

Strategies to Enhance Retention Rates Of New Teachers

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Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Education

May 2020

Goucher College
Graduate Programs in Education

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Abstract

The retention of new teachers has been a critical issue facing schools since the 1970's. This study is focused on identifying what strategies are being used in high schools within a school system to successfully increase the retention of new teachers as well as which of these methods seem to be the most effective and whether or not student, teacher, or demographic variables have an effect on the retention of these new teachers. The null hypothesis of this study is that there is not a clear correlation between school demographics and the new teacher retention at the high school level. An exploratory statistical analysis was conducted of the role of school demographics and a self-report survey was conducted of new teachers at a high school. Through these methods, it was concluded that professional development seemed to be the most effective strategy in improving teachers, which lead to teachers staying in their teaching positions. It was also discovered that there may be an indirect relationship between school demographics and the retention of new teachers, but there isn't direct statistical evidence to support the conclusion completely.

CHAPTER I

INTRODUCTION

Overview

The retention of new teachers is a critical issue facing schools. New teachers to the field have had trouble dealing with the pressures of coming into a new career that they are expected to have a complete understanding of, but have only a little or no experience with. New teachers and school districts have been working with the issue of keeping Early Career Teachers in the field for some time. There have been many ways that school districts have taken up this challenge of retaining teachers themselves. Counties in Maryland have offered programs such as mentorships and co-teaching to help new teachers get a better understanding of their new situation in the classroom with more highly qualified educators to help them establish themselves as educators.

The challenge of retaining new teachers has been something that has been a factor for schools all over the world since the 1970's. The stress of actually working in classrooms for less pay than many other jobs in the workplace drives many from the field. Researchers have found that there are few teachers reaching the level of highly qualified but have made career changes rather than stay in their career situation.

This problem of new teacher retention came to this researcher's attention after a few years in teaching. After twelve years of teaching in three different counties in Maryland, teachers of all different backgrounds, experience, and methods have been observed moving into and away from the career of an educator. Interest in strategies used to increase teacher retention has been a priority concern during those years of observation.

Statement of Problem

This study is focused on identifying what strategies are being used successfully to increase retention of new teachers. This study concentrates specifically with the retention of high school teachers. The study will also show which of these methods or strategies seem to be the most effective for the teachers themselves and whether or not student, teacher, or demographic variables have an effect on the retention of these teachers. In addition, an exploratory statistical analysis will be conducted of the role school demographics play in the retention of new teachers at the high school level.

Hypothesis

The null hypothesis of this study is that there is no correlation between school demographics and new teacher retention at the high school level.

Operational Definitions

The selected variables will be used in this study are as follows:

High Quality Teachers is defined by the Maryland State Department of Education as the percentage of teachers teaching with advanced academic degrees.

Free and Reduced Meals is operationally defined as a proxy for the poverty index of a particular school.

Percentage of pupils in special education is defined as the percentage of students per school that is receiving special education services.

Percentage of pupils proficient on state tests is defined as the combined reading and math SAT scores for the classes of 2018 and 2019.

The overall state accountability percentile is the number of accountability stars (1-5, 5 is best) rating of a particular high school.

Percentage of minority pupils and teachers located in the high school is defined as the percentage of non-Caucasian students and educators working during the 2018-2019 school year.

Percentage of students who feel they are safe in the high school is defined based on information gathered by BCPS and Maryland State Department of Education through yearly surveys.

Percentage of teachers who feel safe in the high school is defined based on information gathered by BCPS and Maryland State Department of Education through yearly surveys.

Student absentee rate is defined on the basis of the percentage of pupils absent less than ten days during the school year.

CHAPTER II

REVIEW OF THE LITERATURE

Overview

This literature review examines what is being done by school systems to maintain high retention rates with new teachers. Section one describes some of the causes of new teachers leaving the education profession. Section two discusses what is being done to encourage new teachers to stay with the school systems. Section three examines how teacher retention can be maintained or improved upon in schools.

Causes of Attrition for New Teachers

When teachers come into the profession of education, most come into the profession with ideas of how things will work out for them in their first year. They feel that they are ready to start teaching and that everything they do will work the first time around. This reality that they have built up for the most part is an illusion. Most early career teachers are put into situations that they are asked to perform at the same level as veteran teachers. Studies have been shown that there is a significant relationship between workload and burnout when it comes to ECTs or early career teachers (Kelly, Cespedes, Clarà, & Danaher, 2019). With this workload, ECT's are also clearly affected by working conditions, as well as the relationships with students and parents; the personal control and decision power about one's work; and the possibilities of growing within the profession.

Teachers have been asked to describe their personal landscape and discussed the factors in the decision to stay or leave a school. Harfitt (2015) explains that some teachers are assigned duties that the teachers have no experience with but it is assumed by administration that they know how to complete the task.

With these thoughts in mind, teachers have to work with site conditions they are not properly trained for before they even begin their teaching careers. Watson (2018) states that school site conditions in urban schools, private schools, and schools with high rates of disciplinary problems, and large numbers of English language learners have been factors that facilitate novice teacher turnover. It has also been reported that teachers were complaining to their administration of insufficient training to work with students with diverse needs and behavioral problems.

Other studies have found that there is a psychological state that can affect beginning teacher's intention on staying or leaving a school. Findings from a longitudinal interview study with 50 beginning teachers who stayed in their schools, moved to new schools, or left the profession within the first 3 years of teaching revealed that for leavers, one of the main reasons for quitting the teaching profession was the lack of collegial support (De Neve & Devos, 2017). The first main finding of this study was that beginning teachers' intention to leave the job was strongly determined by their levels of self-efficacy and affective commitment. The direct and negative relationship between self-efficacy and intention to leave the job was also in line with previous research done in other studies. When the individual feels that they are not moving forward, they will find better opportunities for themselves.

Researchers found that some problems that occurred with the retention of new teachers were partially dependent on the types of schools in which they work. For instance, Dutch teachers working in 'disadvantaged' schools, the demands from schools would be that teachers would be able to deal with cultural diversity, whereas teaching at 'more advantaged' schools the demand was for teachers who would collaborate with highly educated parents, even though most

new teachers had not received the proper training in order to do either task properly (Gaikhorst, Beishuizen, Zijlstra, & Volman, 2015).

With multiple factors for new teachers, most will find themselves to be overwhelmed and leaning towards the idea of leaving the school county. Studies have shown that many novice teachers have limited preparation or curriculum knowledge to teach in places such as low-income schools. Without this training, thirty-three percent of teachers entering public schools quit within the first three years. Rodgers and Skelton (2014) say that due to this, taxpayers lose nearly \$2.2 billion yearly to teacher attrition, and \$2.7 billion yearly to teacher turnover.

Encouragement to Stay

Teacher attrition is an issue throughout the United States. State, district, and school policymakers have increasingly been working on combating teacher turnover by implementing induction and mentoring programs for early-career teachers. Ronfeldt & McQueen (2017) found that more than half of all states in the United States now require some form of induction for new teachers to help curve this trend with ECTs.

Induction and mentoring programing has been a component of education since the 1970's. When education in the United States began seeing a change in the number of people moving into the field, schools began to create methods on how they could maintain higher teacher retention. Through the years they found that mentoring programs, beginning seminars, supportive communication from school leadership, and, to a lesser degree, collaboration/planning time appeared to help retain teachers both in the profession and in specific schools (Ronfeldt, & McQueen 2017).

Within mentoring programs, mentors are used to support teachers within the first few years of their educational careers. This type of intervention has been linked to increased teacher

job satisfaction and contributing to the likelihood that a new teacher will stay in the profession and become a career educator. Researchers like Sowell (2017) say that, “Effective mentoring increases teacher retention, develops teaching expertise and confidence, reduces isolation and fosters beginning teachers’ reflection and development” (p.129). Studies have been done with mentors in the field and show that one of the key factors in the quality of mentorship is the building of relationships between the mentor and the teacher. In some cases, beginning teachers meet with their mentors once a week where they can discuss topics such as lesson planning, classroom management, and best practices used in the classroom. With these mentors, beginning teachers have someone whose focus is to help them receive training in the current practices instead of reinforcing outdated and ineffective practices in their own classrooms.

Along with mentoring, there has been an increase of induction programs for novice teachers. Sadiq, Ramzan, and Akhtar (2017) say that these pre-service teacher educators are a step toward gaining fundamental knowledge, experiences, and practices to be a teacher in a true sense. This true experience, information, and knowledge can be learned through interaction with the students in their classes.

With this in mind, the initial year is most important because it helps in developing the communication skill, teaching methods, norms, courses, educational foundation, philosophy and supervised practices that a new teacher will need in order to be successful in their career. Sadiq et al. (2017) continues with speaking about the four goals of an induction program. The first goal is to improve teaching of the students, second, to enhance the professional efficacy of a teacher, third, awarding the role of mentor to senior teacher so that they may transmit valuable culture, finally to help in teacher retention. With these methods of preparation and support for

new teachers, studies have shown teachers who received extensive supports had significantly and meaningfully lower rates of attrition (Ronfeldt & McQueen, 2017).

