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The Role of a School Principal's Practice of Resource Allocation and its Relationship with a School's Culture of Collaboration

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Abstract

This article presents the findings that investigated the relationship between a principal's practice in resource allocation and how it promotes a school's collaborative culture. Participants of the study were New York City (NYC) Department of Education (DOE) school principals who scored a four or above on the NYC Survey School Measures of "Effective School Leadership." The independent variable was principal practice defined as resource allocation. The dependent variable, collaborative school culture, was defined as scoring 90% or above on the "Collaborative Teachers" measure of the NYC School Survey. The study was guided by the question: What is the relationship between a principal's practice of resource allocation and a school's collaborative culture? Through the use of an online survey, this study aimed to gain a better understanding of school principals' practice of resource allocation and its relationship with a school's collaborative culture. Pearson Correlation was used to examine the relationship of a school principal's practice in resource allocation on a school's collaborative culture. In studying the relationship between a school principal's resource allocation practice and its relationship with a school's collaborative culture significant positive relationships were found in the re-directing of monies for reduction of class size, allocating monies for professional development over the summer, and the solicitation of input from all teachers and staff when planning the school budget.

Introduction

The responsibility of moving the school forward and making sure that all stakeholders work together so that students learn, lies squarely on the school principal's shoulders. How the

school principal creates a collaborative culture that focuses the school on the mission and vision of educating children is dependent on his/her leadership style, skillset, and practices. The running of a school is a delicate balance between practices that maintain structure and how those practices impact the school's culture. This delicate balance is supported by Deal and Peterson (2016) when they described how "effective schools are those that balance structure and culture in a dynamic tension that keeps the fulcrum point on center" (p. 278). Maintaining the fulcrum in balance requires a leadership style that will "provide a more sustainable means of building the type of learning-focused climate that characterizes high-performing schools" (Heck & Hallinger, 2009, p. 660).

In their study that identified key conditions for school improvement, Bryk, Sebring, Allensworth, Easton and Luppescu (2010) argued that "successful leadership also entails a deliberate orchestration of people, programs, and extant resources. A strategic orientation must guide these efforts so that resources (both time and money) are effectively allocated to support the continuous improvement of classroom practice" (p. 63). Bryk et al. (2010) further recommended that "school leaders strive to achieve a subtle balance between aggressive efforts at advancing effective action and simultaneously seeking to nurture local followership and the emergence of a more distributed form of local leadership over time" (p. 63). Bryk et al. (2010) supported a distributive leadership style when they argued that "while a principal holds substantial role authority to promote change, no one person can transform a school on his or her own. In the end, some form of more distributive leadership needs to emerge" (p. 64). The work of Bryk et al. (2010) influenced New York City Department of Education's (NYC DOE) Framework for Great Schools (2018).

The Framework for Great Schools

The Framework for Great Schools (2018) is how the NYC DOE engages with schools to ensure ongoing cycles of learning by placing student achievement at its core with seven supporting elements: Rigorous Instruction, Supportive Environment, Collaborative Teachers, Effective School Leadership, Strong Family/Community Ties and Trust. Rigorous Instruction is defined as instruction that is customized, inclusive, motivating, and aligned to the Common Core. Supportive Environment is defined as the establishing of a classroom and school culture where students feel safe, supported, and challenged by their teachers and peers. Collaborative Teachers is defined as teachers who are committed to the success and improvement of their classrooms, where they have the opportunity to participate in professional development within a culture of respect and continuous improvement. Effective School Leadership is defined as principals leading by example, nurturing the professional growth of teachers and staff, developing, and delivering the instructional and social-emotional support that drives student achievement. Strong Family/Community Ties is defined as how the school leadership brings resources from the community into the school building through partnerships with families, businesses, and community-based organizations. Trust is defined as the working together towards the shared goal of improving student outcomes, preparing students for success in school and beyond.

New York City School Survey

On a yearly basis, the NYC DOE solicits from parents, teachers, and students (grades 3 and up) their perceptions on their school experience via the NYC School Survey. The NYC School Survey is designed to collect information about each school's ability to support student success.

