

PRINCIPALS AND TEAMWORK AMONG TEACHERS: AN EXPLORATORY STUDY

DIRETORES DE ESCOLA E O TRABALHO EM EQUIPE ENTRE PROFESSORES: UM ESTUDO EXPLORATÓRIO

PRINCIPALES Y EL TRABAJO EN EQUIPO ENTRE MAESTROS: UN ESTUDIO EXPLORATORIO

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ABSTRACT

This study explored the role public school principals play in implementing teamwork among K-12 teachers. A sample of 636 U.S. principals completed an online survey rating the importance of teamwork, identifying the barriers teachers face when working in teams, and listing the initiatives they have taken to promote teamwork among teachers. The findings suggest that principals consider teamwork to be very important. They also showed that time constraints, relationship concerns, and differences in teaching and experience are the leading barriers to teamwork. The findings also indicated that principals take initiatives—such as modifying schedules, team-building activities, and professional development—to foster teamwork among teachers.

KEY WORDS: PRINCIPALS; SCHOOL LEADERSHIP; TEAMWORK; TEACHERS' TEAMWORK.

RESUMO

Este estudo explorou o papel que os diretores das escolas públicas desempenham na implementação do trabalho em equipe entre professores do ensino fundamental e médio. Uma amostra de 636 diretores dos EUA completaram uma pesquisa *on-line*

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sobre a importância do trabalho em equipe, identificando as barreiras enfrentadas pelos professores ao trabalharem em equipes e listando as iniciativas tomadas para promover o trabalho em equipe entre os professores. As descobertas sugerem que os diretores consideram o trabalho em equipe muito importante. Também mostraram que restrições de tempo, preocupações com relacionamento e diferenças no ensino e experiência são os principais obstáculos ao trabalho em equipe. Os resultados também indicaram que os diretores tomam iniciativas tais como a modificação de horários, atividades de formação de equipes e desenvolvimento profissional para promover o trabalho em equipe entre os professores.

PALAVRAS-CHAVE: DIRETORES; LIDERANÇA ESCOLAR; TRABALHO EM EQUIPE; TRABALHO EM EQUIPE DOS PROFESSORES.

RESUMEN

Este estudio exploró el papel que desempeñan los directores de las escuelas públicas en la implementación del trabajo en equipo entre los maestros de K-12. Una muestra de 636 directores de EE. UU. completó una encuesta en línea en la que se evaluó la importancia del trabajo en equipo, identificando las barreras a las que se enfrentan los maestros cuando trabajan en equipos y enumerando las iniciativas que han tomado para promover el trabajo entre los maestros. Los hallazgos sugieren que los directores consideran que el trabajo en equipo es muy importante. También mostraron que las limitaciones de tiempo, las preocupaciones de relación y las diferencias en la enseñanza y la experiencia son las principales barreras para el trabajo. Los hallazgos también indicaron que los directores toman iniciativas, como la modificación de los horarios, las actividades de creación de equipos y el desarrollo profesional, para fomentar el trabajo en equipo entre los maestros.

PALABRAS CLAVE: PRINCIPALES; LIDERAZGO ESCOLAR; TRABAJO EN EQUIPO; TRABAJO EN EQUIPO DE PROFESORES.

INTRODUCTION

Teamwork can be defined as the ability to work with others through cooperation and communication to accomplish a common goal (Baker, Salas, King, Battles & Barach, 2005; Ballangrund *et al.*, 2017). For teamwork to be effective, members must understand the team's purpose, work toward that purpose, and be both independent of and dependent on other members to accomplish the task (Baker *et al.*, 2005). Strom, Strom, and More (1999) also call attention to the critical role of communication for teamwork success.

Teamwork can lead to a decrease in workplace errors, higher rates of satisfaction among employees and clients, and provide opportunities for continuous improvement

among professionals (Ballangrund, 2017; Hwang & Ahn, 2015). Teamwork also brings benefits to schools. Different forms of teacher teamwork are associated with greater impact on students, readiness to teach, teacher commitment, teacher entrepreneurial behavior, and higher student achievement in math and reading (Ronfeldt, Farmer, McQueen & Grissom, 2015; Shapira-Lischshinky & Aziel, 2010; Tschida, Smith & Fogarty, 2015; van Dam, Schipper & Runhaar, 2010).