Maintaining and Improving

With the focus in mentoring and other programs such as teacher induction being used by school systems to improve the retention of new teachers, researchers have agreed that this process must continue in order to lessen the absence of veteran teachers created by the high rate of teacher turnover. Data reports claimed that 93% of teachers improved their skills through mentoring, 88% from training and development, and 87% from mentoring (Rodgers & Skelton (2014). Studies have been created that looked at the effects of professional development programs to help with not only the retention of teachers, but also the quality of their teaching.

A study by Gaikhorst et al., (2015) had a program that lasted one year and consisted of three components: group meetings (these included theoretical input from experts regarding the four urban themes, opportunities for sharing experiences and group assignments, classroom application (participants apply new insights to their teaching practice) and lectures (in which experts explored substantive themes). After this study concluded a year later, they determined that establishing networks of teachers that allowed teachers of different schools to exchange their experiences was a promising way for teachers' professional development and job motivation overall. Another study found that a good support culture was important for beginning teachers, and much of the literature on effective support for beginning teachers focused on the support structure, or the support activities that schools perform to support their teachers.

Researchers have said that maintaining and improving mentoring programs advance the professional growth of new teachers, making them more effective in a shorter amount of time, improving student learning, and reducing the attrition rate of new teachers. Some researchers say

that mentoring is not a choice but a responsibility of everyone within the school system, because all involved have a vested interest in the success of new teachers that enter their schools.

Research has also shown that teacher attrition correlates with teacher quality, in that the teachers who are not contributing effectively to student learning become disengaged and leave the profession. With this in mind, Callahan (2016) identified seven key criteria of high-quality mentoring programs designed to improve the teaching ability of new teachers and improve teacher retention. These included mentor selection, mentor assignment, mentor training, mentor roles and responsibilities, program design and delivery, funding, and accountability. With these key criteria in mind, mentoring programs could be designed to give new teachers the best chance for success in their own educational careers.

With the implementation and improvement of these mentoring programs, induction programs continue to grow as well. Researchers say that some induction programs for novice teachers serve multiple purposes - training, socialization, culture transformation, problem solving and many more so that quality of education may develop over time (Sadiq et al., 2017). Some studies have shown that new teachers even wish to have familiarity with school culture using these induction programs. This can be due to certain populations of the newly inducted teachers and where they got their education - possibly from the private sector and ultimately their experience at school level will be different from others. Researchers state that if the school culture is different from the perception of novice teacher's or from the school culture which they attended during school days, the teachers will need to have induction training programs to better prepare them for success.

With these programs, findings from De Neve and Devos (2017) revealed that when beginning teachers receive more autonomy, they express higher levels of self-efficacy and

affective commitment. In turn, teachers with higher levels of self-efficacy and affective commitment are less likely to leave. Expanding the experience of professional learning will limit the feelings of isolation among novice teachers and create collaborative learning communities that can help increase higher teacher retention rates (Rodgers, & Skelton, 2014). It has been recommended that school leaders should provide these professional supports for novice teachers to manage personnel and emotional issues, such as learning new policies and procedures, completing new tasks, working through problems, and engaging in reflective practice. In the end, good support improves the likelihood that teachers will stay with a school or district for years to come.

Summary

Teacher retention has been a challenge for schools all over the world. Research indicates that there are multiple factors that can be present for new teachers that cause them to either transfer or leave the profession. It also shows that this is something that occurs often, and that though there are ways to manage and lessen teacher attrition, there has been no definitive way to completely eliminate it. What we as professionals can do is understand the problem of teacher retention and set plans in place in order to control it. Mentoring programs, professional development, induction programs, and collaboration with colleges are only a few of the concepts that researchers have studied in order to deal with this issue in school districts. Many studies suggest that these options seem to be the most successful. However, we must remember that this is not a simple fix. Multiple methods need to continue throughout teacher's careers in education in order to bring about better quality educators that will help in turn with the incoming new teachers.

CHAPTER III

METHODS

Design

This action research project is a modified action research study, including an exploratory analysis of existing high school data from public websites, and the results of a self-report survey of current teachers in the researcher's high school about their school system's teacher retention initiatives.

Participants

The participants of this study are teachers who had been teaching at a Maryland public high school for a total of three or less years. Twenty-seven teachers were selected out of the total eighty-seven staff/faculty of the high school, and then narrowed down further by selecting teachers who were not holding advanced degrees at the time of this study.

Instrument

The instruments used in this Action Research include a self-report survey, the county school dashboards, and the Maryland Report Card.

Procedure

The procedure followed began with obtaining statistics on all twenty-four Baltimore County Public School (BCPS) high school dashboards located on BCPS.org. Also used was the Maryland Report Card public website which contained public information about each high school in the district. This data was then copied from the websites onto Excel and imported into Stata version 13.1 (Stata Corp, 2016).

A self-report survey was then designed to measure the perceived effectiveness of the four most commonly used forms of teacher retention and improvement used within BCPS. There is

no statistical reliability or validity indices computed for this survey. The content of the questions were written to measure the four common methods, which ones the selected teachers thought to be the most effective on improving their teaching, which would lead them to become highly qualified educators and more likely to remain with the county.

The surveys were distributed to 27 high school teachers on February 29th, 2020 and collected during the week through Google Forms. Response rates for the completed surveys were then calculated. The survey results were tabulated item-by-item. Dashboard and Maryland Report Card results were summarized statistically to provide context and background data for the teacher self-perceptions of BCPS initiatives. The exploratory analysis of BCPS high school data for 2019 will identify current relationships among school level demography, teacher characteristics, and student achievement. Those relationships combined with the teacher self-perceptions of BCPS initiatives for retaining faculty could generate ideas for subsequent iterations of the four retention initiatives.

CHAPTER IV

RESULTS

The purpose of this research study was to determine what was being done at a BCPS High School in order to retain and improve its teachers teaching, which would lead them to become highly qualified educators and more likely to remain with the county. Once the completed surveys were collected and calculated, Dashboard and Maryland Report Card results were summarized statistically to provide context and background data for the teacher self-perceptions of BCPS initiatives being done at their school.

With the publicly assessable data from the BCPS Data Dashboard school websites and/or the Maryland Report Card website, seven variables were used as inputs, most of them being demographic. Six other variables from the same sources were used as outputs (student achievement and climate/safety). Only school level data were available from these sources. With exploratory analysis, there is no way to attribute the cause and effect of teacher retention to the input and output variables. At most, statistical correlations may be identified using these two sources. Relationships are the first step, however, in establishing cause and effect. There are 24 comprehensive high schools, either zoned or magnets in the Baltimore County Public School System.

Table 1.
Selected Input and Output Variables

Input Variables	Output Variables
% High Quality Teachers	% Proficient on state standardized tests
% Capacity enrolled	SAT 2019 combined reading and math
# Pupils per classroom teacher	% Pupils who say they feel safe in school
% Pupils eligible for FARMS	% Pupils who say they belong to school
% Pupils receiving Special Ed	% Teachers who say they feel safe in school
% Nonwhite teachers	% Pupils absent < 10 days during school year
% Nonwhite pupils	

Table 2.**Descriptive Statistics for 24 BCPS High Schools—Input Variables**

Input	Mean	Std Dev	Min	Max
HQ Teach	63.8	11.4	38	80
Capacity Use	93.3	13.5	70	129
Pupils/Teach	15.7	1.17	14.0	17.8
FARMS	39.2	15.5	8	64
Spec Ed	11.2	4.7	1	19
Nonwhite Teachers	20.4	16.0	4	60
Nonwhite Pupils	63.7	24.4	13	99

Table 3.**Descriptive Statistics for 24 BCPS High Schools—Output Variables**

Output	Mean	Std Dev	Min	Max
Proficiency	43.0	24.9	11	86
SAT 2019	947.6	124.3	799	1147
Pupils Safe	71.2	10.2	53	88
Pupils Belong	52.2	6.8	44	68
Teachers Safe	78.6	14.8	47	100
Pupils Low Absent	71.5	11.8	48	94

The following tables list the 24 high schools ranked from low to high by the input variables and by the output variables.

