



How School Achievements Interplay with School Culture and Principal Behaviors : A comparative Study ¹

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Abstract

The purpose of the study was to explore school culture in radically different schools due to school achievement. The particular objectives of this study were to investigate: (1) the teachers' perceptions of school culture (2) the teachers' perceptions of principal behaviors, and additionally (3) to determine the relationship between principals' behaviors and perception of school culture by teachers. This study employed a comparative-descriptive research design and took place in A - Middle School, representing a high-performing school, and B -Middle School, representing a low-performing school. These two middle schools were both located in capital city of Poland and were selected based on their position in Warsaw Middle Schools Ranking. The "School Culture Survey" (Gruenert & Valentine, 1998) was used to obtain data about school culture factors. To determine the teachers' perceptions of principal's behaviors, "The Organizational Climate Description Questionnaire - Middle Level" (OCDQ-ML, Hoy et al., 1996) was used. Statistical comparisons of collaborative school culture indicated that the compared schools differ significantly in four school culture dimensions. In school A there is a culture focused on individual achievements, the competition more than cooperation, unlike the situation in B-middle school, in which collaborative school culture is strong and visible. According to principal behaviors, significant differences between compared schools were also identified. Namely, more supportive principal behaviors were typical for school B (low school performing), while restrictive principal behaviors were more common in school A (high-performing). Results indicated that principal behaviors and collaborative school culture were associated with each other.

Key words: academic achievement, school culture, school performance, principal behavior, middle schools comparison

Introduction

'Individual student progress' or 'external test scores'? How to compare and rank schools' performance?

School performance reflects the effectiveness and efficiency of the schooling process. Effectiveness and efficiency are judged according to the school's 'objectives'. Although these are school specific to some degree, school performance research focuses solely on objectives that schools have in common (Maslowski, 2001). Nowadays, public schools face considerable pressure to be held accountable by legislators, parents, students, and other stakeholders for the success of their students (Toutkoushian, Curtis, 2005). Morris points out, that professional educators have long recognized that schools differed in their quality and in the learning environment they offered. In time, researchers' points of view about student achievements has changed: from the consideration of pupils' personal qualities or family backgrounds as factors which determine students' academic attainment (e.g. King, 1965), to the conclusion that "schools really do matter" (see Wilby, 1988). Toutkoushian and Curtis (2005) emphasize the relationship between a locality's socioeconomic status and the academic performance of schools. According to Wake (2001), 'people will tell you that the best way to predict a school's standardized test scores is to take a look at the cars in the parking lot. The more expensive the cars, the higher the scores, the better the school's reputation' (Wake, 2001, p. C3). Toutkoushian and Curtis (2005) note that school rankings that are based solely on observed outcomes such as external test scores or the college-bound rates of students tend to 'penalize' schools located in districts with relatively low socioeconomic status and vice versa.

However, many people regard test scores and examination results as suitable and adequate measures of a school's relative academic success. Advocates of standardized testing argue that scores provide the only objective data available to monitor student progress. But there are also arguments that, for many reasons, standardized test scores should never be used as the basis for policies that affect individual students or schools or for the formulation of important public policy-period. Critics of "monolithic batch" system have argued, among other things, that standardization is the antithesis of personalization, and evidence and experience suggest that personalization is a key factor in student motivation and success. Personalizing education, by definition, requires creating multiple pathways for students to succeed and reach their goals (Wolk, 2011). Moses and Nanna (2007) state that standardized tests are not inherently negative, and testing can serve to assess student learning and progress. But if testing is used in inappropriate ways, it can be damaging to students both emotionally and academically. On the other hand, 'test scores' is the main component of schools ratings. Any school's rating is a simple tool for 'school clients', mostly for parents, in the school selection process. Based on external test scores and other available data, schools' ratings provide information on school performance, giving parents a picture of school place and learning environment. Researchers (e.g. Kennedy, 1991) had argued that a more appropriate mechanism for comparing schools was to measure the progress individual students make between the different stages of their education (Morris, 2009).

School Culture

Organizational culture of institution is a basic concept in modern management theory. In contemporary literature, in the field of management it is assumed that organizational culture includes assumptions, attitudes, beliefs, rituals, traditions, knowledge, language, norms and values shared by all members of the organization (Schein, 1985). Every organization that is a formal place of work with a fixed structure, creates a specific culture and climate and have an impact on its participants. 'The variance and invariance of human behaviors and mental processes under diverse cultural conditions are both objects of cultural studies and they form the collective property of a group' (Zhu, Devos & Li, 2011, p. 320). Macneil, Prater and Busch (2009) emphasize that culture is complex because it has unique and idiosyncratic ways of working.

