEMATICS AND ENGLISH AMONG HIGH SCHOOL STUDENTS 2004-05
Dr. Robert W. Kern
Master of Arts in School Administration

The purpose of this study was to determine the effect of suspension in Mathematics and English achievement among the students at Sequoia Transition High School.

The major aspects of methodology used in this study were collected from material culture of student grades for the period of September 2004 to January 2005. Fifty one students were researched on several different points of interest based upon suspension frequency, grade level, gender, and average of four consecutive interim and marking period grade point scores.

A summary of the data was compiled. Computerized statistical calculations were used to determine the relevancy of English and Mathematics achievement scores as related to occurrence of suspension. These results were analyzed and presented in respect to the research statement.

The results of the study indicated that there was no significant correlation between suspension and achievement in the disciplines of English and Mathematics.
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The late Raphael D. Asch, my father and the late Norman J. Rosenberg, my father-in-law, who in my greatest times of despair smiled down upon me and gave me the courage to continue.

Fanny M. Asch, my mother, who believed in my goals and achievements due to the persistence of her character and her deeds. Who now cannot ever conceive the concepts nor relish the glow of my accomplishments due to the overwhelming effects of Alzheimers.

My three daughters, Nicole L. Asch, Samantha J. Asch, and Rachael D. Asch, who offered unending understanding, encouragement and affection beyond my comprehension.

My wife and ultimate best friend, Laurie D. Rosenberg-Asch, whose dedication, devotion, love, support, and greatest understanding of the human spirit and desire virtually made this dream a reality.
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Chapter 1

Focus of the Study

There are many attributes that influence a student's achievement that otherwise demonstrate undesirable behavior within the school and classroom setting. One may be the student's interest in the subject matter. This could highly motivate the student and thereby propel him or her to do and accomplish greater tasks in the learning process of a particular course (Adler & Fliham, 1997). It afforded the student opportunity to possibly achieve a higher grade. Another attribute was the influence a particular teacher has on the student. This also often propels the student into the realm of greater achievement and thereby reduced undesirable behavior within the term of the course. Other attributes can be economic status in the community of which the student and school are a part. Sometimes a student will forego adverse behavior and be highly motivated because of the wish to continue on the social and financial ladder of parents, relatives, and friends. The reason for motivation and achievement are possibly learned behavior. One attribute of achievement in students that demonstrate unwanted behavior may sometimes be overlooked. Disciplinary action was a characteristic, which has been researched and considered to have had no effect on student achievement. There were opposing viewpoints regarding the effect of discipline or suspension on academic achievement in mathematics and English; however, it was the purpose of this research to explore only the characteristics that were or might have been contributory to achievement if and only if student suspension was considered.
Purpose of the Study

The purpose of the study was to determine the effect of suspension in mathematics and English achievement among the students in Sequoia Transition High School. The plausibility design was to positively affect student's achievement patterns by determining if suspension influences the way a student learns. Teachers may have an interest in this facet of research to better understand the population of their classroom and it will also allow administrators to better understand the population of their school, thereby influencing curriculum and discipline in a more positive manner.

The study focused on the correlation between suspension and achievement in mathematics and English of all the transitional high school students within the Sequoia Transition High School. Data records and documentation including but not limited to test grades and report card grades were included in the study. The data was accumulated and complied in a mathematical data table, raw data scores, as well as growth and decreased percentages relating to student’s achievement within the school were used.

Our society has afforded families a new definition. No longer does the definition of family encompass a two-parent household. Today a great many more students live in a family of one parent or other relatives. This environment again may contribute to the academic achievement of an individual student, inasmuch as the single parent may or may not have the time to become as involved in the scholastic achievement of the student (Moore & Mayer, 2003). Influences such as economic position and the familial environment are just a few of the factors that can affect achievement in a student’s educational career. Is it not possible that discipline in the form of suspension could also be a factor in a student’s achievement?
The purpose of this study was to evaluate the effectiveness of suspension on achievement in mathematics and English within Sequoia Transition High School using material culture documents and records of student interim and report card grades in mathematics and English at Sequoia Transition High School within the Lenape Regional High School District. The study resulted in a feasibility research to inform educators, parents, and students. The use of this research did provide administrators and teachers with the opportunity to innovatively and creatively understand their students. It allowed the teacher to implement precise, appropriate, and efficient educational experiences within classroom setting. It resulted in the opportunity for the student to adapt, improvise, and have the skills to overcome any future potential educational problems.