Table 4.**High Schools Ranked by Input Variables (Low to High)**

School	HQ Teach	School	Capacity Use	School	Pup/tch
woodlawn	38	randallstown	70.3	lansdowne	14.0
chesapeake	44	woodlawn	74.0	milford mill	14.2
dundalk	45	overlea	80.2	chesapeake	14.2
new town	54	hereford	82.1	parkville	14.4
milford mill	57	milford mill	84.2	randallstown	14.5
lansdowne	57	new town	84.6	dundalk	14.5
parkville	58	kenwood	84.6	owings mills	14.5
kenwood	58	eastern	87.5	patapsco	14.9
randallstown	59	franklin	88.6	overlea	15.0
patapsco	62	loch raven	89.2	western	15.1
franklin	63	pikesville	90.0	woodlawn	15.4
overlea	63	western	90.1	new town	15.5

School	HQ Teach	School	Capacity Use	School	Pup/tch
loch raven	64	lansdowne	90.9	loch raven	15.5
pikesville	66	gw carver	91.5	gw carver	15.7
owings mills	66	parkville	92.5	perry hall	16.2
perry hall	70	perry hall	93.6	kenwood	16.2
hereford	71	dulaney	94.7	sp pt	16.3
towson	71	chesapeake	96.3	pikesville	16.5
catonsville	72	catonsville	104.6	franklin	16.6
gw carver	76	owings mills	105.2	hereford	16.7
eastern	78	patapsco	110.7	catonsville	17.1
dulaney	79	dundalk	112.1	towson	17.5
sp pt	79	sp pt	113.9	dulaney	17.6
western	80	towson	129.3	eastern	17.8

School	FARMS	School	SpEd	School	Nonwht Teach
hereford	8	eastern	1	hereford	4
towson	14	gw carver	2	sp pt	8
dulaney	19	western	3	dulaney	8
gw carver	19	towson	7	eastern	9
eastern	24	hereford	7	towson	10
perry hall	29	dulaney	8	gw carver	10
western	31	franklin	9	patapsco	10
catonsville	31	sp pt	10	perry hall	11
franklin	32	catonsville	11	catonsville	11
pikesville	34	lansdowne	11	dundalk	13
sp pt	35	pikesville	11	loch raven	14
loch raven	36	owings mills	12	western	15
new town	38	loch raven	12	kenwood	15
dundalk	46	perry hall	12	lansdowne	15
milford mill	51	dundalk	13	franklin	17
parkville	51	parkville	13	pikesville	18
owings mills	51	randallstown	13	owings mills	18
randallstown	51	patapsco	14	chesapeake	19
patapsco	54	chesapeake	15	parkville	19
overlea	55	new town	16	overlea	38
kenwood	55	woodlawn	16	new town	42
woodlawn	56	milford mill	16	woodlawn	46
lansdowne	56	kenwood	18	milford mill	59
chesapeake	64	overlea	19	randallstown	60

School	Nonwht Pupils
hereford	13
sp pt	17
towson	38
patapsco	43
catonsville	48
eastern	48
dulaney	48
perry hall	51
gw carver	54
loch raven	55
dundalk	58
lansdowne	59
kenwood	59
franklin	67
pikesville	68
chesapeake	72
parkville	76
overlea	81
western	89
owings mills	91
new town	97
woodlawn	98
milford mill	99
randallstown	99

Table 5.

High Schools Ranked by Output Variables (Low to High)

School	Proficiency	School	SAT 2019	School	Pupils Safe
woodlawn	11	woodlawn	799	woodlawn	53
overlea	16	overlea	802	loch raven	53
chesapeake	16	milford mill	816	kenwood	54
lansdowne	18	dundalk	835	lansdowne	56
owings mills	19	lansdowne	838	patapsco	65
milford mill	20	new town	845	dundalk	66
dundalk	20	chesapeake	848	perry hall	66
randallstown	21	owings mills	849	randallstown	69
kenwood	21	randallstown	852	parkville	69

School	Proficiency	School	SAT 2019	School	Pupils Safe
new town	27	kenwood	859	franklin	70
parkville	30	patapsco	880	milford mill	71
patapsco	30	parkville	894	dulaney	71
franklin	46	pikesville	945	chesapeake	71
perry hall	48	loch raven	957	owings mills	73
pikesville	51	sp pt	957	sp pt	74
loch raven	57	franklin	969	overlea	74
catonsville	59	perry hall	989	new town	76
sp pt	62	catonsville	1004	catonsville	77
dulaney	70	dulaney	1107	towson	77
hereford	72	gw carver	1124	pikesville	79
gw carver	74	western	1139	hereford	85
towson	74	hereford	1142	eastern	85
western	84	eastern	1145	western	87
eastern	86	towson	1147	gw carver	88

School	Pupils Feel Belong	school	Teach Safe	school	Low Abs
woodlawn	44	parkville	47	woodlawn	48
dundalk	45	kenwood	51	dundalk	52
loch raven	45	dundalk	55	lansdowne	57
kenwood	45	loch raven	55	kenwood	61
lansdowne	45	woodlawn	65	patapsco	62
milford mill	48	franklin	71	chesapeake	63
chesapeake	48	perry hall	74	owings mills	65
randallstown	49	dulaney	75	overlea	65
parkville	49	catonsville	78	randallstown	65
perry hall	50	owings mills	80	parkville	65
patapsco	50	randallstown	82	loch raven	70
overlea	51	towson	83	perry hall	70
franklin	52	chesapeake	83	new town	72
sp pt	52	patapsco	83	franklin	73
owings mills	52	milford mill	84	milford mill	74
new town	52	sp pt	84	catonsville	77
catonsville	53	overlea	85	towson	78
dulaney	53	new town	85	pikesville	80
towson	55	lansdowne	87	sp pt	80
pikesville	55	pikesville	91	dulaney	80
hereford	58	eastern	92	hereford	86

School	Pupils Feel Belong	school	Teach Safe	school	Low Abs
western	65	New carver	97	gw carver	89
eastern	68	western	100	western	89
gw carver	68	hereford	100	eastern	94

The next 3 tables display the Pearson correlations between the input variables and output variables for the 24 high schools in BCPS. Correlations that are large enough to meet the alpha=0.05 threshold to reject the null hypothesis of zero correlation in the population are asterisked. Negative signs note inverse relationships. Also, for easier reading the decimal points are omitted. For example, the number 57 is actually 0.57 in these tables.

Table 6.
Correlations Input and Output Variables for 24 High Schools

Inputs	Outputs					
	Prof	SAT19	Pupil Safe	Pupil Belong	Tch Safe	Low Abs
HQ Tch	85*	80*	61*	72*	47*	85*
CAP Use	25	24	13	4	-4	6
Pup/Tch	74*	73*	34	46*	15	61*
FARMS	-89*	-91*	-61*	-67*	-39	-79*
SpEd	-88*	-89*	-65*	-84*	-50*	-78*
Tch Nonwh	-59*	-61*	-21	-34	-3	-36
Pupil Nonwht	-57*	-57*	-17	-22	-11	-37

Table 7.
Correlations Among the Input Variables for 24 High Schools

	HQ Tch	Cap Use	Pup/Tch	FARMS	Spec Ed	Tch Nonwht
Cap Use	25					
Pup/Tch	61*	20				
FARMS	-73*	-22	-79*			
SpEd	-72*	-21	-50*	76*		
Tch Nonwht	-52*	-58*	-48*	51*	54*	
Pupil Nonwht	-51*	-51*	-58*	58*	42*	80*

Table 8.

Correlations Among the Output Variables for 24 High Schools

	Prof	SAT19	Pupil Safe	Pupil Belong	Tch Safe
SAT19	97*				
Pupil Safe	64*	64*			
Pupil Belong	79*	79*	88*		
Tch Safe	43*	43*	73*	68*	
Low Absence	89*	84*	82*	88*	62*

From information in the BCPS Dashboards and MD Report Card, the following scatterplot graphs were created and display the relationship between several inputs and outputs, as well as input-input relationships. Best fitting regression lines are shown as well.

Figure 1.

Relationship of State Proficiency with FARMS for 24 High Schools in 2019

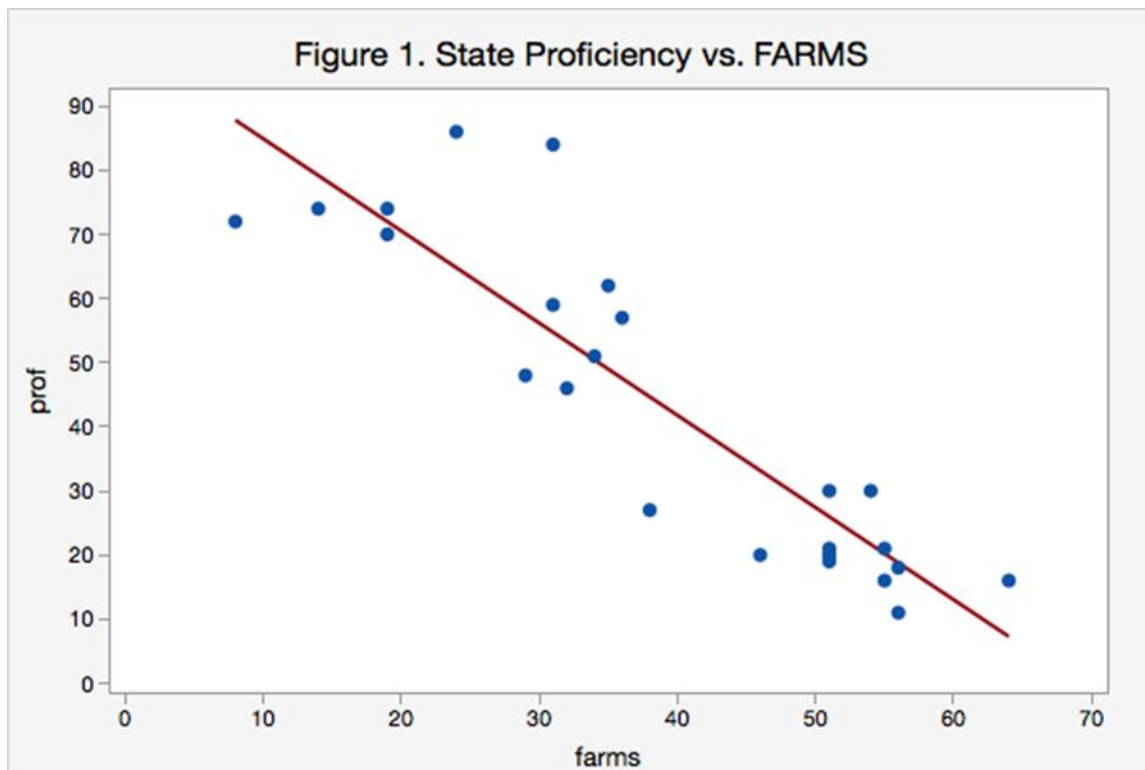


Figure 2.