In the Effective School Leadership component, parents are asked questions regarding the school leader's inclusive leadership style. Teachers are asked questions about the school leader's

instructional leadership style, program coherence, teacher influence, communication of a clear vision, setting high standards, clear expectations on implementing what they have learned in professional development, and if teachers have a voice in providing feedback in developing instructional materials. The Effective School Leadership element score is a weighted average of the standardized scores from the sources within each element. The weights applied are survey responses (40%) and three indicators from the Quality Review: 1.3 Leveraging Resources (20%), 3.1 Goals and Action Plans (20%) and 5.1 Monitoring and Revising Systems (20%). If teacher response rate is less than 30% or fewer than 5 responses then the element score is N/A (NYC Department of Education, 2017). The Quality Review is a two-day school visit by either district personnel or central office personnel and is divided into three quality categories: Instructional Core, School Culture and Systems for Improvement. The indicators used to calculate the Effective School Leadership component fall within the Systems for Improvement categories of the Quality Review.

Statement of Problem

The results of the 2016-2017 NYC School Survey identified 384 Principals as receiving a rating of four or higher on the NYC School Measures of "Effective School Leadership" and "Trust" of the NYC School Survey from their teachers. Receiving a four or higher is a rating of Exceeding Target. The results of the NYC School Survey led the researcher to ask: What practices did the principals have that led to their rating? Why were these 384 principals rated four or above by the teachers in their school? These questions led to this quantitative study that investigated the relationship of principal's practices on a school's collaborative culture. Participants of the study were NYC DOE school principals who scored a four or above on the NYC Survey School Measures of "Effective School Leadership". The independent variable were principal practices defined as decision making, resource allocation, and communication. The

dependent variable, collaborative school culture, was defined as scoring 90% or above on the "Collaborative Teachers" measure of the NYC School Survey.

Principal Practice of Resource Allocation

Aligning Budget Resources to School Goals

In their study that linked student achievement and the allocation of school resources, Cobb-Clark and Jha (2016), defined the role of the principal as the "development of strategic plans, allocate budgets and implement policies" (p. 253). Cobb-Clark and Jha (2016) found that aligning school resources to the school goals impacted not only the school's culture but also positively affected student achievement. Schein (2017) postulated that, "[h]ow budgets are created in an organization reveals leader assumptions and beliefs" (p. 192).

Traditionally, the term resource allocation has been defined as the use of monies for various uses in an organization ensuring the running of a school. Aligning the allocation of time, money, personnel, and materials to meet school goals is vital, but critical for school leaders is to maintain the capabilities once the supports are removed (Waters & Marzano, 2006; Marsh & Farrell, 2015). Epps' (2010) research on the differentiated supervision classification model (DSCM) focused on classifying schools based on their needs and allocating resources accordingly. DSCM was created by Epps (2010) as a result of the void in the No Child Left Behind Act 2001 on "providing additional resources for those schools that have greater needs" (p. 54). Epps' (2010) study found that when fiscal resources were allocated within a selected content area it positively affected student performance. Epps (2010) further noted that "both the level of resources and their explicit allocation seem to affect educational outcomes" (p. 56).

Teacher Professional Development

Miles et al. (2004) argued in their study of urban district spending on professional development that in order to justify the cost of professional development for teachers, school leaders must take three steps:

> First, districts must identify the resources they are currently investing in professional development and the programming these resources support. Second, they must assess the degree to which these investments align with district goals for student learning and produce desired results. Finally, to the extent that current resources are not being used effectively, they must be reallocated to new, more powerful strategies. (p. 2)

Bambrick- Santoyo and Peiser (2012) noted that "[f]requent professional development creates a culture in which teachers know that they come to work not only to use what they already know but also to grow themselves and learn new skills" (p. 213). Growing the skills of a teacher should align with the goals of the school. Elmore (2002) supported the importance of professional development and argued that professional development "is a collective good rather than a private or individual good. Its value is judged by what it contributes to the individual's capacity to improve the quality of instructions in the school" (p. 14).