Was there a direct relationship between suspension and achievement in Mathematics and English courses of high school students, and did these students achieve higher test scores and therefore higher grades? This study sought to explore these issues among high school students in a transition school in a large northeastern state. Simply stated, this study sought to determine if, in fact, there is a linear relationship between student suspension and the grades students achieve in Mathematics and English.

Definitions

The following terms were used in this study.

*Undesirable behavior*: Behavior exhibited by students that can only be addressed via school suspension from classes.

*Mathematics achievement*: The quarterly marking period grades for students over a three-term interim reporting period.
**English achievement:** The quarterly marking period grades for students over a three-term interim reporting period.

**Suspension:** The act of being out of classroom instruction via a decision from the school principal and/or superintendent because of undesirable behavior.

**Limitations of Study**

The limits of this study were that the total population of the school district is too vast and only a single school will be selected with a smaller population. This population is considerably smaller than traditional high schools. Sequoia Transition High School has a total population of about fifty students. Therefore, the review of material culture at Sequoia will be based on the total population. There will also be a correlation analysis between data and results of mathematics and English achievement.

The results of this research may not reflect the total population of students who are in high school due to the above limitations. This is due to the small size of the student population at Sequoia Transition High School.

**Setting of the Study**

Sequoia Transition High School is a part of the Lenape Regional High School District. The district serves the townships of Evesham, Medford, Medford Lakes, Mt Laurel, Shamong, Southampton, Tabernacle, and Woodland. Students attend four high schools as designated by township. The population total may surpass 100,000 residents in the year 2004. Sequoia Transition receives students from all of the district high schools. The transition school assists students in overcoming obstacles that may be present while attendance at the other high schools.
Significance of the Study

The contribution that this study made to scholarly research was in the form of data relation significance. A comparison was made between suspension and its relationship to its achievement in mathematics and English. The question was whether there was a positive or null affect on student achievement overall. If mathematical and English achievement was affected by suspension there could be alternative instruction methods as well as discipline measures an educator used to enhance the overall educational process. Teachers, administrators and even the board of education may have highly regarded this study if it was proven or even created a shadow of evidence that there was a correlation between suspension and achievement. The needs of the students were always in the forefront of this study.

The Relationship to ISLLC Standards

The ISLLC Standards that relate to this are numbers two, three and five. ISLLC Standard 2 states a school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth (Ubben, Hughes, Norris, 2004). This standard related to this study because the suspension was a part of the school disciplinary program. If there was an effect between rate of suspension and academic progress this should be determined. If this effect minimized learning then it should be examined further in an effort to positively affect learning. Standard 3 states a school administrator is an educational leader who promotes the success of all students by insuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment (Ubben, Hughes,
Norris, 2004). This standard related to the study because the suspension of students was an effect caused by an unsafe, inefficient, and possibly ineffective learning environment. Again, to promote the success of all students an effective suspension system should be examined further to positively effect the learning environment. Standard 5 states a school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner (Ubben, Hughes, Norris, 2004). This standard related to the study because the issuance of disciplinary actions must be fair and without malice. If suspensions caused students to become less effective learners then the actions of the administrator would reduce the success principles involved in the ISSLC standards.
Chapter 2

Review of Literature

In the 21st century, most teachers and students agree that there are a great many influences that affect a student’s achievement while in the educational system. Obviously, economics played a major role and can be considered either an attribute or possibly a limitation to the achievement of a single student. Although financially secure students were unable to obtain parental guidance, understanding, and or the passing of knowledge, the parents had the financial means to provide better educational opportunities. This is not limited to private tutoring and learning centers (Delisio, 2003).

The reference list of this limited research study, indicated only a few of the research articles and books in the field of suspension and how it related to different types of academic and personal achievements. The purpose of this study was to determine if there was a relationship between suspension and achievement in Mathematics and English grades. In the forth-coming paragraphs, there were numerous findings that explore the relationship between suspension and English and mathemetic achievement among high school students.