Relationship of SAT19 vs. FARMS for 24 High Schools in 2019

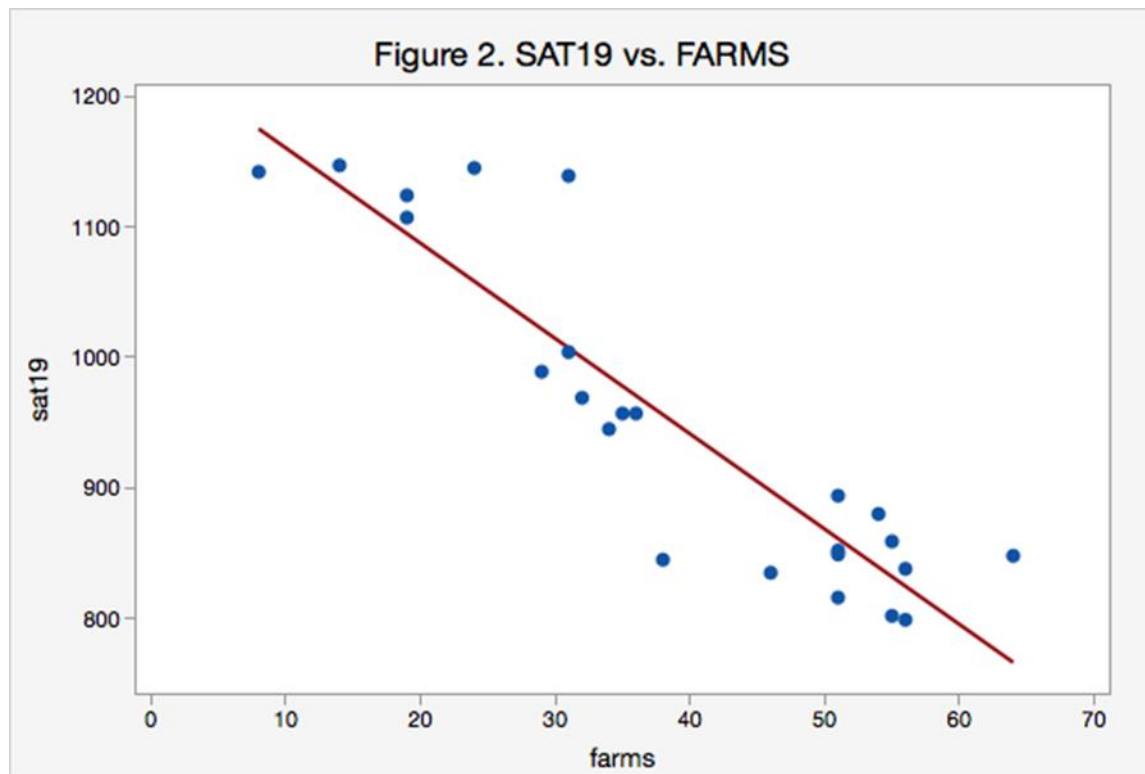


Figure 3.

Relationship of State Proficiency vs. High Quality Teachers for 24 High Schools in 2019

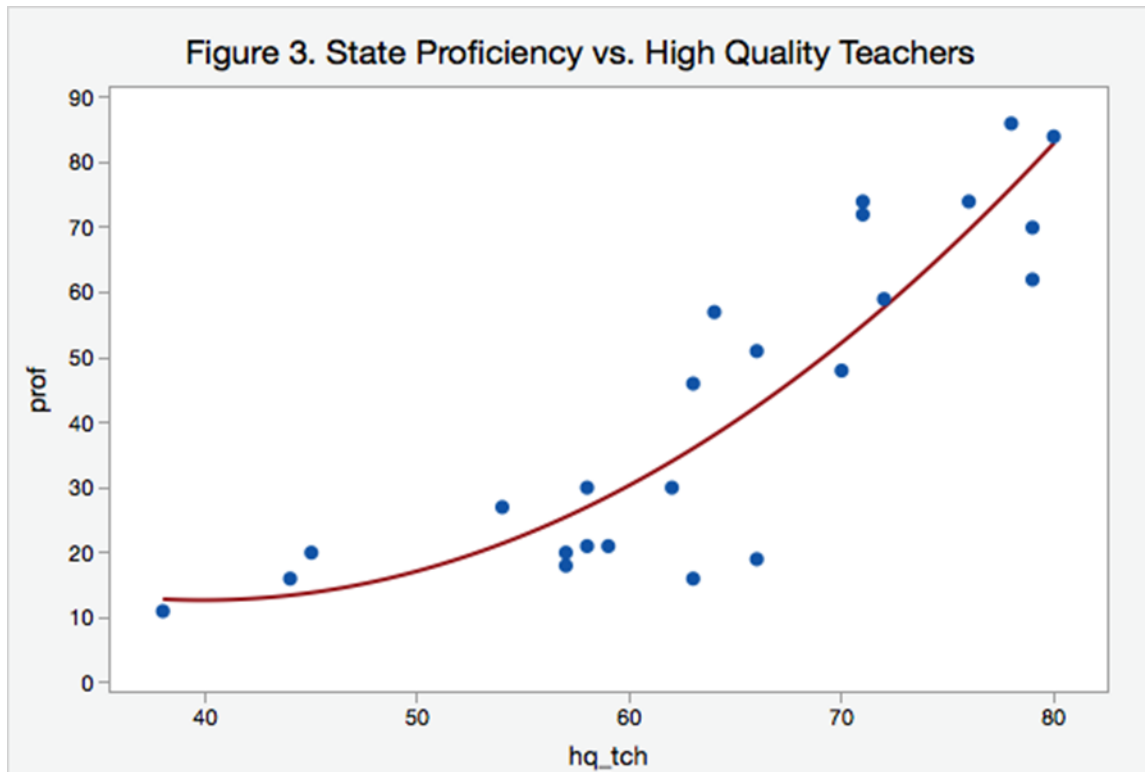


Figure 4.

Relationship of SAT19 vs. High Quality Teachers for 24 High Schools in 2019

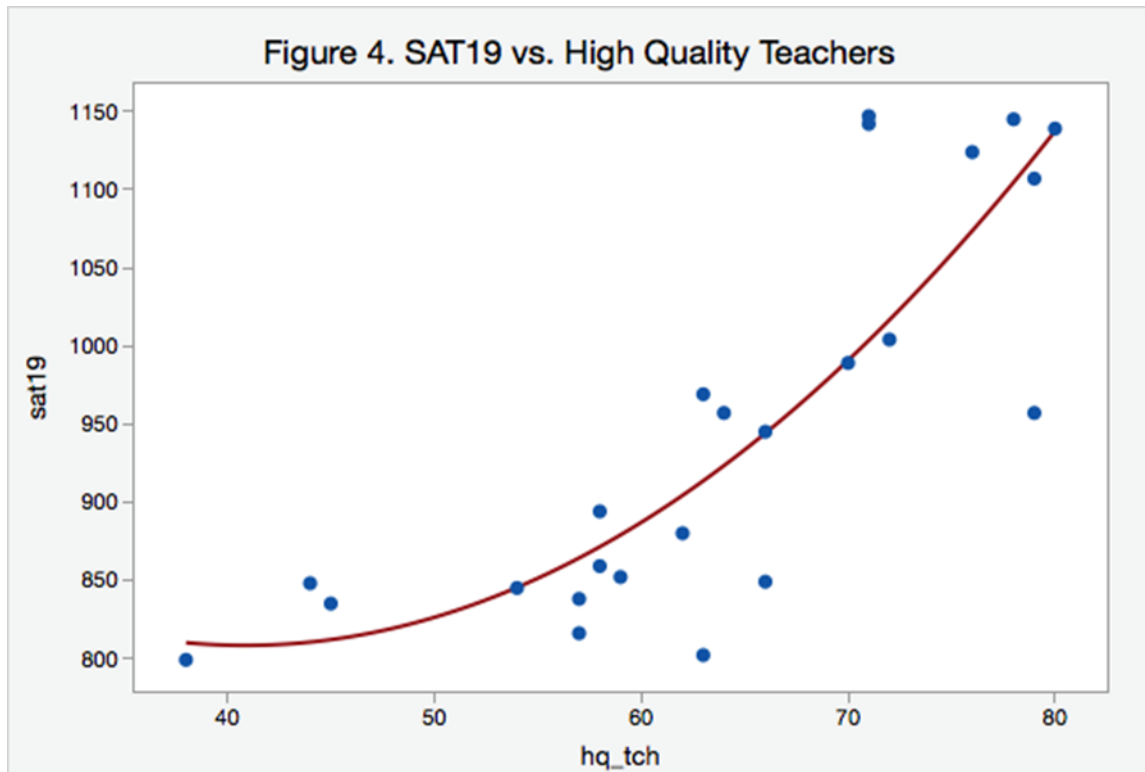


Figure 5.