Miles et al. (2004) in their study found that the scheduling of professional development during teacher preps or planning periods "should be considered a professional development expense" (p. 8). School leaders face the challenge of finding funds to cover the hiring of extra personnel during curriculum planning weeks to cover teachers. Providing time for teachers to meet during the school day for common planning and professional development is a challenge for many principals. School principals in NYC are restricted in the allocation of time due to the collective bargaining agreements, (United Federation of Teachers, 2018). As per their collective bargaining agreement, teachers in NYC are entitled to a minimum of one preparation period (prep) per day and a duty-free lunch. Teachers are allowed to use the prep time for professional

work with little interference from the principal. Principals can assign work during prep times but it cannot be a norm only an exception, (United Federation of Teachers, 2018).

Van den Bergh, Ros and Beijaard's (2014) study on improving teacher feedback through professional development argued that it was "necessary to ensure that the Professional Development Plan (PDP) was designed in a manner that built upon teachers' existing beliefs, perceived problems, and feedback behavior during active learning" (p. 774). Miles et al. (2004) defined professional development as falling into two categories: individual professional development and instructional capacity school wide. Individual professional development "is not aimed at a school or school-based team of teachers, but at meeting individual career needs" (p. 9). Instructional capacity school-wide "builds individual capacity, but in the context of a school level or instructional program effort" (p. 9). Cobb-Clark and Jha (2016) echoed Miles et al. (2004) findings when their study found that the "way the budgets are allocated across spending categories matters for student achievement" (p. 253).

Class Size

Odden and Archibald (2001) found that the primary decision that affects all school costs is class size. They wrote that "when class sizes are smaller, school costs generally are higher; when class sizes are larger, school costs generally are lower" (p. 32). The debate on class size has impacted policies, "because of a growing belief that lower-class sizes improve student learning" (p. 32). Blatchford and Russell (2018) found that:

> smaller classes involve an increase in the number of teachers which in turn has important implications for educational planning and resourcing. Put simply, more teachers mean more money, and it is understandable if there are hard questions asked about the value of this investment. (p. 1)

West and Woessmann's (2003) study at the international level found that "the existence

of class-size effects is related to the quality of the teaching force. Smaller classes appear to be beneficial only in countries where average teacher quality is low" (p. 62). A conclusion of West and Woessmann (2003) was that "it may be better policy to devote the limited resources available for education to employing more capable teachers rather than to reducing class size" (p. 62). Shin and Chung's (2009) meta-analysis review of 17 studies on the effects of class size reduction (CSR) is contrary to West and Woessmann's (2003) study. The results of Shin and Chung (2009) meta-analysis review of class size studies found that "student achievement in small classes is better than that of large classes by .20 standard deviations" (p. 3). They further found that the results for elementary school are better than for secondary schools and that small class size works better for minority and disadvantaged students. "CSR can be a good educational policy option for minority and disadvantaged students, especially minority and disadvantaged students in grades K-3" (p. 16). Hoxby (2000) explains class size as a function fallacy:

> It is conventional to estimate the relationship between educational inputs (like class size) and outputs (achievement) and to call the relationship an "education production function." The analogy is a false one, however, because firms' production functions are not just a result of their ability to turn inputs into outputs. A firm's production function is the result of maximizing an objective (profits), given a production possibility set. (p. 1240).

Hoxby (2000) further wrote that "class size reductions can fulfill a variety of objectives, not all of which are related to achievement" (p. 1240). Hoxby (2000) highlighted the variables that explain the effect of class size on student achievement such as teacher experience, parent involvement, and student ability.

Limited studies have been done on the effects of smaller class size and its impact on a school's collaborative culture. Guder, Malliaria, and Jalilvand (2009) investigated the effects of

increased class size at the undergraduate level at Loyola University Chicago. Their investigation concluded that "increasing the class size has not been detrimental to either faculty or students" (p. 88). They found that there was no significant difference in the performance of students in large or small classes. But the study did concede that the effect of increasing class size didn't negatively affect the school's culture through the "careful preparation for the change in our culture of teaching" (Guder et al., 2009, p. 88).