Suspension

The definition of suspension was defined as the state or period of being suspended. It was also defined as the temporary removal from office or space or privileges (American Heritage, 1976). This definition seems to be self-explanatory. Students may be suspended from academic activities for many reasons. One of these reasons may have been acting out insubordinately in the classroom setting thereby causing other students the deprivation from learning in that period of time (Streifer, 2004). This was not usually the
case within this study. Many other times students were suspended for inadequate behavior even though the student may have had a higher capacity for learning. It was sometimes the student’s need for attention that may or may not have caused him or her to act out inappropriately (Miller, 1990). Other suspensions may be quite severe, as in fighting with another student, drug related paraphernalia, and or distribution or actively using drugs while on school grounds. Still some students inherently caused their suspension by not availing or familiarizing themselves adequately with the rules and regulations of the school and district. All these students cannot be categorized as adequate or inadequate learners (Dawson, Quinn, 2004).

Although the suspended students’ grades may have suffered because of his or her removal from the classroom setting the student may be influenced academically. For example, if a student was suspended and he or she learns the reason for the suspension so as to not repeat the same or other inappropriate behavior causing suspension that student may then attend class and continue to become a valuable learner. On the other hand, if a student was suspended and did not understand the reasons for his or her suspension and cannot learn adequate behavior as to not cause another suspension this student could be deprived of the learning process thereby possibly causing his or her achievement to be reduced (Streifer, 2004).

There were many different types of suspension that were available for an administrator to subject to the offending student. Two primary suspension methods were in-school suspension and out of school suspension. These seemed to be self –explanatory, however it was necessary to convey the different types of both categories.
An in-school suspension was defined by the student's parents being contacted and told that their child must be removed from their traditional classroom setting and isolated in a small group classroom which was approximately eight feet by ten feet in size and included one window for the entire duration of the suspension. Sequoia Transition High School has four such classrooms available for in-school suspension students. This suspension would usually be as short as one day or as long as three. Although the term of the suspension may vary from district to district or school to school, it was the ultimate decision of the principal based upon the acts of the student who has committed either the inadequate behavior or the offense (Delisio, 2003).

An out of school suspension is defined by the student's parents being contacted and told their child is being removed from their traditional classroom setting and not being able to attend school (Schumacher, 2001). The student will not be able to receive instructional aid because he will be out of school, thereby missing the academic opportunity to learn. Although the term of this suspension could vary for the offense it is usually between one and five days. However, severe offenses can be extended with a superintendent of schools hearing and exceed ten days. The decision for the length of time of the suspension can be determined not only by the administrator or the superintendent via a hearing, but it may also be a mandatory issuance. For example, theft of another student's property will cause a suspension of not more than five days but not less than three (Board of Education, Lenape Regional High School District, 2004-2005).

Although it may seem that the administrators were in control of the suspension terms it is in actuality the student's ultimate decision to commit the undesirable act or misbehavior that will usually cause his or her suspension (Delisio, 2003)
Many researchers believe that ethnicity and socioeconomic levels are a contributing factor to suspension and thereby denying the subject students the ability to grow academically due to loss of instruction time (Epps, 2003). Socioeconomics can be defined as the social and or economic position of a student or his or her parent and is sometimes looked upon as a cause of misbehavior on the part of the lower socioeconomic student. This is a stereotypical belief. There are many students who become disciplinary problems for an administrator in a lower income school district. Conversely there are also many students who require disciplinary action through suspension from administrators within a higher socioeconomic school district.

It is unfortunate, but research indicates that ethnicity still influences the reasons for student misbehavior and thereby effecting suspension. It has not been proven beyond a reasonable doubt that students of varied ethnic background are inadequate learners (Moore, 2002). Although ethnicity was discussed, the cultural difference between students, the administrator, and general community was not a part of this study.