Gruenert and Whitaker (2017) state Anytime a group of people spend a significant period of time together, they will develop roles and expectations for each other. Over time these roles will define each person and give balance to the group as its members attempt to survive the environment. The group will create rules to define who is a member and who is not. Rewards and sanctions will support these rules, usually in the form of peer pressure. There is comfort and predictability as routines and rituals bond the group. Change is not welcome. A culture has been formed. (p. 12)

Many authors have written extensively about school culture (e.g. Cunningham & Gresso, 1993; Hopkins, Ainscow & West, 1994; Sergiovanni, 1994; Fullan & Hargreaves, 1996; Gruenert 2000; Maslowski, 2001). It has been defined as the way people do things and relate to each other within the school (Cunningham & Gresso, 1993); as a generic term for the underlying assumptions, values and norms in school, and the myth, heroes, symbols, practices and rituals in which the latent culture manifests itself. The basic assumptions of school members are related to their values and norms, and these, in turn, are linked to the stories and

symbols within the school and with the practices and rituals that exist (Maslowski, 2001). According to Hopkins et al. (1994), school culture relates to:

- The observed patterns of behavior (e.g. how teachers interact in the staff room, how they communicate with each other, the language they use, the rituals they establish).
- The norms that evolve in working groups of teachers in terms of lesson planning or monitoring the progress of students.
- The dominant values espoused by the school, typically through a mission statement.
- The philosophy that guides the approach to teaching and learning of particular subjects in a school.
- The unwritten policies and procedures that new teachers have to learn in order to get along in the school or their department.

School culture can be also defined as the guided beliefs, assumptions, and expectations that are evident in the way a school operates (Fullan & Hargreaves, 1996; Gruenert, 2005).

There is no universal definition of school culture, but there is a general acknowledgment that every school has its own unique culture. It is either an ineffective culture, characterized by the absence of vision and cohesiveness, or an effective culture, where staff and students exhibit such qualities as trust, cooperation, confidence, and commitment to do their best (Stolp & Smith, 1995). Kachur, Stout and Edwards (2013) note that school cultures can be placed on a continuum from complacent, ‘satisfied with the status quo’ schools on one end to highly cohesive, forward-moving schools on the other. Schools on the complacent end have a great deal of difficulty trying to reshape their cultures so staff members will value working and learning together to make their school a great place for everyone. To focus on each school’s culture means ‘to look at’ its values, beliefs, and traditions that have been formed over time.

The organizational culture of a school has been created for a long time. And, patterns of culture have a fairly significant durability as important components of a school. It does not mean that they are immutable and resistant to environmental influences or internal factors, but change of the culture takes time. School culture affects the overall performance and effectiveness of the school. The literature indicated that a healthy school culture is usually marked by professional collaboration and professional learning among all members of the organization with a common core of values and beliefs (e.g., Valentine, 2006; Zepeda, 2013). Therefore, through collaboration and collegiality, with the goal of promoting the professionalization of all teachers, teacher leadership can strengthen the building of a healthy school culture and could further enhance the capacity for change and improvement at both the school and classroom levels (Harris & Muijis, 2003).

Wang and Zepeda (2013) compared the experience of teacher leaders from two middle schools in China and indicated that the teacher leadership and the school culture were two interrelated factors. At KM Middle School (representing high-performing school) with a healthy school culture, more prospective teacher leaders developed and the current teacher leaders were able to exert their leadership efficiently with a positive impact. Whereas at SY Middle School (representing a low-performing school) with an unhealthy school culture, it was difficult to develop teacher leaders. They concluded that a healthy culture marked with positive learning attitudes, a wide range of collaboration and trust, provides a foundation for teacher leadership. They also suggested that more research is needed in this area.

The Role of the Principal in School Culture Shaping

Moffitt (2007) stated that leadership is synonymous with power because it is a part of the influence process. Hence, the school leaders have the power, authority and position to impact the culture and climate of the school. In the 1990s, researchers (e.g. Sashkin & Sashkin, 1990; Endeman, 1990) showed an 'interrelationship' between leadership and organizational culture. Sashkin and Sashkin (1990) assessed leadership and culture in twelve different schools in one district. They measured leadership characteristics, such as self-efficacy and leader's impact on organizational culture, in relation to such factors as attaining goals, working together as a team, and sharing values and beliefs. The results showed a strong web of relationships among leadership variables and organizational culture. And all the relationships were statistically significant (after: Stolp & Smith, 1995).