The benefits of teamwork are being increasingly documented. Authors such as O'Neill and Salas (2018) advocate for more empirical studies on teamwork in general, while Amorim Neto, Burse, Janowiak, Mccarty, and Demeter (2018) call for an exploration of teachers' teamwork from the perspective of school leaders. Their call is relevant because school leaders—namely principals—are tasked with the development of a culture of teamwork among teachers (Ketterlin-Geller, Baumer & Lichon, 2014). In Benoliel and Schechter's (2018, p.234) words, principals must "pull teachers away from the comfort of their closed classroom doors and instructional routines and allow them to take the risks of learning and doubting with colleagues" to ensure school success. Accordingly, our exploratory study is an answer to their call. Our study examines teamwork among teachers from the principals' perspective—identifies the importance they give to teamwork, barriers teachers face when working in teams, and initiatives taken by principals to further teamwork.

THEORETICAL BACKGROUND: TEAMWORK IN EDUCATION

Teamwork is viewed as fundamental to successful organizations, and more specifically to good teaching (Cherkowski & Schnellert, 2018; Leonard & Leonard, 2003, 2005). According to Leonard and Leonard (2003), professional teaching standards have been revised to include language advocating for teachers' learning communities and collaboration. Teamwork not only deters teachers from working in isolation, it also improves pedagogical practices and advances student acumen and achievement (Achinstein, 2002; Datnow, 2011; Vangrieken, Dochy, Raes & Kyndt, 2015).

In a review of the literature, Vangrieken et al. (2015) provide a comprehensive overview of teacher collaboration. The team found that schools must offer a climate of trust, honesty, and respect to foster effective teamwork. An environment of open communication and a shared sense of purpose and values also contribute to successful teamwork (Kutsyuruba, 2011; Vangrieken *et al.*, 2015). Furthermore, effective teams are flexible and regard the expertise of individual contributors. The work is not imposed from the top down, but emerges from the effort of the entire group instead (Duyar, Gumus & Bellibas, 2013; Vangrieken *et al.*, 2015).

Teamwork has the potential to motivate teachers, reduce workload, and increase self-efficacy (Vangrieken *et al.*, 2015). According to Avanzi, Fraccaroli, Castrelli, Marcionetti, Crescentini, Balducci, and van Dick (2017), social support is a meaningful tool for navigating work overload. Supportive mentors, colleagues, or team members share positive experiences and work together to complete tasks, thus alleviating workload stress (Avanzi *et al.*, 2017). Furthermore, research by Moolenaar, Slegers, and Daly (2011) found a relationship between the collective efficacy beliefs of Dutch teacher teams and student success in language. When teamwork fosters feelings of efficacy in teachers, it supports student achievement (Chantathai, Tesaputa & Somprach, 2015; Moolenaar *et al.*, 2011; Skaalvik & Skaalvik, 2017; Vangrieken *et al.*, 2015).

Leonard and Leonard (2003) point out that teacher collaboration is unlikely to develop in a toxic school culture. A hostile environment and other stressors in the teaching profession—such as low salaries, lack of support from the administration, and poor communication of expectations—have led to worldwide rising attrition rates (Buchanan, Prescott, Schuck, Aubusson & Burke, 2013; Kutsyruba, 2011; Skaalvik & Skaalvik, 2017). Research in Norway suggests that teamwork has the potential to subvert this trend (Skaalvik & Skaalvik, 2017). The Norwegian team analyzed the results of a questionnaire completed by over 500 teachers at ten randomly chosen high schools. They concluded that social support may not necessarily alleviate stress. But feelings of self-efficacy, job satisfaction, and enthusiasm can indeed be derived through teacher teamwork, mentoring, and learning communities (Skaalvik & Skaalvik, 2017). Skaalvik and Skaalvik (2017) also found that a supportive and collaborative atmosphere at work could be associated with lower attrition rates. However, a recent study with U.S. teachers found no correlation between teamwork and motivation to leave teaching (Amorim Neto *et al.*, 2018).