Achievement

Can achievement be defined or measured in physical terms? There are a few types of achievements that can be measured. General achievement can be determined by an accomplishment that can be realized. It can be a determining factor in the life of an individual whether he or she progresses or recesses. If a goal is achieved then possibly other goals are set and then realized. It then becomes a progressive spiral of goal setting and triumph. Adversely, if a goal is not achieved then possibly other goals will not be set and never realized. It now becomes a downward digressive spiral of never attaining a single goal. Only the individual whom has accomplished and overcome his or her unique
task or goal can assess personal achievement. It can be a goal as trivial as remembering to bring a pen and notebook to class. It can be as significant as completing an above average grade in an advanced math class such as Calculus. These personal achievements contribute to the learning process as they promote the human desire to continue and motivate the student to progress forward. It is as important to learning as breathing is to living (Streifer, 2004).

Academic achievement can be physically measurable through students test scores, interim reports and report cards. These devises will record the progression of student’s goals and triumphs through his or her academic career (Moore & Mayer, 2003).

Mathematic Achievement

Suspension may be a contributory factor to mathematic achievement. If a student is not in the class due to suspension he or she will not be able to understand the lesson because the student is not attending class. If he or she is not attending class then the learning ability has been diminished (Streifer, 2004). If learning ability is diminished how can the student possibly achieve an expected goal? The ability to understand and learn has a direct relationship to attendance. However, most students do not have the capability or the desire to learn on their own in the absence of an educator. Conversely, there is research that would suggest that there is no correlation between suspension and achievement in mathematics or many other subject areas (Streifer, 2004). If a student has been suspended the suspension may be a catalyst for the student to promote success. He or she may feel that there is a great deal to be accomplished after one or two suspensions have altered their traditional educational role. In effect, the suspension may cause the student to righteously begin the path of correct learning. Other types of effects that the
student may experience could be low self-esteem and the inability to accomplish a specific task (Streifer, 2003). In the field of mathematics many students give up the learning process due to the reasons above therefore reducing or greatly diminishing their mathematic achievement (Moore, 2002). Not only does the student play a significant role but also the educator is equally responsible for the mathematic achievement of any one particular student. Obviously the student has greater responsibility to obtain and triumph over his or her preset goal to achieve mathematic proficiency (Miller, 1990).

**English Achievement**

English achievement can also be affected by the suspension status of a student. As in mathematics the student's absence from a classroom will diminish the learning process. However unlike mathematics the desire to read may overcome the desire to be in class. If a student is stimulated by the subject matter he or she may continue to excel and thereby achieve a better grade (Dawson & Quinn, 2004). English, reading and writing, seem to be a much more viable content area for the student to embrace rather than mathematics. A good story, a well rounded personal essay, and even a verbal report on a desired book will stimulate a student to achieve a higher grade although this same student may have run a suspension during the course (Delisio, 2003).

As in mathematics research may suggest that there is little correlation between English achievement and suspension. Again, if a child is suspended for a specific number of days he or she is unable to attend class and cannot be a part of the instructional day. However this seems to influence self-esteem more than it does achievement. If the self-esteem of the student has been damaged it would quite possibly be for a short period of time. The
student can usually bounce back and resume a graduated progression of learning with an end result of achievement (Streifer, 2004).
Chapter 3
Design of Study

Description of Research Design

Does suspension have a negative effect on student achievement in Mathematics and English among Sequoia Transition High School students? The description of the research design was based on data collection of material culture of students attending Sequoia Transition High School.

The focus on research instruments used for this study was marking period grades and student suspension records. The selected student’s interim and semester report card grades were obtained and collected. Secondly, information on student suspensions was also reviewed and collected from individual suspension notices in the student’s files. All the data collected was compiled and reviewed. The data was entered into a computer to produce statistical frequencies and other mathematical calculations to determine relevancy of suspension of the students in the study to their grade or achievement level.

Grades in many traditional classroom settings are compiled form test scores, quizzes and rubric evaluations of predetermined project assignments. Each grade represents a numeric valuation base upon the knowledge that the student obtains from course design and teaching methods. The grade is an evaluation of not only the knowledge of the subject matter, but the achievement within the course of study. It is course achievement in Mathematics and English that is one of the determining factors of this study.
Development and Design of Research Instruments

The data collection approach was to analyze both Mathematics and English marking period grades with individual suspension records. The design of collecting the suspension data on each student was to answer three specific questions. Was the student suspended during the period September 7, 2004 through January 21, 2005? What was the frequency of suspensions for that student? How many days was the student suspended for a particular infraction? This study was not interested in the reason for the suspension only the effect that the suspension had on student achievement in Mathematics and English.