According to MacNeil, Prater and Busch (2009), there is substantial evidence concerning the importance of leadership in creating good school environments. It seems to be that the principal does not directly affect student achievement, but indirectly effects teaching and learning by impacting the school climate. The way in which the principal behaves, as well as the leadership style that he/she follows, influences the views of the educators with regard to the prevalent work atmosphere and resultantly has an influence on the organizational climate of the school (Hoy et al., 1991; Hoy & Tarter, 1997). Organizational climate is not the same as organizational culture (Gruenert, 2008), but it is the main window by which observers can get a sense of the prevailing culture. Undoubtedly, principals might well foster teachers' collaboration through their own helping behavior. It is the responsibility of both sides: individual teachers and principals to develop an atmosphere of collegiality and professionalism. The principal can build a positive school culture which is reflected by the positive school climate which serves everyone. The study conducted by Moffitt (2007) clarified that the principal is the primary person for instituting leadership among all within the school which ultimately contribute to student achievement

Brankovic, Rodic and Kostovic (2012) stated that effective school leaders are continually working on changing the school, analyzing and examining what their schools need to become better places for all students and employees. They also mentioned the most important tasks of school leaders which include building vision, understanding and development of people, redesigning the organization, and the management of the teaching and learning process in school. Furthermore, a large number of researchers came to the conclusion that the principal behaviors, theoretically constructed as a principal's leadership style, is the most important factor of teachers' job satisfaction (see Josanov-Vrgovic & Pavlovic, 2014, p. 43). Our earlier research (see Thuściak-Deliowska & Dernowska, 2015) conducted among middle school teachers established that teachers perceived their principal as supportive rather than restrictive. It means that principals are helpful and genuinely concerned with teachers' successes. Furthermore, supportive and directive principal behaviors were found to be positively correlated with teachers' job satisfaction.

Although culture may be a nebulous concept in a reality where principals need concrete results in student achievement, linking culture and student achievement may allow principals to re-center their energies on more human aspects of school leadership. Some school administrators are transforming their beliefs about productivity and effectiveness, embracing a more human approach, away from the mechanistic paradigm, with the hope that these efforts will provide the settings necessary for increased student and teacher learning. Yet, as schools

are held more accountable for student achievement, primarily defined as higher test scores, the challenge of collaboration may not seem warranted (Gruenert, 2005).

Research Aims

Regarding results and conclusions from the above mentioned investigations, this study was prepared with attention seeks to explore school culture in two selected schools. It is obvious that there are no two same schools, thus, no two identical cultures of schools. Nevertheless, a comparison of two schools with certain characteristics similar to each other, while others extremely different, can provide interesting results relevant to leadership, also for pedagogical practice.

The purpose of this study was to explore school culture in two radically different schools regarding school achievement. This study employed a comparative-descriptive research design. The particular objectives of this study were to investigate: (1) the teachers' perceptions of their school culture (2) the teachers' perceptions of principal behaviors and additionally (3) to determine the relationship between principals' behaviors and perceptions of their school culture by teachers. We expected that there are significant differences between schools in their school culture dimensions as well as in perception of principal behaviors. Additionally, we assume that the role of school principal is significant for the school culture creation and perpetuation.

Method

Settings

This study took place in A - Middle School, representing a high-performing school, and B - Middle School, representing a low-performing school. These two middle schools were both located in capital city of Poland and were selected based on their position in Warsaw Middle Schools Ranking. These two schools are approximately 10 kilometers apart.

A-Middle School is commonly perceived as an ideal place for learning. This institution provides high quality educational services for students, parents and the local community. This school is famous for its great achievements of students in various competitions, particularly in Maths and Physics. The school offers a wide range of extracurricular classes and activities to enable students to develop their skills and talents. Based on the analysis of the statute and the documentation of this school we can learn that students' learning at the highest professional level is recognized as a basic task of this school. Furthermore, it is imperative that they equip students with the skills necessary to function in a rapidly developing world, in particular the ability to continue effective learning. The faculty attaches a great importance to providing education and educational content in an attractive, modern and easily digestible venue for young people. High quality education and professionalism of pedagogical work are the essential values of this teaching staff. Quality control of classes and objective assessments of the teachers' work are important elements of quality management of the educational process. The ambition of the community is for this school to be a leader in the quality of education. Based on school performance and students' achievements, we can say that this objective is being achieved.