The processes of building effective teamwork and improving as a group can be quite complex, often involving what Achinstein (2002) refers to as micropolitics. Micropolitics is the use of power struggles within an organization as individuals or groups set out to attain specific ambitions or objectives (Achinstein, 2002). Coups, quibbles, and contention can create conflict. But a failure to think pragmatically about the delineation of tasks and the complicated nature of relationships—as well as a miscommunication of goals—can lead to lack of trust and breakdown in the process (Bennett & Gadlin, 2012; Datnow, 2011; Frederick, 2008; Zaccaro, Rittman & Marks, 2001).

While many teachers are uncomfortable with conflict, it may actually have the potential to be viewed as a source of renewal (Achinstein, 2002; Hargreaves, 1995). Research challenges the commonly held notion that community is built in harmony

and consensus, asserting that conflict can be an instrument of inquiry, growth, and innovation (Achinstejn, 2002). While it is true that strong communities typically have common values or goals, Achinstejn (2002) points out that teamwork, derived in a climate in which cohesion itself is the value, can stifle diverse ideas and minimize the benefits of reflection. Achinstejn (2002) explains that conflict can be the catalyst for transformation, allowing teachers to challenge the status quo and take greater risks to reform education.

Asked what they needed to build effective teamwork, teachers offered diverse opinions. These included additional training through appropriate professional development, time and money for planning, more administrative support, and clear expectations (Kutsyuruba, 2011; Leonard & Leonard, 2003; Matsuo, 2016). Teachers consistently report frustration with inadequate resources and support, especially when they perceive the work environment as unsupportive, discouraging, or even hostile (Kutsyuruba, 2011; Leonard & Leonard, 2003; Matsuo, 2016).

These issues bring the role of principals in fostering teamwork to light. Mickan and Rodger (2000) indicate clearly that effective teamwork stems—at least in part—from supportive leadership. On the other hand, leadership actions presented by principals can be a barrier to teamwork (Karakus & Tomeren, 2005). Because the support of principals to teamwork does not happen automatically, their role in implementing teamwork and a culture of collaboration in schools requires further exploration.

PRINCIPALS FOSTERING TEAMWORK

Facilitating a culture of teamwork among teachers is one of the many tasks of principals (Ketterlin-Geller *et al.*, 2014). In Turkey, Duyar *et al.* (2013) found that principal leadership and teacher teamwork rank high among variables that affect job satisfaction and self-efficacy. Schools in Turkey are adapting to support teamwork among teachers. As a result, the role of principals is shifting from hierarchical, top-down management to transformational leadership (Duyar *et al.*, 2013).

Effective leadership emphasizes teamwork and collaboration rather than a singular manager. Principals are responsible for the transformational shift that occurs when schools commit to a culture of teamwork (van der Mescht & Tyala, 2008). Since schools tend to be highly structured organizations, principals must modify their structure to strengthen the culture of collaboration (Szczesniul & Huizenga, 2014). According to van der Mescht and Tyala (2008), successful principals support teamwork by establishing a cohesive climate in which team members from distinctive backgrounds with various areas of expertise collaborate to reach a shared goal. When principals facilitate successful teams by focusing on a wide variety of skills, teachers become

part of teams with a comprehensive range of ideas, expertise, and experiences that can be shared and reflected upon (Ketterlin-Geller *et al.*, 2014; Mullen & Hutingger, 2008; van der Mescht & Tyala, 2008).

Principals who are intentional about facilitating teamwork establish a precise mission and provide opportunities for teams to develop a shared vision (Drago-Severson & Pinto, 2006). By making the purpose and vision of teamwork well-defined, they provide teachers with a sense of unity and alleviate isolation. The organizational school structure gives way to an empowered culture of collaboration (Szczesiuł & Huizenga, 2014). What emerges from this new mindset is a cohesive community of learners driven by diversity, participation, and shared responsibilities (Mullen & Hutingger, 2008; van der Mescht & Tyala, 2008). As teamwork flourishes, the culture of schools becomes less rigid and an environment of risk-taking, creativity, and openness is unfurled (van der Mescht & Tyala, 2008).

Early work in Australia by Walker (1994) suggests that teachers entrusted with decision-making and shared responsibilities become more willing to participate, take creative risks, and contribute to the overall effectiveness of the school. Further studies in Dutch elementary schools found that teachers empowered in this way foster strong student achievement (Moolenaar, Slegers & Daly, 2011). Likewise, a study of secondary schools in Kenya found that school leaders can inspire ownership and achievement when teachers are included in decision-making and planning (Zaveria & Thuringi, 2017). This study also indicated that teachers more successfully implement school programs and may also improve student performance when principals design effective teams.