Methodology

Participants of the study were principals who scored a four or above on the NYC Environmental Survey School Measures element of *Effective School Leadership*. The independent variable principal practices were defined as decision-making, resource allocation, and communication. The dependent variable, collaborative school culture, was defined as scoring 90% or above on the "Collaborative Teachers" measure of the NYC Environmental Survey. The following research question guided this study: What is the relationship between a principal's practice of resource allocation and a school's collaborative culture?

Research Design

This study used a quantitative correlational design "to describe and measure the degree or association (or relationship) between two or more variables" (Creswell, 2018. p. 12). The variable in this study is the principal practice of resource allocation and its relationship with a school's collaborative culture. The quantitative data collection tool to measure the variables was an online survey. The online survey provided for a rapid turnaround in data collection and analysis. Surveymonkey.com was used as the online survey tool. The survey was sent to school principals in NYC in elementary, middle school and K-8 schools.

Population and Sample

Population

The 2016-2017 NYC School Survey data lists 1,745 schools. There are 610 elementary schools, 348 middle schools, 486 High Schools, 61 Transfer High Schools, 69 Early Childhood elementary schools, 25 Young Adult Borough Centers (YABC), and 227 Charter Schools. For the purposes of this study, Charter schools were not included as they can operate outside of the "division of labor and rationalized school procedures found in traditional schools, charter schools have created a new legal structure that is presumably less bureaucratic and provides more autonomy than traditional schools" (Renzulli, Macpherson Parrott, & Racial, 2010, p. 27).

Sample

Purposive sampling was used to select participants of the study and a stratification method was further used to select principals for the sample group. Purposive sampling is used when the "sample is gathered deliberately, with a purpose in mind, but not randomly. The cases chosen might be selected because they seem typical or perhaps because they are diverse" (Vogt, 2007, p. 81). Stratification is when, "specific characteristics of individuals are represented in the sample" (Creswell & Creswell, 2018, p. 150). The annual NYC School Survey was used to determine participant eligibility. The estimated sample is taken from the results of the 2016-2017 NYC School Environmental Survey where it identified 384 Principals from Prek-12th grade schools as receiving a score of four or above on the *Effective School Leadership* element. Principals who scored a four or above have exceeded expectations and thus have positively impacted their school's culture by the collaborative score on the NYC School Survey.

Principals of the sample group have an average of 7 years as the school leader in their current school. The racial makeup of the principals is 16 % Asian, 23% African American, 38% Hispanic, and 18% Caucasian. The average student enrollment in their schools is 560 students

with a 93% student attendance rate. Seventy percent of students in the sample schools are approaching or meeting standards in the English Language Arts (ELA) exam. The average percentage of teachers in their schools with three or more years is 76% and the average teacher attendance is 96%.

Instrumentation

The researcher developed survey questions for an online survey, based on the literature for resource allocation from the works of Bambrick-Santoyo and Peiser (2012), Elmore (2002), and Trimmer (2016). School Culture questions were used (with permission) from a survey created by Brackins (2012) for her doctoral study. The online survey for this study was divided into three sections: demographic information, principal practices, and school culture belief questions. The demographic information collected included information such as years as a school principal and type of school (elementary, middle school, or High School). The principal practices section focused on questions regarding resource allocation, decision-making, and communication. The final section on school culture asks questions about the school principals' beliefs about their school's collaborative culture. The online survey was comprised of 56 questions with responses indicated on a 5-point Likert-type scale (i.e. Strongly Agree, Agree, Neither Agree nor disagree, Disagree, Strongly Disagree). The ratings provided a mean score relating to each of the principal practices.