B-Middle School is not as famous as the School A and the results of standardized, external tests are not as spectacular and high. School B declares, that the welfare of the child is the highest priority, and it emphasizes that "an individual approach matters." In the statute, the school declares providing the opportunities for learning and cognitive and physical development for students. This school strongly stresses that the process of successful human

development requires conditions of respect for the dignity of students, as well as freedom of religion and freedom of thought. As a lower-secondary compulsory school, it enables the students to fulfill their obligation of schooling. According to further declarations included in the statute, teaching and all other activities of the school are carried out in accordance with the educational rules, the law, The Universal Declaration of Human Rights and the ideas expressed in the Convention on the Rights of the Child.

Both schools are similar in size, and both have a similar number of students and teachers. Both offer a wide range of extracurricular classes and activities to enable students to develop their skills and talents. There is a difference between these selected schools regarding student academic achievement. Table 1 shows the detailed data comparison between A-Middle School and B-Middle School.

Table 1. *Data comparison between A-Middle School and B-Middle School during the 2015-2016 school year*

	A-Middle School	B-Middle School
Number of students	450	420
Teachers' average seniority	17	20
Teachers' average seniority at this school	10	13
The percentage of chartered teachers	68	66
Non-teaching staff numbers	13	10

Participants

Researchers invited all teachers working in both schools. In A-Middle School the collected questionnaires were 31 (27 women, 3 men, 1 no data). In B-Middle School the collected questionnaires were 34 (25 women, 6 men, 3 no data). In both schools, all teachers have master degrees.

Measures

Measures were obtained from a self-report questionnaire administered to the participants in the school building.

Measurement of School Culture

The "School Culture Survey" (Gruenert & Valentine, 1998) was used to assess the collaborative nature of each school culture. This questionnaire has been successfully used in many countries to study school culture (Serbia: Brankovic, Rodic & Kostovic, 2012; Etiopia: Butucha 2013; Turkey: Gumuseli & Eryilmaz, 2011). The School Culture Survey is an instrument designed to be administered to teachers in a school building to get a sense of how collaborative the educators are within the school. The School Culture Survey consists of 35 items describing distinctive behaviors of adults in the school. Each item in this questionnaire is rated using a 5-point Likert scale from *strongly disagree* (1) to *strongly agree* (5). Although the concept of school culture may embrace a number of factors, Gruenert and Valentine (1998)

have identified six dimensions of school culture: (1) unity of purpose (5 items, $\alpha = 0.92$), (2) collaborative leadership (11 items, $\alpha = 0.93$), (3) professional development (5 items, $\alpha = 0.82$), (4) teacher collaboration (6 items, $\alpha = 0.73$), (5) collegial support (4 items, $\alpha = 0.80$) and (6) learning partnership (4 items, $\alpha = 0.66$). Higher ratings on the factors of the School Culture Survey demonstrate stronger agreement with the survey statements. Gruenert and Whitaker (2015, s. 86) emphasize that it is important to think of the responses as those of the culture – a community voice – rather than of any one individual.

Measurement of Principal Behaviors

To determine the teachers’ perceptions of principal’s behaviors, “The Organizational Climate Description Questionnaire - Middle Level” (OCDQ-ML, Hoy et al., 1996) was used. This questionnaire consisted of 50 items. The teachers’ task was to comment against statements using a four-level scale, ranging from 1 – rarely occurs, 2 – sometimes occurs, 3 – often occurs and 4 – very frequently occurs. The questionnaire contained six dimensions. In this study three dimensions related to principal behaviors were taken into account: (1) “supportive principal behavior” is directed toward both the social needs and task achievement of faculty (11 items, $\alpha = 0.94$); (2) “directive principal behavior” is rigid domineering behavior (6 items, $\alpha = 0.76$); and (3) “restrictive principal behavior” is behavior that hinders rather than facilitates teacher work (4 items, $\alpha = 0.71$). Higher ratings demonstrate stronger agreement with statements belonging to the particular dimension.

Data analysis

The IBM SPSS Statistics version 24 was used for data management. Interpretation of the results was based on the statistical analysis of the data. Analysis first considered descriptive statistics of main variables: (1) school culture and (2) principal behaviors and next, comparisons of mean values using Student’s *t*-test were made. Additional analysis - analysis of the relationships between main variables - was based on the correlation analysis.