For the purpose of this study there was no differentiation between in-school suspension and out of school suspension. All suspensions were evaluated based upon the number of days given for the infraction. The students were not identified and remain anonymous for the purpose of this study.

Sample and Sampling Technique

The grades, quizzes and project assessments by rubric evaluations determine numerical values of understanding and subject achievement. These grades were then averaged and evaluated to complete a single numerical achievement score for a specific marking period. Two marking periods have been used to evaluate student performance within this study. The documentation researched two grade reports over a period of five months. This created a spectrum of grading evaluations specific to each student within the survey.

Another data collection that was used was the review of material culture for all students in attendance at Sequoia Transition High School beginning September 2004. It consisted of a total of 51 students between grades 9 and 12. This sample and the sampling
The technique used for this study consisted of the entire student population grades 9 through 12 for Sequoia Transition High School for the school year beginning September 2004. The primary emphasis was on students who were suspended within the study period and their subsequent grades for English and Mathematics within that same period.

**Data Collection Approach**

Data was gathered through procedures that were mostly compiled from the review of material culture. All information and documentation were kept confidential without relevance to any particular student. The data was compiled to reflect mathematical valuations of achievement and then related to gender and suspension in regard to the number of students affected in the study.

This research was a structured case study. Therefore, it was familiar and there was a fluent understanding of all aspects of the data by organization. It allowed for the systematic presentation of the material in a mathematical format. The data was structured into categories, themes, and patterns as to show relationships, equalities, or inequalities. The data was coded and evaluated as to specific form and presentation. Alternative explanations were searched for the data as to not to conform to traditional methodologies and misunderstandings without due diligence of concrete documented explanations.

**Data Analysis Plan**

The data analysis plan for this study was to accumulate information whereby a comparison was made between suspension and grades in Mathematics and English. For the ease of data collection all information was compiled on a table whereby each student was represented. These sheets were later reviewed and the results of the students were statistically analyzed for suspension and grade variability. The data was then compiled to
determine a range for the students as to their suspension status. The results for the students were projected onto a statistical table. The marking period grades were obtained for the students and then posted to the table detailing the suspension frequencies with the corresponding grades of the students.

Computerized statistical calculations were used to determine the relevancy of the Mathematics and English achievement scores as it related to suspensions. These results were than analyzed and presented with respect to the research statement.

Finally, a comparison was made between the selected sample for students with suspension and students who had both good and poor grades. The data for the students at Sequoia Transition High School were reviewed and compared to determine if a possible correlation existed between these students and their academic achievement in Mathematics and English and their suspension frequency. The material culture of both grades and suspension records were used as evidence to validate this study. It would have an impact if the analysis of this data could be used to guide the administrator in future disciplinary actions if such actions would have a detrimental effect on student grades.
Chapter 4

Research Findings

Findings

Does suspension have a direct relationship to achievement in Mathematics and English? The total population of Sequoia Transition High School was used as the sample for the data collection process at the start of the 2004 school year. The first data set that was collected were the grades of all students that began the school year in September 2004 and grades obtained were from the first and second interim and marking period report cards in the classes of English and Mathematics at Sequoia Transition High School. The second data set was collected from material culture of student grades for the period of September 2004 to January 2005. All the data collected were compiled and reviewed for a total population of 51 students. The data was then computerized to produce statistical frequencies and other mathematical calculations to determine relevancy of the suspension of students in the study to the grade or achievement score.

Each grade represents a numeric valuation based upon the knowledge that the student obtains from course design and teaching methods. The grade is an evaluation of not only the knowledge of the subject matter, but achievement within the course of study. It is this course achievement in both English and Mathematics that was one of the determining factors of this study. The grades, quizzes and project assessments through standardized rubric evaluations determine numerical values of understanding and subject achievement. These grades for the two interims and two marking periods were then averaged and evaluated to complete numerical achievement scores of students selected in the study. The documentation researched four such grade reports over a period of five months. Each
report was based upon an approximate two and a half month cycle. This created a spectrum of grading evaluations for each individual student within the data collected.