Data Collection

The emails of the principals were collected using the website www.greatschools.org, which lists all schools in NYC along with the name and email addresses of school principals. The researcher cross-referenced the school principal listed on www.greatschools.org with the school's web page on the NYC DOE website. An introductory email with the SurveyMonkey electronic link was sent via email. The introductory email informed school principals of the

purpose of the study, their rights in participating in the study, with assurances that their answers to the survey are anonymous. School principals were informed that their participation in this study was voluntary and that they could withdraw consent at any time prior to completing and submitting the survey. To increase response rates, three follow-up emails, one week apart were sent to school principals as a reminder to complete the survey.

Reliability and Validity

Reliability

Internal consistency/reliability was computed using Cronbach's Alpha. Cronbach's Alpha reliability test was applied on questions about principal practices with the result of .831. School Culture questions are deemed reliable as reliability testing on those questions was applied as part of research by Brackins (2012).

School Culture Construct Variable

A construct variable was established for the School Culture questions (Survey Questions 48-56) labeled "Culture" and a Cronbach Alpha test was applied to test for reliability of the School Culture questions. Cronbach Alpha was .779 for the eight school culture questions. The construct variable was used to create the correlation tables for each of the principal practices studied – decision making, resource allocation, and communication.

Validity

Content validity was established through an Expert Panel. One District Superintendent, six School Principals, and one District Resource Supervisor were assembled to review the survey questions and provide feedback on the content of the questions. Each participant on the panel is considered an experienced expert in the field of K-12 educational administration. The survey was sent to the Expert Panel via Survey Monkey. For the purposes of the Expert Panel review, an open-ended question was added at the end of the survey to allow for feedback. It was removed

for "live" launch of the survey. The researcher modified the survey based on the feedback from the Expert Panel. School Culture questions were deemed valid as testing on those questions were applied as part of research by Brackins (2012).

Data Analysis

Descriptive statistics was used with the demographic data gathered on the participants of the study. For the purpose of this study, the demographic information gathered was only used to describe the study participants. Survey responses with questions not answered were deleted and not included in the analysis. The statistical methods used for this study were Cronbach's Alpha for reliability and correlational analysis of principal practices (decision making, resource allocation, and communication) on school collaborative culture. Pearson Correlational analysis was applied for each question within the three principal practices of decision making, resource allocation, and communication against a construct variable for the school culture questions.

Findings

Two types of statistics were used: Descriptive and Inferential statistics. Descriptive statistics were used to detail the school and principals' demographic data. Inferential statistics were used to investigate correlations and statistical significance of the relationship between principal practices and a school's collaborative culture.

Background of Participants

The sample population consisted of 384 School principals based on the 2016-2017 public NYC School Survey data, obtained from the NYC DOE website. The NYC School Survey data listed the Quality Review score along with the name of the principal at the time of the Quality Review. The emails of the principals were collected using the website www.greatschools.org, which lists all schools in NYC along with the name and email addresses of school principals. The researcher cross-referenced the school principal listed on www.greatschools.org with the

school's web page on the NYC DOE website, leading to the elimination of 53 school principals from the sample population. The elimination was due to the name of the principal on the NYC DOE website not matching the name of the principal at the time of the Quality Review during the 2016-2017 school year. The survey was sent to 331 NYC School Principals via email. Of the 331 school principals emailed, six auto-response messages were received stating that the school principal either retired or found a new job outside of the NYC Public Schools (thereby eliminating them from participation) for a total of 325. A total of 57 (17%) school principals out of 325 responded to the survey; three principals did not finish the survey and their responses were deleted. Out of 325 school principals who received the survey, 54 (16%) completed responses were received.

As shown in Table 1, the majority of principals were female at 43 or 80% while males were 11 or 20% of the respondents. Twenty-seven or 50% of the respondents answered they were White or Caucasian, with twelve, or 22% were Black or African American, eleven or 20% were Hispanic or Latino, one or 2% were Asian and three or 6% preferred not to answer the question.

Twenty-nine or 53% of the respondents stated that their highest degree level was a master's degree, sixteen or 30% stated their highest degree level was a Professional Diploma, eight or 14% stated that they had their Ph.D./Ed.D., and one or 2% stated they had Other. Forty-five or 83% of the respondents stated that they obtained their education via a traditional pathway, while nine or 16% stated they obtained their education via a Non-traditional pathway such as the Leadership Academy.