Relationship of Pupils <10 Days Absent with High Quality Teachers for 24 High Schools in 2019

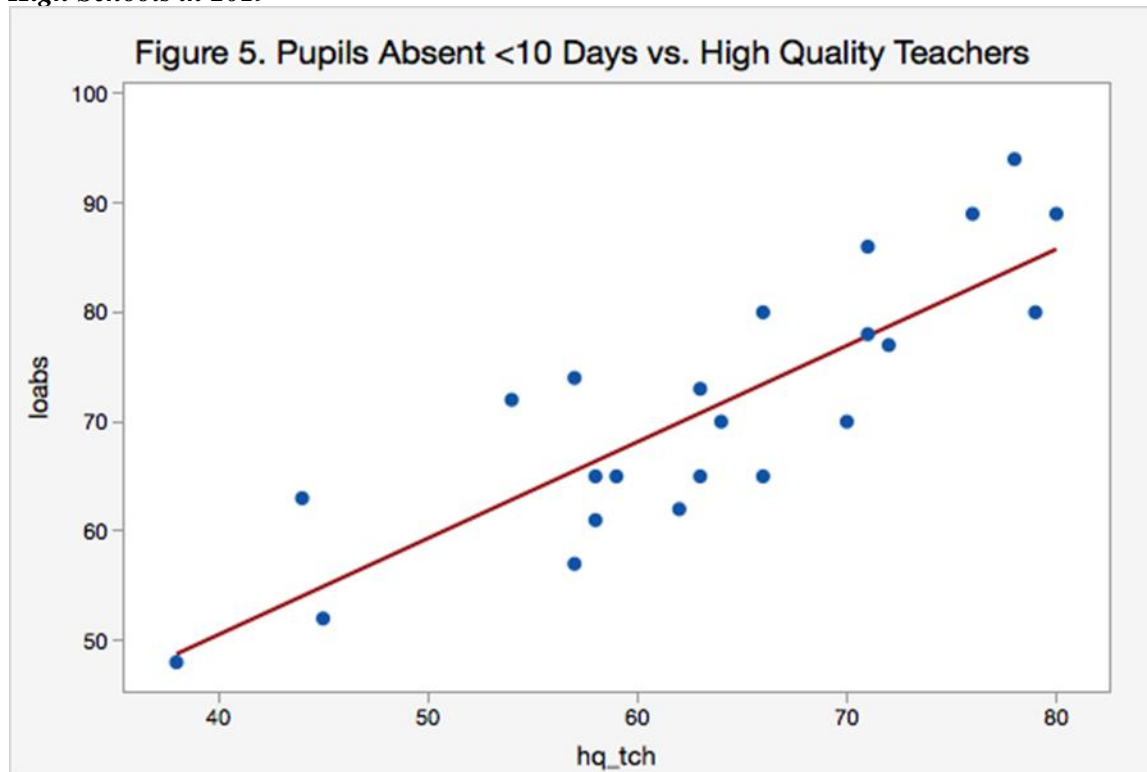


Figure 6.

Relationship of Pupils That Feel Safe vs. High Quality Teachers for 24 High Schools in 2019.

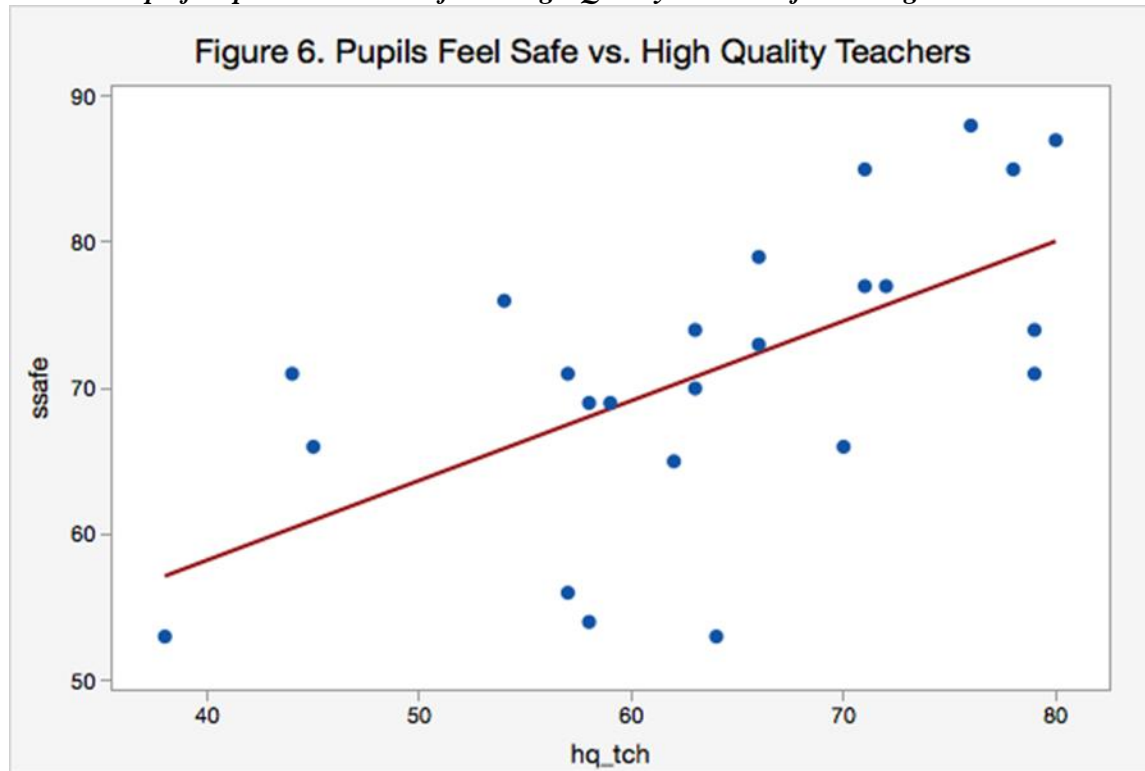


Figure 7.

Relationship of Teachers That Feel Safe vs. High Quality Teachers for 24 High Schools in 2019

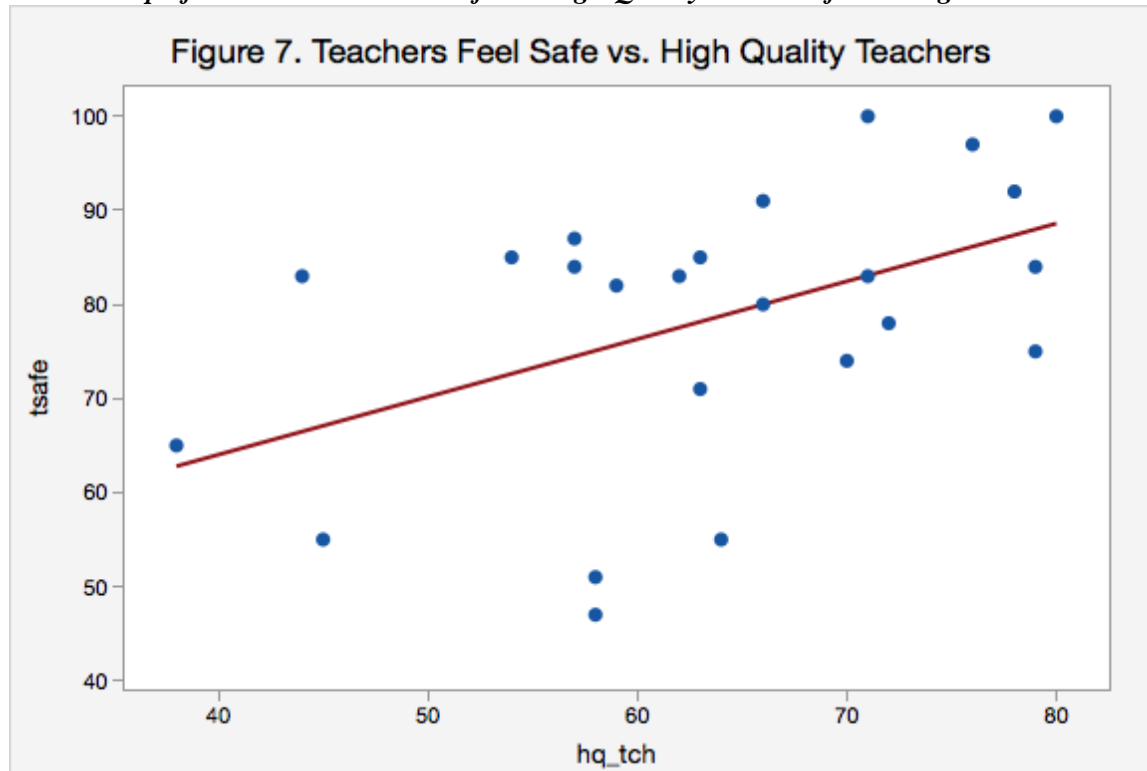


Figure 8.