As decision-making and shared responsibilities are filtered through teams, principals become wellsprings of resources and support (Walker, 1994). They can support teacher teams by building mutual planning time into team schedules, giving feedback to teams as they work toward team goals, and advocating for a shared vision (Mullen & Hutingger, 2008). In addition, principals can model meaningful professional learning by leading teams in study groups (DuFour, 2006). They can also act as a buffer for teams against external factors—such as bureaucracy and policy—and allow teachers to stay focused on the team’s creative work (van der Mescht & Tyala, 2008).

In a study in South Africa, van der Mescht and Tyala (2008) explored the perceptions of principals regarding team management. They found that teachers consider time, trust, and diversity as necessary components of good teams. For collaboration in schools to flourish, leaders must foster a climate of trust (Duyar *et al.*, 2013). Principals who cultivate teamwork will establish a culture of trust and openness, in which teachers feel a sense of shared values and purpose, feel safe to express their feelings, enjoy acknowledgement for their accomplishments, and know they are

buffered against negative external forces (Duyar *et al.*, 2013; van der Mescht & Tyala, 2008; Walker, 1994).

Van der Mescht and Tyala (2008) also support a transformation from the hierarchical management approach to distributed leadership—an approach in which members of the team evolve and contribute to the team in varying ways. Szczesiul and Huizenga (2014) point out that the hierarchical use of mandated, formal controls has been proven ineffectual in complex school settings. In fact, a climate of authoritarian oversight, rather than organically derived collaborative processing, may put teamwork at risk (Mullen & Hutinger, 2008; Szczesiul & Huizenga, 2014; van der Mescht & Tyala, 2008; Walker, 1994). When the Turkish Ministry of National Education implemented a training program on collaboration without teachers' input, they were less willing to embrace it (Duyar *et al.*, 2013). The authors of the Turkish study emphatically call on the centralized systems integral to the country to rethink education.

Nonetheless, barriers like the ones in Turkey exist elsewhere. In Australia, Walker (1994) expressed concerns about overburdened teachers. He noted that pushing teachers to take on extra duties without extra pay could undermine teamwork. A similar U.S. study stated that teachers develop resentment toward the process when they participate in teamwork without feeling like they have influence (Tschannen-Moran, 2001). This is a term known as contrived collaboration. Tschannen-Moran (2001) also referred to principals' lack of trust. They feared that teachers were not trained to lead or that they might not perform competent work in shared leadership positions.

Another barrier noted by several studies was the scarcity of time (Amorim Neto *et al.*, 2018; Ketterlin-Geller *et al.*, 2014; Mullen & Hutinger, 2008). In some cases, principals are concerned about the challenge of finding common time for all team members to meet (Szczesiul & Huizenga, 2014; Zaveria & Thinguri, 2017). Other studies note the challenge of team members who misuse time or fail to use it productively (Ketterlin-Geller *et al.*, 2014; Szczesiul & Huizenga, 2014). In this sense, van der Mescht and Tyala (2008) alert us to teachers who undermine the process of collaboration—what the authors call sabotage. Such teachers may not contribute as much to the process, or they may act as disruptive elements.

Research has found that lack of clear communication is a sizable barrier when principals set out to build teacher teams (Szczesiul & Huizenga, 2014; Tschannen-Moran, 2001; Walker, 1994). Szczesiul and Huizenga (2014) argued that lack of communication includes the principal's inability to convey the vision or provide feedback. They noted that this can leave teachers feeling uncertain. They also found that teams end up longing for clearly stated goals to give them a sense of purpose. These findings resonate with the study Amorim Neto *et al.* (2018) conducted with 322 U.S. public school teachers. Their study found that providing a clear vision and

goals is the number-one action teachers expect principals to take to foster teamwork. Furthermore, teachers do not want a vision and goals imposed on them. They expect principals to engage them in developing the school's vision and goals, while leading by example (Amorim Neto *et al.*, 2018). Additionally, teachers would like to see principals foster teamwork in ways that include trusting teachers and listening to their feedback, running team-building activities, providing time for collaborative work, and offering professional development focused on teamwork (Amorim Neto *et al.*, 2018).