Results

Comparison of School Culture Indicators

First, school culture factors were calculated to identify the structure of each school’s culture. The results of the comparison of school culture indicators between the two schools are presented in table 2.

Table 2. Means, standard deviations, *t*- value and significance level for A-Middle School and B-Middle School on school culture.

	A-Middle School		B-Middle School		<i>T</i>	df	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Collaborative leadership	3.36	0.60	4.30	0.54	-6.461	59	0.000
Teacher collaboration	3.53	0.64	3.90	0.51	-2.486	60	0.016
Unity of purpose	3.83	0.61	4.00	0.84	-.894	61	0.375
Professional development	3.87	0.65	4.28	0.54	-2.785	62	0.007
Collegial support	3.35	0.74	3.73	0.77	-1.978	61	0.052
Learning partnership	3.71	0.39	3.70	0.61	0.085	55,075	0.930

**p* < 0.05 (two-tailed)

** *p* < 0.01 (two-tailed)

The data in table 2 indicate that A-Middle School had the highest mean scores for professional development ($M = 3.87$), followed in descending order, by unity of purpose (3.83) and learning partnership (3.71). Collegial support and collaborative leadership were rated lowest.

According to the B-Middle School, the higher mean scores were for collaborative leadership ($M = 4.30$), professional development (4.28) and unity of purpose (4.00). Learning partnership were rated lowest.

Significant differences in school culture indicators between compared schools were identified in four dimensions: (1) collaborative leadership ($p < 0.001$), (2) professional development ($p < 0.01$), (3) teacher collaboration ($p < 0.05$) and (4) collegial support (bordered on a statistically significant value). In all cases, higher averages are typical for B-Middle School, which may mean that the collaborative nature of their school culture is stronger than School A.

Comparison of Principal Behaviors

The teachers' perceptions of principal's behaviors were calculated in the next step of analysis. Findings are presented in Table 3.

Table 3. Means, standard deviations, *t*-value and significance level for A-Middle School and B-Middle School on principal behaviors.

	A-Middle School		B-Middle School		<i>T</i>	df	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Supportive principal behaviors	3.19	0.86	4.40	0.50	-6.856	59	0.000
Directive principal behaviors	3.52	0.70	3.65	0.63	-.819	62	0.416
Restrictive principal behaviors	3.95	0.85	3.06	0.87	4.092	60	0.000

* $p < 0.05$ (two-tailed)

** $p < 0.01$ (two-tailed)

In A-Middle School, restrictive principal behaviors were rated the highest ($M = 3.95$) by the teachers, and supportive behaviors were rated the lowest (3.19). Quite the opposite situation than found in B-Middle School: supportive principal behaviors were rated the highest (4.40) and restrictive principal behaviors were rated the lowest (3.06).

As seen in Table 3, significant differences between the compared schools were identified according to these two dimensions. More supportive principal behaviors were typical for school B (difference is significant at the $p < 0.001$ level), while restrictive principal behaviors were more common in school A (difference is significant at the $p < 0.001$ level). Directive principal behaviors are at similar levels in both schools.

Relationships Between Principal Behaviors and School Culture

The last step of analysis was to examine the relationships between principal behaviors and school culture indicators. It was decided to conduct this analysis without division into two schools because of searching for general regularities. The results of correlation analysis are presented in the table below.

Table 4. Correlation coefficients between principal behaviors and school culture indicators.

School culture factor	Supportive principal	Directive principal	Restrictive principal
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	behaviors	behaviors	behaviors
Collaborative leadership	.84**	.22	-.59**
Teacher collaboration	.36**	.30*	-.26
Unity of purpose	.24	.12	-.28*
Professional development	.59**	.29*	-.44**
Collegial support	.28*	-.02	-.24
Learning partnership	.18	.15	-.27

*p < 0.05 (two-tailed)

** p < 0.01 (two-tailed)

The data in Table 4 indicate that the lowest correlation coefficients were documented between directive principal behaviors and four school culture factors. Only two of these relationships were statistically significant (with teacher collaboration, $r = 0.30$; $p < 0.05$ and professional development $r = 0.29$; $p < 0.05$). Positive correlations occurred between supportive principal behaviors and all six school culture factors. The strongest correlations were documented between supportive principal behaviors and collaborative leadership ($r = 0.84$; $p < 0.01$) and professional development ($r = 0.59$; $p < 0.01$). Negative correlations exist between restrictive principal behaviors and collaborative school culture indicators. In particular, with collaborative leadership ($r = -0.59$; $p < 0.01$) and professional development ($r = -0.44$; $p < 0.01$).