The students were not identified but for their numerical place in the collection process, therefore the results were anonymous for each student. The data recorded on the collection document was totally undeterminable as to each student, and therefore each student did maintain his or her own anonymity. For ease of data collection, all information was compiled on a single spreadsheet listing each student. These sheets were later processed and the results were statistically analyzed. The data was then compiled to determine a correlation between the students as to their suspension frequency. The results for the number of suspensions were projected on to statistical tables. Assigned identification numbers were used to post the interim and marking period grades from each student record. A table was compiled detailing suspension occurrences with the corresponding grades for the students.

Finally, a summary of the data was compiled. Computerized statistical calculations were used to determine the relevancy of English and Mathematics achievement scores as related to occurrence of suspension. These results were analyzed and presented in respect to the research statement.

Fifty-one students were researched on an individual basis on several different points of interest based upon suspension frequency, grade level, gender and the average of four consecutive interim and marking period grade point scores. Data to these inquiries were converted to a score level of one to four with the score level of four being the highest obtainable value. Table A is the most relevant to this research.
Each question in the Research Data Rubric Table has been converted to a numerical value as indicated just below the word Legend in the table. The table lists the valuations of grade status, suspension frequency, gender, and interim marking period grades. It was the numerical value that made it possible to provide computerized calculations to be completed and to obtain frequency and statistical data for informational relevancy.

The Table of Data Research has been provided to show a compilation of the data researched. As shown in this table, the sample consisted of 14% female and 86% male. Consistently, twenty-five and forty-three percent of all students researched received a grade of a B and a C in Mathematics achievement reports, respectively. Thirty-five and thirty-three percent of students researched received a grade of a B and a C in English achievement reports, respectively.

The Statistical Data Table shows the distribution of the total sample for mean, median and mode. The values in the Statistical Data Table as compared to the Table of Data Research reveal the following data. As to the number of students without suspension imposed were compared to students with suspension; we find that the mean, median and mode for the average Mathematics and English grade achievement scores are the same. This table indicates a mean value of 3 that represents an achievement score of a B for Mathematics and English for students without suspensions imposed. It also indicates the average grade for students with suspensions imposed of an achievement score of a B for Mathematics and English. These same students had a mean of five suspensions. The mode in this table revealed an average achievement score of a C for Mathematics and English for students with or without suspension being imposed. The mean or average number of days a student was suspended was five. Lastly, the median achievement grade
for both Mathematics and English was a grade of 2.0, consistently. The suspended students averaged a two-day suspension while the others had no suspensions. In both areas, the average grade was the same.

Table 4 has been compiled from the values of grade results in conjunction with Table 1 Research Data Rubric, Table 2 Data Research, and Table 3 Mean, Median and Mode. Table 4 Cross-Tab produced results that were more meaningful. In frequency Table 2 24% of our research of students were of two days suspension, 19% were five days suspension, 12% were indicated as students of 10 days or greater. In Table 4, three students who were not suspended received an achievement score of an A in Mathematics. Alternatively, three students who were suspended received an achievement score of an A. In English achievement scores, four students received a grade of an A, yet the students were suspended. Only two students, not suspended, achieved a grade of an A during the research period. Consequently five students, who were suspended, received a grade of a D in English. Four students received a grade of a D yet they were not suspended. In Mathematics, ten students that were suspended received an achievement grade of B. Contrary; eight students who were not suspended achieved the same grade. Again, in Mathematics an achievement grade of C was issued to nine students that were also suspended. The same grade was recorded for eight students who were never suspended. All cross tab tests resulted in no specific inferences to high grades or achievement score and suspension as shown in Table 5 Chi-Square. The Chi-Square test was prepared based upon the cross-tab results. The scores in the table have a significance level of less than 5 as shown in this table.
Table 1 Researched Data Rubric

<table>
<thead>
<tr>
<th>Suspension Frequency</th>
<th>Numeric Score</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Grade</td>
<td>Senior</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Freshman</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Ten-Day</th>
<th>Ten-Day</th>
<th>Five-Day</th>
<th>Two-Day</th>
<th>Zero-Day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-</td>
<td>-</td>
<td>Male</td>
<td>Female</td>
<td>-</td>
</tr>
<tr>
<td>First Interim</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
</tr>
<tr>
<td>First Marking Period</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
</tr>
<tr>
<td>Second Interim</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
</tr>
<tr>
<td>Second Marking Period</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
</tr>
</tbody>
</table>