Relationship of the Percent of Minority Teachers vs the Percent of Minority Pupils State for 24 High Schools in 2019

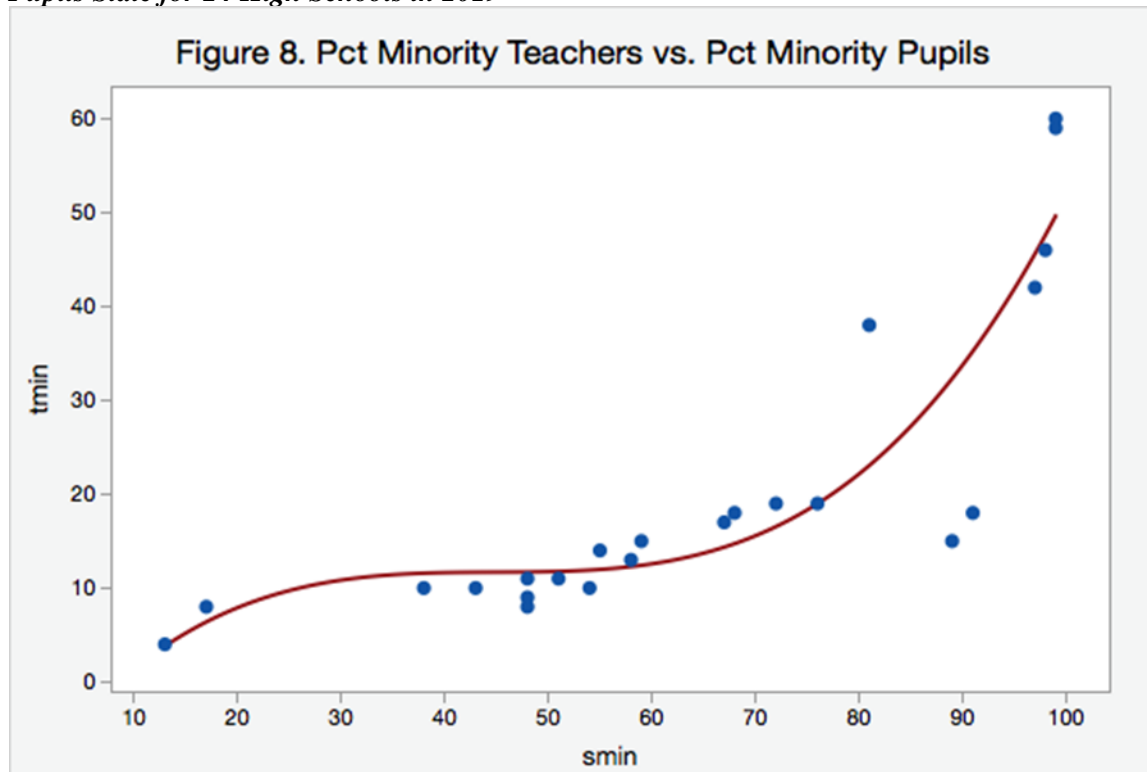
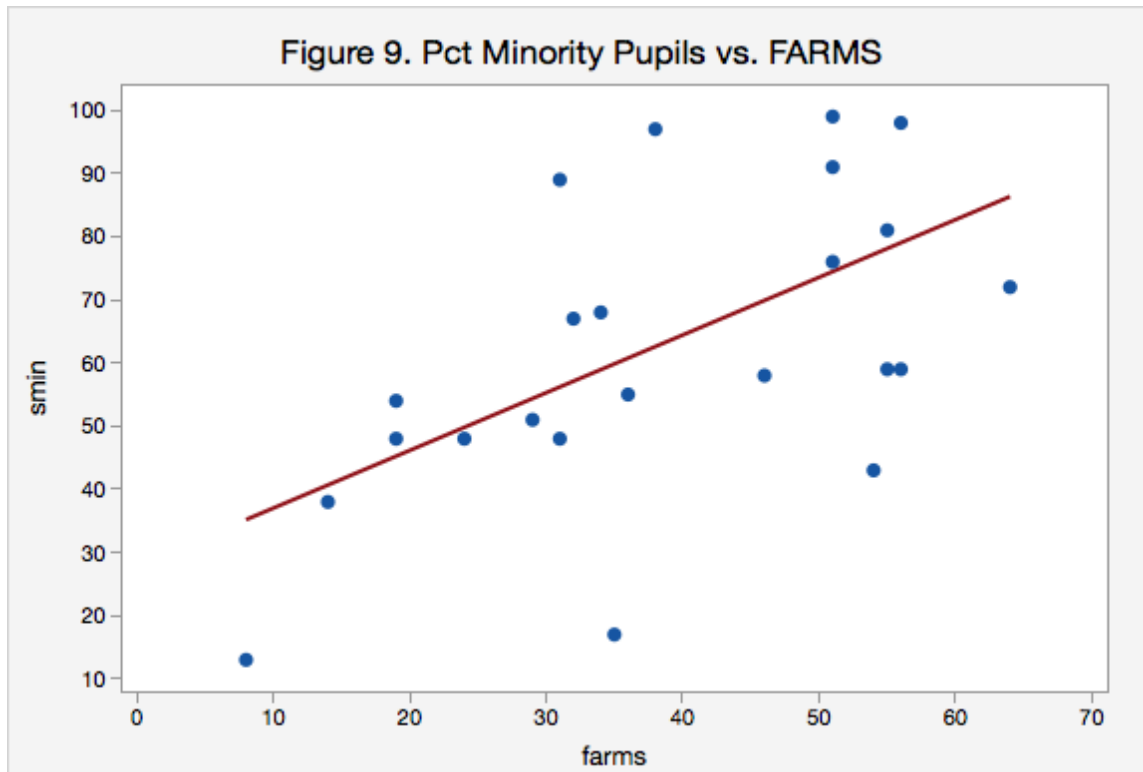


Figure 9.

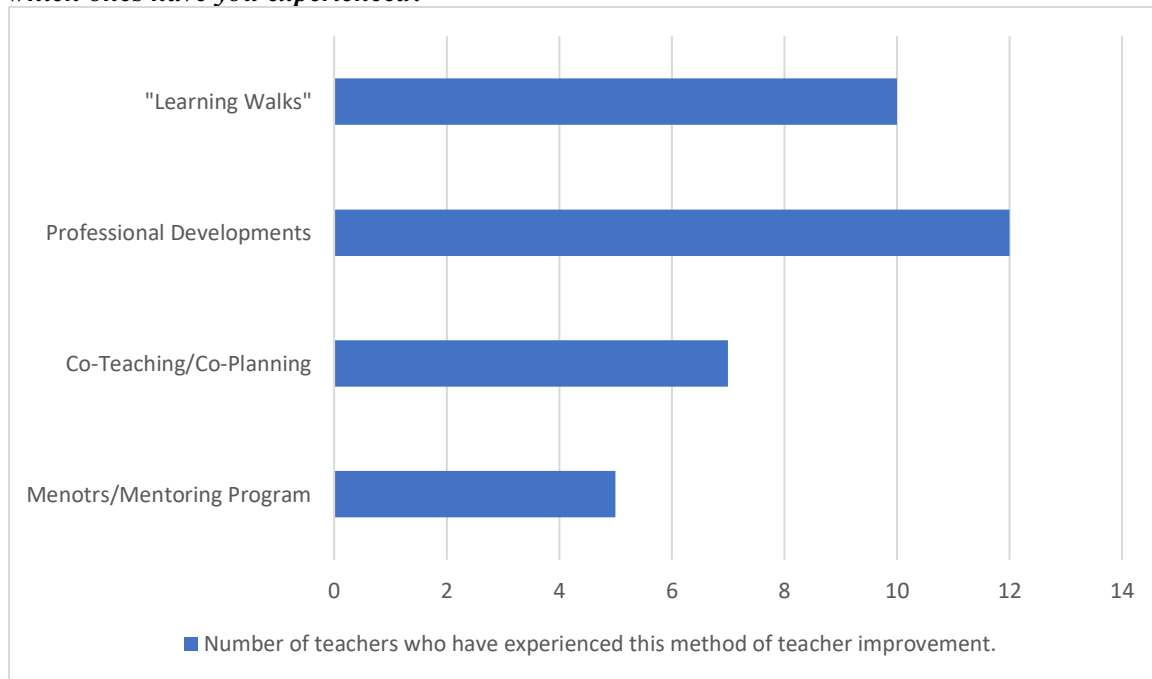
Relationship of the Percent of Minority Pupils vs FARMS for 24 High Schools in 2019



Out of the 27 selected teachers scheduled to participate in this self-report survey, 13 responses were collected over the period of one full week. Through this survey, it was discovered that less than 75% of the received responses were from teachers in either their first or second year as an employee of Baltimore County Public Schools. The selected teachers were asked about which of the four methods of teacher improvement used throughout BCPS high schools to improve teachers they had experienced. These methods were Mentors/ Mentoring Program, Co-Teaching/Co-Planning, Professional Developments, and “Learning Walks” (a method of classroom observations and discussions). Below are the results of this question:

Figure 10.