Table 1

Demographic Information of school principals

Variable	Frequency	Percentage

Please indicate your race		
a. White or Caucasian	27	50
b. Black or African American	12	22
c. Hispanic or Latino	11	20
d. Asian	1	2
e. Prefer not to answer	3	6
Please indicate your gender		
a. Female	43	80
b. Male	11	20
Please indicate your educational background		
a. Traditional pathway (i.e. College)	45	83
b. Non-traditional (i.e. Leadership Academy)	9	17
What is the highest degree you have received?		
a. Bachelor's degree	0	0
b. Master's degree	29	53
c. Professional Diploma	16	30
d. Ph.D./Ed.D.	8	14
e. Other (please specify)	1	2

N=54

Table 2 shows the level of experience of the school principals who responded to the survey. Sixteen or 30% of the respondents indicated they had 10-20 years of experience working in education, while thirty-eight or 70% stated they had more than 20 years of experience. Three or 6% of the school principals responded they had less than five years as a school principal, twenty-three or 42% stated they had 5-10 years of experience, twenty-four or 44% stated that had

10-20 years of experience, and four or 7% indicated they had more than 20 years of experience. Four or 7% of the respondents answered that they had less than 5 years of experience in the current school, twenty-four or 44% of the respondents stated they had 5-10 years, twenty-two or 41% stated they had 10-20 years, and four or 7% stated they had more than 20 years in their current school.

Table 2

Experience of School Principal

Variable	Frequency	Percentage
Please indicate the number of years you have been working in education (count this year as one full year)		
a. Less than 5 years	0	0
b. 5-10 years	0	0
c. 10-20 years	16	30
d. More than 20	38	70
Please indicate the number of years that you have been a school principal (count the current year as one full year)		
a. Less than 5 years	3	6
b. 5-10 years	23	42
c. 10-20 years	24	44
d. More than 20	4	7
Please indicate the number of years that you have been the school principal at your **current** school.		
a. Less than 5 years	4	7

b. 5-10 years	24	44
c. 10-20 years	22	41
d. More than 20	4	7

N=54

Table 3 indicated the school demographics. Thirty-six or 70% of the school principals indicated their school was at the Elementary level, eleven or 20% stated they were Middle School, two or 4% were K-8 schools, and five or 9% indicated "Other." Eight or 15% of the respondents answered they had between 100-300 students in their school, while forty-six or 85% indicated they had more than 300 students in their school.

Fifty-one or 95% indicated they had assistant principals or Dean of Students in their schools while three or 6% answered they had no assistant principals or Dean of students. Six or 11% answered there were 10-20 teachers in the school, while forty-eight or 90% stated there were over 20 teachers in their school. Thirty-eight or 70% answered they were a Title I school, while sixteen or 30% indicated they were not a Title I school. Twenty-one or 40% of the respondents indicated that their school was co-located with another school, while thirty-three or 61% responded no.

Table 3

School Demographics

Variable	Frequency	Percentage
Please select the school level that most accurately describes your school building.		
a. Elementary	36	70
b. Middle School	11	20
c. High School	0	0

d. K-8	2	4
e. Other	5	9
How many students are enrolled in your building?		
a. 1-100	0	0
b. 100-300	8	15
c. More than 300	46	85
Are there other administrators in your school building, such as an Assistant Principal or Dean of Students?		
a. Assistant Principals		
i. Yes	51	94
ii. No	3	6
b. Dean of Students		
i. Yes	37	71
ii. No	17	30
How many teachers do you have at your school?		
a. 1-10	0	0
b. 10-20	6	11
c. 20 or more	48	90
Are you a Title I school?		
a. Yes	38	70
b. No	16	30
Is your school co-located with another school?		
1. Yes	21	40
2. No	33	61

N=54

Correlational Relationship - Resource Allocation and School Collaborative Culture

A Pearson Correlation was performed (see Table 4) to determine the relationship between resource allocation practice and the school's collaborative culture. Participants were asked seven questions regarding their resource allocation practices and three of the questions were found to have a significant correlation with a collaborative culture.