Table 2 Data Research

<table>
<thead>
<tr>
<th>Grade Average</th>
<th>English Avg Grd</th>
<th>Math Avg Grd</th>
<th>Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
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<td>Freshman</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>12%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>2</td>
<td>2</td>
<td>15</td>
<td>29%</td>
</tr>
<tr>
<td>Junior</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>18%</td>
</tr>
<tr>
<td>Senior</td>
<td>2</td>
<td>3</td>
<td>21</td>
<td>41%</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Grade Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>51</td>
<td>100%</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>7</td>
<td>7</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>44</td>
<td>44</td>
<td>86%</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>51</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Average Term Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Interim</td>
<td>A</td>
<td>6</td>
<td>6</td>
<td>11%</td>
</tr>
<tr>
<td>1st Marking Period</td>
<td>B</td>
<td>18</td>
<td>13</td>
<td>35%</td>
</tr>
<tr>
<td>1st Marking Grade</td>
<td>C</td>
<td>17</td>
<td>22</td>
<td>33%</td>
</tr>
<tr>
<td>2nd Interim Grade</td>
<td>D</td>
<td>9</td>
<td>8</td>
<td>18%</td>
</tr>
<tr>
<td>2nd Marking Period</td>
<td>F</td>
<td>1</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>51</td>
<td>100%</td>
</tr>
</tbody>
</table>

22
Table 3 Mean Median and Mode

<table>
<thead>
<tr>
<th>Students Without Suspension</th>
<th>23</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Students With Suspension</th>
<th>28</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Math Grade</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>Total English Grade</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Suspension</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4 Cross Tabs of Suspension vs. Grades

<table>
<thead>
<tr>
<th>Suspension Frequency</th>
<th>Total Math Grade</th>
<th>Total English Grade</th>
<th>Total Suspension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ten-Day Plus</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Ten-Day</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Five-Day</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Two-Day</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Zero-Day</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 5 Chi-Square Test: Suspension Frequency vs. Interim Marking Period Grades

<table>
<thead>
<tr>
<th>English</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Df</td>
</tr>
<tr>
<td>P Chi Square</td>
<td>13.84</td>
</tr>
<tr>
<td>14.46</td>
<td>9</td>
</tr>
</tbody>
</table>
Analysis

The relevancy of the data collected produces results that show that out of the fifty-one students that were surveyed the average grade was a C in Mathematics and C in English. As indicated in table 3 the mean suspension was five days. The median of the suspensions was two. The mode was indicated as two days for these same students. This number of suspensions is one that was most often issued to students.

Table 4 cross-tab tables indicate in the first interim period two-day and five-day suspended students had the highest average in both Mathematics and English grade achievement scores. However, if inspected closely most suspension frequency fell in the B and C grade range. Lastly, two-day and five-day suspended students seem to have scored as high as non-suspended students. Again upon closer inspection suspension frequency positions fell in the B and C grade range. The two-day and five-day suspended students seem to have scored as high in the achievement scores for Mathematics and English. However, if inspected more closely most suspension frequency fell in the A and B grade range for all students in the researched data. Similarly Chi-Square testing shows results of less than 5 in the significance level table.

Other variables, such as school policy for suspended student make-up work, how teachers assisted students upon their return from suspension or during suspension, and interventions by school personnel or parents to keep students on task while suspended was not researched. School policy was to assist all students in the learning process even through suspension. However, these other variables were not a part of the scope of this study due to the fact that data collected was historical in nature. There was not any
recorded data on student make-up work as well as teacher or parent intervention. Therefore this was not a consideration of the study.
Conclusions

Is there a direct relationship between suspension and achievement in English and Mathematics among high school students? The answer to this research question is that there was no significant correlation between suspension and achievement in the disciplines of English and Mathematics. Although only fifty-one students participated in the study, these students were representative of the population at Sequoia Transition High School.