Discussion

Three major themes were constructed in this study. The first theme is the discussion of the different culture in the two schools. Statistical comparisons of collaborative school culture in perception of teachers indicated that the compared schools differ significantly in four school culture dimensions. The results show that A-Middle School presented an emphasis on professional development and high goal orientation which is expressed in the factor *unity of purpose*, and moderate-high *learning partnership* and a relatively lower participation of teachers in decision making, leadership and supporting relationships among teachers. In B-Middle School the same two dimensions were highly rated, namely *professional development* and *unity of purpose*, but issues concerning mutual cooperation and positive interpersonal relationships proved to be equally important. Interestingly is that in all school culture indicators higher averages were typical for B-Middle School, which may mean that the notion of a collaborative school culture is stronger in this school. On the basis of these results it can be stated that in school A there is a culture focused on individual achievements, which feels like a value placed on competition more than cooperation, unlike the situation in B-middle school, in which a collaborative school culture is strong and visible. The values that undergird the school culture is different in these educational institutions.

The second theme investigated was principal behaviors. According to this theme, significant differences between the compared schools were also identified. Namely, more supportive principal behaviors were typical for School B (low-performing), while restrictive principal behaviors were more common in School A (high-performing). Principal behaviors which reflect a basic concern for teachers and expressed in i.e., listening and being open to teacher suggestions, genuinely and frequently given praise, are more common in School B. On the basis of these results it can be stated that the school management style by these principals is completely different in these schools. Directive principal behaviors are at similar levels in both schools. Maybe this kind of behavior - maintaining close and constant control over all teacher and school activities – is simply inscribed in the functioning of all principals, hence no difference between any schools may significantly exist when looking at this trait. Regardless of

this, it should be noted that the two schools differ due to the way the principals behave, and it may be significant for the whole functioning of the school. It can be said that the style of management of one school is in opposition of the management in the second one. Perhaps this is a key of success, which is identified with the achievements of students in the ranking. However, it is interesting that despite restrictive principal behaviors, A-Middle has a greater achievement than the B-Middle school.

Regarding the third theme, the results indicate that principal behaviors and collaborative school culture were associated with each other. Restrictive principal behaviors, in contrast with supportive behaviors, maintain a negative relationship with the various dimensions of a collaborative school culture and thus hinder its evolution toward a more collaborative environment. Particularly, these two categories of principal behaviors were important especially when considering collaborative leadership and professional development. Principal behaviors in these areas either help or hinder. Furthermore, supportive principal behaviors were positively correlated with collegial support, which may mean that the principal behaviors constitute a model for the behaviors of others employees, and perhaps students too. Directive principal behaviors are rather neutral to the collaborative nature of the school culture.

Results of the current study provide an interesting backdrop for reflection on issues of the relationship between school principals behaviors, school culture and school achievement. The dimensions of school culture are dependent on the style of school management by principal, as well as on the specific conditions in which the school operates (see Brankovic, Rodic & Kostovic, 2012). These results lend support for the findings of the previously cited authors who have studied the relationship between leadership and school culture. Correct and creative development of the school's culture depends on principals' activities based on cooperation and dialogue with employees, students, and their parents.

Conclusion

This study investigated two schools that were similar in many aspects, i.e., demographics of students and educators, structures related to government support, as well as region in the country. Yet, the two schools demonstrated polarized student achievement results, as dictated by standardized test scores. While the notion of using test scores to determine the quality of education extant in a school is constantly being debated, we wanted to take a closer look into the social architecture of each setting, namely the school's culture. Relevant to a collaborative school culture, do the best performing schools use collaboration as a foundation to realize success? Our findings suggest no.

It seems possible to achieve success in schools (using test scores as the criterion) without having to be very friendly. Competition may provide the best setting if test scores are the only criterion to be assessed. This study looked at correlations, not causality. However, if a school is having success with student achievement (test scores) should we ask about the degree of cooperation, trust, and relationships, or just be quiet and enjoy this brand of success? Should educators ever decide that test scores are not the greatest source of determining school quality we may be surprised as to how many principals are unable to secure strong relationships as opposed to being a dictator. Therefore, we agree with Gumuseli and Eryilmaz (2011) conclusion that the prominent role of the principal is to stimulate professional learning communities and create working teams to improve the quality of the schools.

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