Fostering teamwork involves much more than simply addressing specific barriers. Principals need to engage in a deeper transformation of the school culture. For example, Szczesiul and Huizenga (2014) reveal that team members end up feeling like the process does not really matter when principals fail to offer appropriate oversight or make decisions without consulting them. Furthermore, principals must be aware of tensions that may arise when the culture transforms from power to creative collaboration (van der Mescht & Tyala, 2008). As they face external administrative pressure, principals must find a balance between compliance and collaboration to emerge as the buffer between policy and practice (van der Mescht & Tyala, 2008).

Shifting the culture of education is a daunting task, requiring more than managerial skills (van der Mescht & Tyala, 2008). It requires a shared vision, the courage to take risks, and a clearly defined set of values (Drago-Severson & Pinto, 2006; van der Mescht & Tyala, 2008). Furthermore, it requires educational leaders to reinvent schools with wisdom and teamwork (Tschannen-Moran, 2001).

CONTRIBUTIONS TO THE FIELD

This exploratory study addresses the following research questions:

- (i) To what extent do principals find teamwork as important?
- (ii) What are the most common barriers they face?
- (iii) How do principals foster teamwork among teachers?

By tackling these questions, this study attempts to fill a gap in the literature surrounding teamwork in the educational field by assessing the importance that principals place on it, identifying from the principals' perspective the most common barriers that teachers face when engaging teamwork, and compiling a list of the most common initiatives principals take to foster teamwork. This study is relevant because the research on teamwork in the teaching profession is still very limited. Much of the work focuses on the positive outcomes of teamwork in teaching and the barriers teachers experience when working with a team (e.g., Achinstein, 2002; Amorim Neto *et al.*, 2018; Hallam, Smith, Hite, Hite & Wilcox, 2015; Kutsyuruba, 2011; Vangrieken

et al., 2015). Given the importance of leaders in shaping the culture of organizations (Groysberg, Lee, Price & Cheng, 2018; Warrick, 2017), more specifically the role of principals in providing teachers with support systems and impacting teachers' schedules and workload (Hallam et al., 2015; Hallam, Boren, Hite, Hite & Mugimu, 2013; Thomas, 2014; Yirci, Özdemir, Kartal & Kocabas, 2014), it is important to explore how they value teamwork and foster teamwork among teachers—thereby offering more evidence to the literature in this area.

METHODS: PROCEDURES AND PARTICIPANTS

U.S. K-12 public school principals received an online message. It informed them of the goal of the study and of their right to decline participating or discontinue their participation at any time. They were also ensured that their identity would remain anonymous. After completing the survey, they could enter a drawing for one of two \$30 gift cards. A total of 636 principals completed the survey.

The mean age of responders was 49.3 ($SD = 8.2$) and mean years experience as principal was 8.6 ($SD = 6.6$). Females comprised 57.39% of participants. This gender distribution is similar to the overall U.S. public school principal population. According to the U.S. Department of Education, National Center for Education Statistics (2017) in 2015-16, 54.2% of principals identify as female. Most participants had a Master's degree ($n = 543$, 85.37%). More than half were principals at elementary schools ($n = 349$, 54.87%), consistent with national statistics.

MEASURES: DEMOGRAPHICS

Participants were asked to provide information regarding age, gender, experience as principal, school type, and highest degree achieved.

IMPORTANCE OF TEAMWORK

Principals were asked to rate the overall importance of teamwork on a five-point Likert scale, ranging from 1 (not at all important) to 5 (very important). Then they were asked to justify their response to this item.

OPEN-ENDED QUESTIONS

Principals were asked to identify up to three barriers they perceive teachers may face when working in a team. We also asked them to identify up to three initiatives they have taken to foster teamwork.

ANALYSES

We performed descriptive statistical analyses to determine the age, gender, years of experience, school type, and highest degree. We also analyzed the importance of teamwork with descriptive statistics.

We performed an analysis of frequency to identify the barriers principals perceive teachers having to teamwork and the initiatives they have taken to promote teamwork. Finally, we performed an analysis of frequency to determine why principals felt teamwork was important.