The results of the Suspension Frequency Table findings as compared to the Researched Data Rubric, based upon suspension and grade scores, show findings that indicate a skew that was arbitrarily disbursed among all students. There did not seem to be any significant frequency pattern developed based upon suspension as related to the four interim and marking period grade scores. Similarly, in Table 4 Cross Tab Suspension Frequency vs. Interim Marking Period Grades Table there did not seem to be any significant pattern that developed among the students. Although at a glance, Table 2 Data Research indicated a higher concentration of A and B grades. This included suspended students as well as non-suspended students. In Table 3 Mean, Median, and Mode, the average student grades with suspension were a B. The median was a C and the mode was a C. Comparatively, students without suspension had the exact same grade pattern. Upon further investigation the conclusion was that these grades were also regularly disbursed. This pattern was visible and documented in Table 4 Cross Tab Suspension. Lastly, in Table 5 Chi Square, the significance level is less than five. It was
concluded that from the reduced valuation of this table there was no significant relationship between suspension and interim period grades that would show achievement among students at Sequoia Transition High School.

Implications

The implications to the school and program at Sequoia Transition High School were that suspension did little to inhibit or enhance achievement in both Mathematics and English. The data indicated that a suspended student did excel to achieve a grade as high as a student who was not suspended. The school suspension policy was a good deterrent to negative behavior. Suspension accomplished the purpose of reducing this type of behavior. It did not affect learning ability of a student being suspended as proved by the grades received by the student that indicated his or her achievement in both Mathematics and English.

Leadership Growth

The Interstate School Leaders Licensure Consortium: Standards for School Leaders (Ubben, Hughes, Norris, 2004) is a list of six values and principals to which all school administrators must try to promote the success of all students. The ISLLC Standards that affected individual leadership growth through this research was numbers two, three and five. ISLLC Standard 2 promotes the success of students by sustaining school culture and instructional programs conducive to student learning (Ubben, Hughes, Norris, 2004). It was imperative to provide this type of learning environment to all students. The student that showed disruptive behavior and prevented learning of others needed to be suspended from school as a consequence of that behavior. In an effort to establish and control the behavior problem, suspension was necessary as well as to provide continued and
undisruptive learning of the other students. ISLLC Standard 3 promotes the success of students by ensuring organizational management for a safe, efficient and effective learning environment (Ubben, Hughes, Norris, 2004). Effective suspension did not have an effect on learning. The data collected for this research showed that the suspensions were imposed upon those students showing misbehavior and it did not have an effect on the achievement of the suspended students. It promoted a safe, efficient and effective learning environment for other students. ISLLC Standard 5 promotes the success of students by acting with integrity, fairness and in an ethical manner (Ubben, Hughes, Norris, 2004). Both students who were suspended and those who were not received similar grades of achievement in Mathematics as well as English. There was very little difference in the scores between the two groups as indicated in the data. Integrity was shown both administering suspension to those students who deserved it. Fairness was revealed in understanding the abilities of those students who needed and desired to learn and who did exhibit negative behavior. Both integrity and fairness was exhibited in an ethical and just fashion.

**Organization Change**

This research will not alter or change the school organization. The effective suspension of some students within Sequoia Transition High School had no real effect on the learning ability or achievement of students who were suspended. Therefore, the continued policy of effective suspension upon students who are unable to comply with the rules and regulations of the school will consequently be suspended in order to uphold the learning abilities of other students.
Further Study

Future study was needed to understand why there was no difference between suspension and achievement. The scope of this study was not to address the topics of student intelligence, self-reliance, teacher dedication and school curriculum standards as it applied to suspension and achievement within Sequoia Transition High School. A student with greater intelligence levels could account for the high achievement if that student was suspended. However, what caused that student to exhibit negative behavior. Another student would have been self-reliant to study on his own. This coupled with a high intelligence level could have accounted for the same high achievement upon those suspended. Grades are based on the successful production of the student and not his or her measured ability. Lastly, teacher dedication could have been a factor in assisting the suspended student. A dedicated teacher would not or could not allow a student to receive a grade lower than his or her ability. It was important to further study the reason for the results for this research. It should be taken into account the performance levels of the students, their academic successfulness, and the comparison of students that are academically unsuccessful with those students who needed academic remediation. The future research of this topic may reveal alternative answers to the question of why?
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