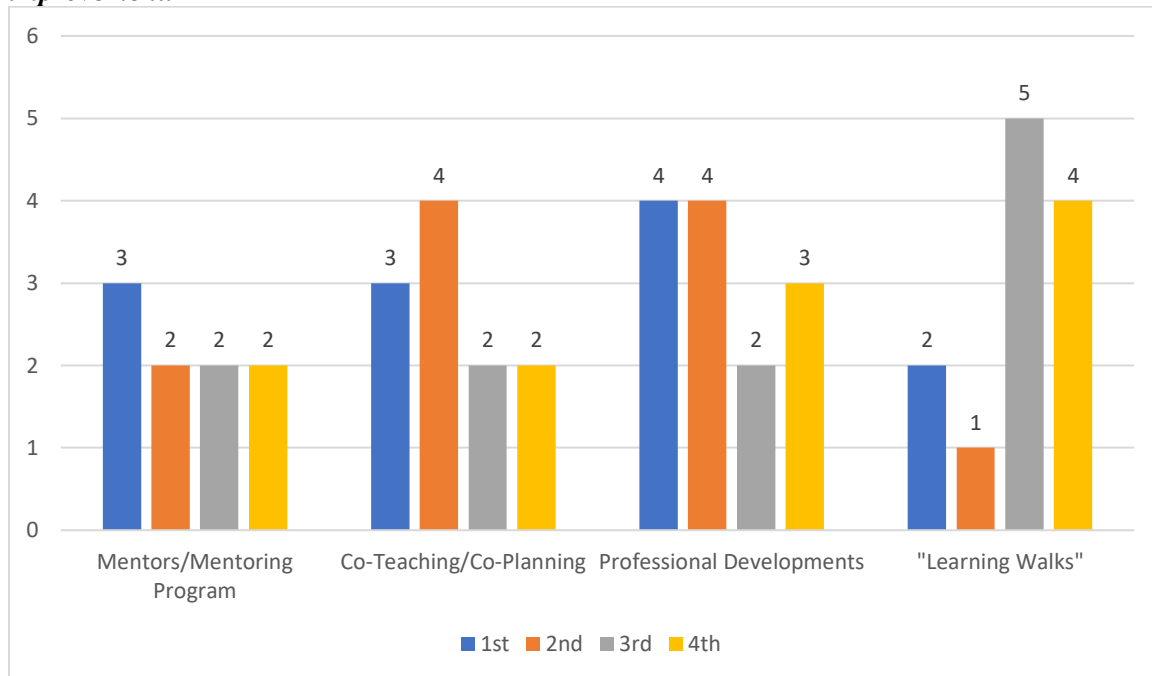
Results of Self Report Survey Question: “Of the following four methods of teacher improvement, which ones have you experienced?”



With this data from the survey, 12 (92.3%) of the collected survey takers had the most experience with Professional Developments, 10(76.9%) had the second highest experience with “Learning Walks”, 7(53.8%) had experienced Co-Teaching and/or Co-Planning, and only 5 (38.5%) had experienced Mentors and/or Mentoring Programs. With this information, the survey takers were then asked to rank the methods in order of effectiveness from 1st to 4th in relation to their effectiveness on their continued teacher improvement. The following figure displays their results:

Figure 11.

Results of Self-Report Survey Question: “Out of the four methods selected previously, rate them in order of effectiveness from 1st-4th in relation to their effectiveness for your continued teacher improvement.”

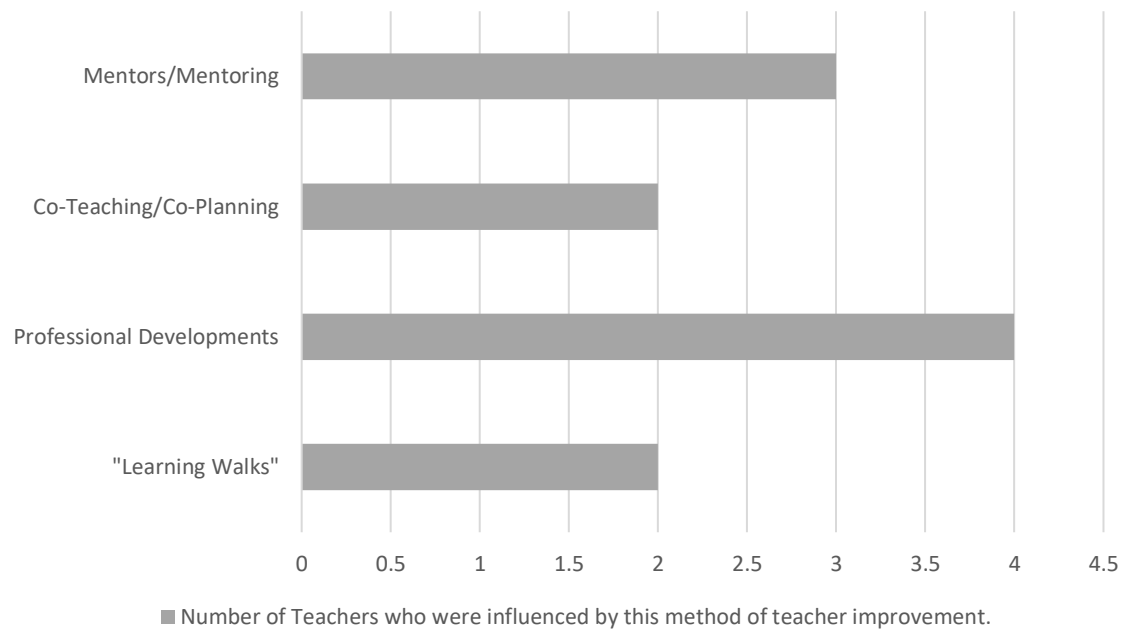


From the responses, it can be concluded that Professional Development was considered to be most effective. It was interesting to see that Professional Development tied with Co-Teaching/Co-Planning as the 2nd highest in the ranking of all four methods. Another interesting point of data that was collected with this survey question was that Learning Walks received the most in both the 3rd and 4th choices as being the less effective in continued teacher improvement, whereas Mentors/Mentoring Programs got an average rate of 2 selections in all 4 places of the ranking.

After this data was collected, survey takers were asked if they would be staying with the same school or BCPS next year. If they responded yes to this question, they were directed to select which methods of teacher improvement had influenced their decision to stay. The following figure displays their recorded responses:

Figure 12.

Results of Self-Report Survey Question: “Do you feel that any methods for teacher improvement have influenced your decision to stay with your school and/or BCPS?”

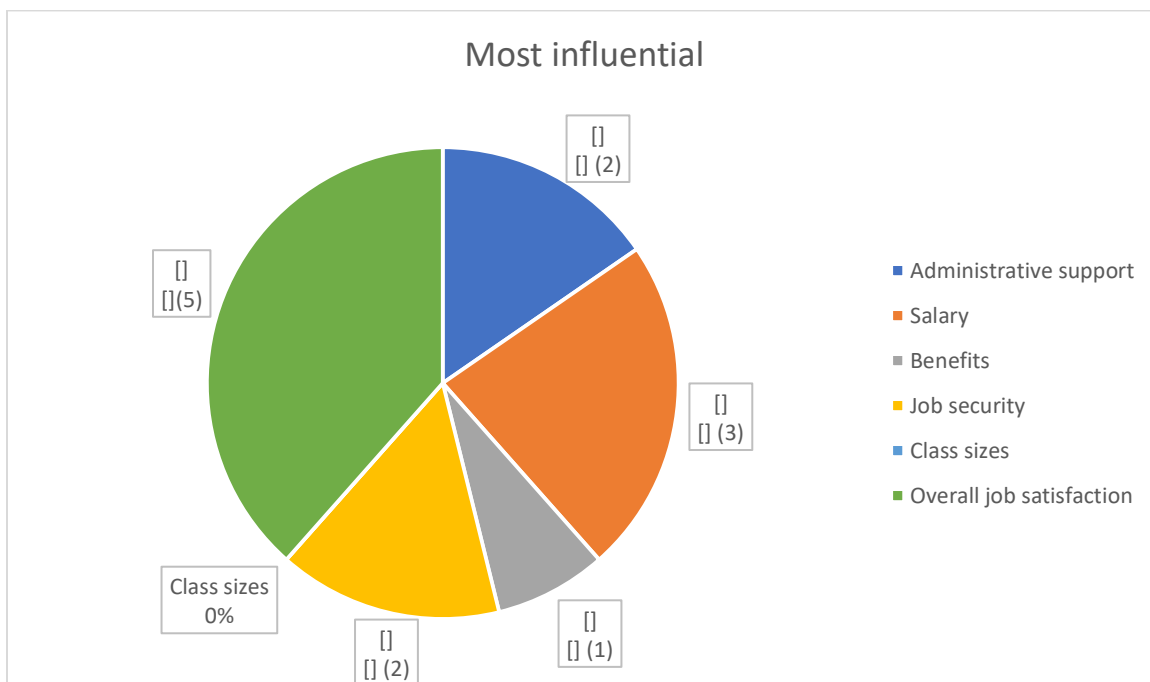
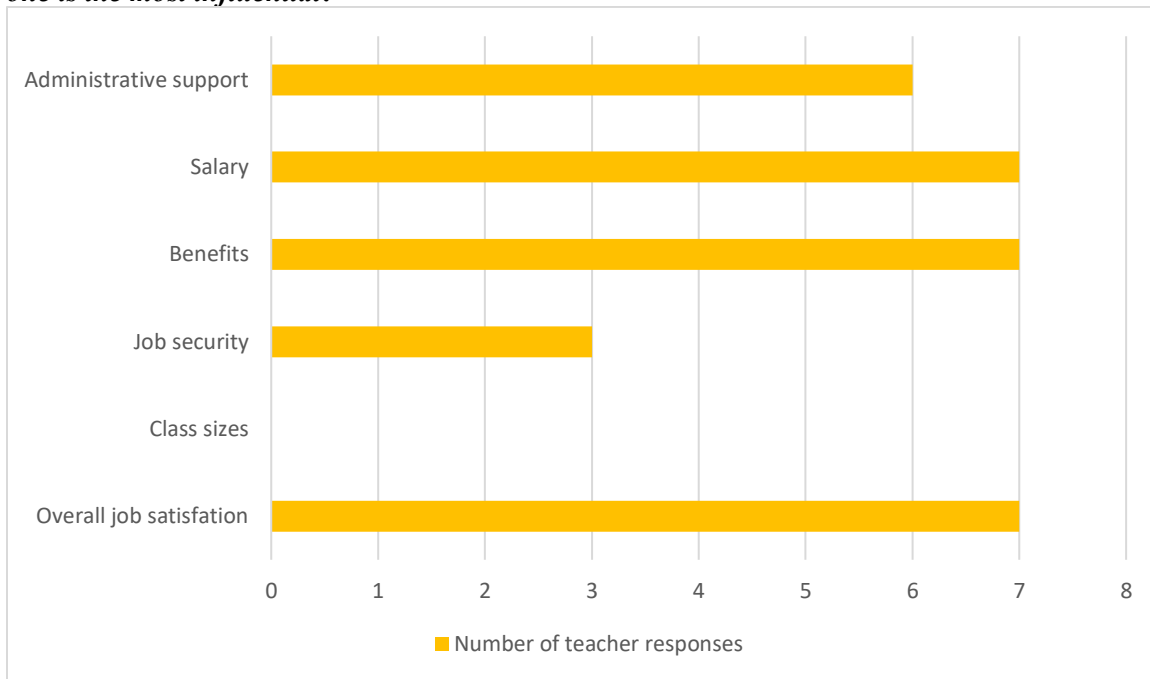