RESULTS: THE IMPORTANCE OF TEACHERS' TEAMWORK

To assess the extent to which principals find teachers' teamwork important, participants rated it in a Likert scale ranging from 1 (not at all important) to 5 (very important). Almost all rated it as highly important ($M = 4.803$, $SD = 0.425$). Only 7 (1.1%) principals attributed low importance to teachers' teamwork.

As a follow-up question, we asked principals to briefly justify their response regarding the importance of teamwork. Their reasons focused on three elements: school culture and success, student achievement, and teachers' pedagogical practices and personal growth. While these elements are usually intertwined in the daily school routine, we present them separately below to better illustrate the participants' reasoning.

i) School culture and success ($n = 185$, 35.99%). Teachers' teamwork is important to principals because it benefits the entire school by facilitating community building, school success, and the creation and achievement of common goals throughout the building. According to principals, teamwork helps create a positive school culture, an environment of open communication, and a climate of trust, honesty, and respect. Additionally, teamwork supports all individuals in the building—teachers, staff members, and students. “We have to work together to best serve kids AND ourselves. It allows us to build a learning community to support the growth of everyone in our building,” said one principal.

ii) Student achievement ($n = 128$, 24.90%). Principals believe that teamwork among teachers positively impacts student achievement and creates a model which

students observe and engage in good teamwork. Teamwork can create an environment in which students are successful and achieve more, both socially and academically. “Collaboration is extremely important in achieving schoolwide goals and vision. These goals are student-centered and ultimately contribute to student achievement,” said a principal.

iii) Teachers’ practices and growth ($n = 201, 39.11\%$). Principals stated that teamwork impacts teaching practices and influences teacher personal growth. Many principals reported that teamwork helps teachers by giving them role models, other teachers to talk to about best practices, and the opportunity to examine different perspectives and opinions. “When teachers work as a team they learn and grow together as they see things from others’ points of view. An effective team taps the expertise of each person, honors the opinions of all and compels each member to be curious, inquisitive and resourceful professional learners and problem solvers,” said one principal.

BARRIERS TO TEAMWORK AMONG TEACHERS

Participants were asked to list up to three barriers that teachers face regarding teamwork. The list presented in Table 1 indicates that time constraints, relationship issues, and teaching concerns were the main barriers teachers face when engaging in teamwork.

Table 1: Barriers to teachers’ teamwork according to principals

Barriers	<i>n</i> (%)
Time constraints	408 (26.19%)
Relationship issues (lack of trust, conflict, communication issues)	252 (16.17%)
Teaching concerns (lack of resources, differences in teaching style, experience, and knowledge)	252 (16.17%)
Personality differences (attitude, ego, personal values)	218 (13.99%)
Other barriers (isolation, leadership issues, lack of buy-in)	174 (11.17%)
Unclear roles and goals	131 (8.41%)
Unwillingness to participate in teams or to change	65 (4.17%)
Insecurities	58 (3.72%)
Total:	1558 (100%)

PRINCIPALS’ INITIATIVES TO FOSTER TEAMWORK

Participants were asked to identify up to three initiatives they have taken to encourage teamwork among teachers. The list indicates that the most frequent initiatives taken was modifying schedules, followed by team-building activities and professional development. Table 2 contains the complete list of initiatives.

Table 2: Initiatives taken to promote teamwork

Initiatives	<i>n</i> (%)
Modifying schedules (common planning time, adding time to meet)	324 (21.04%)
Team-building activities (relationship building, awards, celebrations)	205 (13.31%)
Professional development/training (book studies, mentoring, classroom observations)	219 (14.22%)
Professional Learning Communities (PLC)	165 (10.71%)
Regular meetings (grade-level meetings, team meetings)	164 (10.65%)
Other initiatives (district/state driven, less responsibilities for staff, creating common goals/expectations)	463 (30.06%)
Total:	1540 (100%)

DISCUSSION

This exploratory study had three main objectives: (i) assessing the importance of teachers’ teamwork according to principals; (ii) identifying the barriers teachers face when working in teams; and (iii) listing the initiatives that principals take to promote teamwork. The following sections address the findings for each of these goals and their implications for the field. These are followed by the limitations in our study that we identified and recommendations for future studies.