Question 2 asked participants about their beliefs on re-directing monies to reduce class size. The result yielded a significant moderate positive correlation (r=.324, p=.017). This statistically significant relationship acknowledges that reducing class size is related to increased collaborative school culture.

Table 4

Resource Allocation Practices vs. Culture Correlations

Question #	Survey Question	Culture Construct Variable Pearson Correlation	Significance (2-tailed)
1	As the school leader, I use fiscal resources to meet the curricular and instructional needs of the school.	.183	.185
2	If the situation required it, I would re-direct monies from other staffing categories and hire more classroom teachers to reduce class size.	.324*	.017
3	Setting aside money for Professional Development of teachers over the summer is vital to ensuring my school meets its goals.	.293*	.032

4	If the situation required it, I would hire more pull-out teachers for targeted student support even if it meant an increase in class size.	-.150	.280
5	Arranging the schedule to allow for common planning for teachers, is vital to ensuring my school meets its goals.	.252	.066
6	At my school, learning materials for curriculum and instruction are well-coordinated across all grade levels.	.250	.068
7	As the school leader, I solicit input from faculty and staff when planning the budget for the school.	.500**	.000

N=54

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Question 3 asked participants about their beliefs on providing money for the professional development of teachers over the summer months. The result yielded a significant positive correlation (r=.293, p=.032). This statistically significant relationship acknowledges a relationship between setting monies for the professional development of teachers during the summer months and increased collaborative school culture.

Question 7 asked participants about their beliefs on soliciting input from faculty and staff when planning the budget for the school. The result yielded a significant strong positive correlation (r=.500, p=<.001). This statistically significant relationship acknowledges that including faculty and staff in budget planning is related to improved collaborative school culture.

The rest of the items listed in Table 4 did not yield statistically significant correlations to a school's collaborative culture.

Conclusions

In studying the relationship between a school principal's resource allocation practice and a school's collaborative culture, significant positive relationships were found. They include the re-directing of monies for reduction of class size, allocating monies for professional development over the summer, and the solicitation of input from all teachers and staff when planning the school budget.

Re-directing monies to reduce class size yielded a significant moderate positive correlation ($r=.324$, $p=.017$). This statistically significant relationship supports that reducing class size increases a school's collaborative culture.

Allocating monies for the professional development of teachers over the summer months yielded a significant positive correlation ($r=.293$, $p=.032$). This statistically significant relationship recognizes that the setting aside of monies for the professional development of teachers during the summer months increases a school's collaborative culture.

Soliciting input from faculty and staff when planning the budget for the school yielded a significant strong positive correlation ($r=.500$, $p=<.001$). This statistically significant relationship indicates that when a principal includes faculty and staff in budget planning it is related to improved collaborative school culture.

Concluding Remarks

The data collected for this study showed that there is a link between the principal practices of resource allocation and a school's collaborative culture. This study showed that school principals who focused on reducing class size recognized that their school's collaborative culture improved. This finding adds to the existing body of research as current research has

focused on class size and its impact on student achievement not on its relationship with a school's collaborative culture.

When school principals included, as part of their education strategy, the allocation of monies for teachers' professional development over the summer they contributed to a positive collaborative culture in their school. This conclusion is supported by existing research on the practice of providing teachers with a sufficient amount of professional learning opportunities to ensure that they have the knowledge and skills needed to teach the curriculum successfully (Goertz & Stiefel, 1998; Miles et al., 2004; Van de Bergh et al., 2014; Odden & Archibald, 2001).

School principals who solicited input from faculty and staff when planning the school's budget increased positively their school's collaborative culture. This is supported by Goertz and Stiefel's (1998) study when they concluded that successfully managing the school budget leads to the meaningful involvement of all school stakeholders.

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