From the data gathered for this question, it states that the largest influencer in keeping a teacher staying with either the same school and/or BCPS was Professional Development. It is interesting to note that the second highest influencer was Mentors/Mentoring Programs, whereas Co-Teaching/Co-Planning and Learning Walks were tied together at being the third influencer of teachers staying in the county.

Finally, the survey takers were asked about what other factors had influenced their decision to stay with the same school and/or BCPS. The respondents were given a list of responses from Administrative Support, Salary, Benefits, Job Security, Class Sizes, and Overall Job Satisfaction and were directed to choose all factors that influenced their decision. From that list, they were then asked to choose which one of them was the most influential to their final decision on staying. The figures below display the information from both questions.

Figures 13 & 14

Results of Self-Report Survey Questions: “Are there other factors that have influenced your decision to stay with your school and/or BCPS?”, and “Of these other factors, which one is the most influential?”



Based on the data collected, it is shown that the top three influences for teachers staying with the school and/or the county were Salary, Benefits, and Overall Job Satisfaction.

Administrative Support was second with six responses, Job Security received three and Class Size received 0. When it came to narrow down to the most influential factor out of the selection, Overall Job Satisfaction topped that ranking with five responses; salary got three and both Job Security and Administrative Support tied at two. At the bottom was Benefits with only one response and Class size with zero responses.

From all the information gathered between BCPS Dashboard, MD Report Card, and from the surveyed educators in within the target school, it is clear that there are strong relations among the input and output variables for school level data. However, at this point, it is not possible to clearly identify if there is a correlation between the data and teacher retention. This data demonstrates that more research is required about this topic.

In Table 6 of the exploratory, it is clear there is a strong relationship among the input and output variables for school level data. For example, the percent of high quality teachers correlates significantly with every output. That is, schools with more high quality teachers tend to have better achievement, a better school climate, and better attendance than others. It can be inferred that the percent of high quality teachers is likely linked to the number of years of experience teachers have.

Based on correlation, it cannot be inferred that high quality teachers *cause* better results. The reality is likely more complex than what can be shown from this data. For example, the role that poverty plays in school outputs is apparent but not necessarily directly causative. In Table 7 of the exploratory, FARMS is inversely and significantly related to high quality teachers. Schools with more poverty have fewer advanced degree teachers and lower achievement. Again, from a correlation table, the theory of cause and effect cannot be proven. However, there are strong data indicators that are the first step in establishing cause and effect.

One thing to consider, based on this data, is that teachers indicated that professional development seemed to be the most effective in teacher improvement, as well as one of the main reasons for teachers to stay with their high school and/or BCPS. The method with the least amount of participation from the selected four offered to the survey takers was Mentoring/Mentorships. Mentoring/Mentorships, however, were ranked second in the influences of teachers remaining in their positions. From this data, it can be concluded that teachers are overall content with their job situation and intend to stay with the school and/or the county due in part to these two methods of teacher improvement and retention.

CHAPTER V

DISCUSSION

The purpose of this action research study was to examine if there is a correlation between school demographics and new teacher retention at the high school level. From the information gathered from BCPS Dashboards, Maryland Report Card, and the teacher self-report survey there may be an indirect relationship between school demographics and the retention of new teachers at the high school level for a county public school system. Also, there may be additional support approaches to improve teacher retention, especially in high schools with larger student poverty levels.

Implications of the Results

The implications of the results of the exploratory statistical analysis and self-report survey show that there could be a correlation between the high school's demographics and the retention of high school educators, but there isn't direct statistical evidence that supports the conclusion completely. The high schools examined were ranked by the percent of High Quality Teachers each school had in 2019. Comparing the top six high schools to the lowest six, it can be seen that high schools with less poverty tend to have more highly quality teachers. Since the variable "high quality" is defined, in part, by teachers having advanced degrees, it is likely that high quality teachers tend to be more experienced. This shows that the high schools that have fewer FARMS students may tend to have teachers staying longer in the education profession. Personnel policies and procedures for teacher transfers could exacerbate the difficulty of retaining teachers in high poverty schools.

Theoretical Consequences

The theoretical consequences of this study indicate that educators likely have a higher probability of leaving high schools with higher rankings of FARMS population. The more a teacher recognizes that they will have a harder time staying in a location and reaching the point of being a highly qualified teacher, the more likely they are to either request a transfer to another high school with a greater chance of reaching that goal or leaving the county to find another school county with more opportunities to grow. Unfortunately, the statistical data to confirm this conjecture was unavailable to this researcher.

Threats to Validity

The main threat to the validity of this study was the limited data that were available for the exploratory analysis and self-reporting survey. The exploratory analysis only had access to information that was available on public databases. As for the survey, not all the original 27 selected teachers at the high school submitted their survey answers within the week as requested. If given additional time, survey takers who didn't submit may have had the chance to change the results of the ranking of effective teacher methods or even what other factors they thought may have influenced their decision to stay with the high school or school system another year.

Connections to Previous Studies/Existing Literature

This study has a few similarities between previous studies and existing literature. From the self-report survey, it was obvious that mentoring programs as well as administrative support held a position of great influence on teachers staying at their high school or within the school system. This seems consistent with the research of Ronfeldt, and McQueen (2017), stating that mentoring programs and supportive communication from school leadership appeared to help retain new teachers both in the profession and in specific schools. Through this study, it was

shown that new teachers agreed that professional development was ranked the most effective out of other methods for teacher improvement. This was also similar to the research of Gaikhorst et al., (2015) concluding that after a year of study, teachers that had been given professional development with established networks of other teachers was promising for new early career educators.

Implications for Future Research

Based on this study, counties can begin looking at continuing to implement more effective methods of teacher education, improvement, and post-hiring professional development. Professional development should be focused on supporting and retaining new teachers especially in high schools with larger poverty levels. The goal should be more teachers staying with their high school positions and becoming a part of the cadre of highly qualified educators at their locations in county public school system.

Another implication for future research is whether or not the location and poverty level of a high school influences the assignment of early career educators or allows teachers to transfer to other schools once they reach the status of tenure in the county.

Conclusion/Summary

Throughout this action research project, the focus has been on the retention of early career educators. With data from public resources and collected data from new teachers in a high school, it is clear that the school system has been implementing methods to enhance the retention rates of new teachers across the board. However, this is something that will not be fixed the same strategy at every school. Research shows that high schools with low numbers of highly qualified teachers might be affected by outside variables, such as FARMS students, and will need to be monitored from this point moving forward to find the best methods to increase the new teacher

retention rates. It cannot be determined from this study whether poverty is a cause of schools having fewer teachers with advanced degrees (hence less experienced faculties). However less poverty at least correlates with schools having more experienced teachers on staff. This study has shown that professional development has had the greatest effect on teacher improvement and can be used as a main incentive toward increased teacher retention numbers at the high school level.

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