THE IMPORTANCE OF TEACHERS’ TEAMWORK

The high importance of teachers’ teamwork reported by participants is encouraging. The literature has long indicated the positive benefits of teamwork (e.g., Datnow, 2011; Ronfeldt, Farmer, McQueen & Grissom, 2015; Shapira-Lischshinky & Aziel, 2010; Tschida, Smith & Fogarty, 2015; van Dam, Schipper & Runhaar, 2010; Vangrieken et al., 2015), which we highlighted in previous sections of this paper. Similarly, the reasons provided by principals for such evaluation—which included school culture and success, student achievement, and teachers’ pedagogical practices

and personal growth—are also aligned with the previously cited literature. The results suggest that principals in our sample seem to be aware of teamwork as a strategy to school success in a very dynamic society.

The fact that principals already have a high regard for teamwork suggests that school districts can continue to reinforce this message and provide tools for principals to identify obstacles to teamwork and address them. As Karakus and Toremén (2008) suggest, teamwork effectiveness has not only to do with teachers' relationships and individual differences, but also with structural issues and how leadership is exercised. School districts and principals need to see themselves as part of the equation. They impact teachers' teamwork and it impacts them in return. Once schools have redesigned themselves to embrace a culture of collaboration—which includes the ability to doubt deeply held assumptions regarding education, leadership, and the very role of schools—there is no way to go back to a hierarchical management approach, as discussed by van der Mescht and Tyala (2008). In this sense, the very nature of principalship changes. Principals are no longer managers or enforcers, instead they become leaders who facilitate the development of a shared vision, foster a sense of unity, and empower a culture of collaboration (Amorim Neto *et al.*, 2018; Drago-Severson & Pinto, 2006; Szczesiul & Huizenga, 2014).

In light of this study's findings, current and prospective principals could be further educated on team development strategies and theories, how a culture of collaboration actuates the exercise of their profession, and the nature of the expectations that school districts place on them. In this way, they can support teachers in designing successful teamwork initiatives and redesigning school systems and practices that previously led to isolation and competition.

BARRIERS TO TEAMWORK AMONG TEACHERS

The barriers to teamwork identified by principals include time constraints, relationship concerns (e.g., lack of trust, conflicts, communication issues), teaching and personality differences, willingness to participate, and more. These deterrents to teamwork are aligned with the literature. For instance, Vangrieken *et al.* (2015) discusses how conflicts, unclear goals, poor communication, and little time can negatively impact teamwork. Outside of the school context, Poghosyan, Norful, and Martsolf (2017) highlight the role of time constraints and lack of participation on teamwork. Similarly, Levitt (2016) indicates that personal differences such as age, educational background, and gender could be barriers to teamwork. Levitt's conclusions are also supported by previous work by Karakus and Toremén (2008).

While those barriers to teamwork are well-known to researchers and practitioners, we were surprised by the ways in which principals downplayed the role of leadership on teamwork. A small number of participants reported leadership issues. The number was so small that we presented it under “Other barriers.” It is possible that they did not see themselves or other principals as a potential barrier. As shown in the results, they put a high importance on teamwork and took action to foster it. However, it is possible that they are not fully aware of the critical role they play in fostering or derailing teamwork in schools. According to Park, Henking, and Egley (2005), leaders need to be intentional when promoting teamwork. In that way, they can demonstrate reliability, trustworthiness, and embodying behaviors that demonstrate the value of teamwork, rather than just talking about it. Deriving from Tschannen-Moran (2001) and van der Mescht and Tyala (2008), it can be argued that teamwork is less likely to take place if principals do not trust that teachers are capable of offering meaningful contributions. This is relevant because previous studies have found that some teachers do not believe principals trust them (Balyer, 2017; Yirci et al., 2014). Teachers respond by not trusting principals in return (Hallam et al., 2015). In such an environment, meaningful collaboration and a sense of community are compromised. This can ultimately lead to teacher attrition (Boyd, Grossman, Ing, Lankford, Loeb & Wyckoff, 2011; Yirci *et al.*, 2014).

These findings are a call to school principals to further develop their awareness of their own power to block and/or support the growth of teamwork through specific actions as well as forging a culture of collaboration. They also remind teachers that a well-prepared and well-intentioned principal can only do so much if they sabotage the collaborative processes introduced by school leadership. Professional development of teachers and principals, as well as the certifying programs, could integrate teamwork both as a content and a process aimed at supporting student success.

HOW PRINCIPALS FOSTER TEAMWORK

The initiatives principals take to promote teamwork among teachers include modifying schedules to increase common time and availability for meetings, conducting team-building activities, providing professional development and training in teamwork, establishing PLCs, and conducting regular meetings by grade levels or discipline areas. These actions seem appropriate to address the barriers discussed in the previous section. In fact, just like time constraints was the main barrier identified by principals, modifying schedules to allow for common time was their number-one initiative. This is meaningful because the issue of time is commonly found in the literature (e.g., Ketterlin-Geller et al., 2014; Mullen & Hutinger, 2008; Zaveria & Thinguri, 2017) as a

deterrent to teamwork. Additionally, most of the initiatives reported are aligned with actions that U.S. public school teachers expect principals to take to foster teamwork, such as providing professional development, time for collaboration, and running team-building activities. (Amorim Neto *et al.*, 2018).

While principals seem to be aware of the concerns shared by researchers and teachers in terms of barriers and actions taken, our findings suggest that principals may be losing sight of an important role of leaders: shaping organizational culture (Groysberg *et al.*, 2018; Warrick, 2017). U.S. public school teachers have said that their main expectation is for principals to provide a clear vision and goals (Amorim Neto *et al.*, 2018). The lack of a clear vision and goals may lead to confusion due to faulty communication (Szczesniul & Huizenga, 2014) and to contrived collaboration (Tschannen-Moran, 2001). It is therefore important to put all initiatives in the context of a culture of collaboration that fosters participation and shared leadership (Mullen & Huting, 2008; van der Mescht & Tyala, 2008; Szczesniul & Huizenga, 2014).

These findings regarding the initiatives that principals take to foster teamwork suggest that while they are mostly in tune with their teachers' expectations, they need to continue working toward a more systemic perspective of their initiatives to develop a deeper understanding of teamwork and forge a culture of collaboration in their schools through a shared vision and goals (Drago-Severson & Pinto, 2006; Hallam *et al.*, 2015). A culture of teamwork and collaboration would lead to a school that Cetin and Keser (2015) describe as a place where adults learn together and continuously with focus on student success. A school culture that fosters teachers' teamwork also requires attention to their needs, expectations, and inclinations (Karakus & Tomeren, 2008). While principals are expected to shape the culture of their schools, they need proper education and the support of school districts to do so. In this regard, the findings of this study are also a call to certification programs and school districts to ensure that principals are well-equipped and able to develop a common vision and goals with the school community. Teachers expect principals to do more than manage schedules, organize professional developments, and run meetings. Teachers want principals to be visionaries who engage them in achieving a common goal and developing a shared vision (Amorim Neto *et al.*, 2018; Drago-Severson & Pinto, 2006).

LIMITATIONS AND FUTURE RESEARCH

Up to now, only limited studies have explored teachers' teamwork from the principals' perspective. This paper is a step toward a systematic investigation of the importance of teamwork for principals, the perceived barriers, and the actions they take to foster it in their schools. While the exploratory nature and the type of analysis

conducted were appropriate to address the research questions with a large sample of principals, the findings of our study were limited. We identified the actions principals take to foster teamwork, but did not explore decision-making processes nor the level of involvement of teachers in the implementation of these actions. Similarly, while we placed the role of principals toward teachers' teamwork in the larger context of school culture and leadership, we did not ask any questions specifically addressing principals' perceived leadership styles and their impact on teamwork. Finally, while inquiring about the actions taken by principals to foster teamwork, we did not ask them about the success of those actions and potential takeaways.

We reinforce the calls by O'Neill and Salas (2018) for more empirical studies on teamwork in organizations and by Amorim Neto *et al.* (2018) for a continuous exploration of teachers' teamwork from the perspective of school leaders. To expand the literature on the topic at hand and address this study's limitations, we recommend in-depth qualitative studies aimed at uncovering the decision-making processes that support the actions principals take to foster teamwork. More specifically, future research could assess the extent to which teachers and other staff are involved in the decision-making and implementation of such actions. Future studies could also explore the success rate of actions taken by principals to foster teamwork as well as what they have learned from their successes and failures in such implementations. Finally, the implementation of teamwork from the perspective of principals could also be explored from the broader discussion of shared leadership, including how principals understand their roles as leaders regarding developing a shared vision and common goals that require teamwork.

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