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Collective Efficacy across Multiple Elementary Schools

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A School Improvement Project Presented in Partial Fulfillment of the Requirements For the Degree of Master of Education

Abstract

This school improvement project explored the effect that shared leadership and collective efficacy have on student achievement. Participants include 47 staff members from six different elementary schools in the Ottumwa Community School District. Participants spent the 2020-2021 school year attending monthly meetings and professional development sessions creating common assessments, rubrics, and curriculum. FAST data was collected to determine if the new committee of staff members influenced student scores in grades 2-5. It was determined that there was no positive or negative impact on student achievement based on the implementation of the Curriculum Council.

Keywords: collective efficacy, shared leadership, elementary schools, student achievement

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Collective Efficacy across Multiple Elementary Schools

The goal for this school improvement project is to find if shared leadership among school staff can lead to a positive effect on student achievement. Shared leadership is having leadership at all levels that make decisions regarding the school or district (Pearce et al., 2018). Shared leadership gives all members a sense of leadership and choice. It allows all members to have a voice to help make key decision that will effect students and staff.

All stakeholders in a district should have the core belief that they can make a difference in the lives of others. This belief means that everyone has something valuable to bring to the table. Shared leadership allows all members of the staff to have a seat at the metaphorical table and make decisions (Pearce et al., 2018). It will change the structure of a school to a holacracy rather than the traditional hierarchy. Shared leadership is used to maximize the talents of those on a staff (Freund, 2017).

The problem is most schools follow a typical hierarchy where the board and superintendent make decisions and those decisions trickle down to principals then down to teachers and staff to finally students. The people furthest away from the students are making decisions about students. In having a district where shared leadership is implemented then all major stakeholders will have a say in what effects students.

The purpose of this school improvement plan is to create a group of teachers, curriculum instructional leaders (CILs), and administrators that work together to improve student learning. The goal is for staff from different buildings across a large district to

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change their mindset from having collective efficacy within the four walls of their schools to having collective efficacy and shared leadership throughout all of the elementary schools. The knowledge gained from this project will help the district make changes to their traditional leadership framework to include all stakeholders.

Review of the Literature

Self-Efficacy

Self-efficacy is described as the belief that someone has control or can effect the outcome on their own life or event that effect their life (Bandura, 2000). The belief in oneself to effect change often leads to a higher motivation and desire to push oneself in their own profession learning (Loughland et al., 2020). The belief that one can affect the learning and behavior of their students in known as teacher self-efficacy (Viel-Ruma et al., 2010).

There are several studies that show the impact a teachers college experience, principals, and previous school experiences play a role in teacher self- efficacy (Versland, 2017; Qadach et al., 2019). Administrators play a key role in teacher self-efficacy by just being a role model for the students and staff in their school (Versland et al., 2017). Teacher self-efficacy can be influenced by a teachers college experience. Nisson's study on self –efficacy both before and after internships in schools shows that teachers' selfefficacy significantly grew using Bandura's framework (Nisson, 2020). Nilsson found that the frame of mind that each individual walked into the classroom with, both positive and negative, played a key role in the amount of growth that was observed. When teachers had a negative view on what was being done in the classroom they would work to find solutions in their own practice. Adversly, when teachers had a positive view on what was being done in the classroom they would use what was being done in their own practice. Self-efficacy also plays a key role in teacher retention (Qadach et al., 2019). When a teacher believes that, they will make an impact on students lives they are more likely to stay in the field of education. This leads to higher job satisfaction (Viel-Ruma et al., 2010). This belief coincides directly with the belief that as a group teachers can make a greater impact (Qadach et al., 2019). If one does not believe that they can effect change on their own they will not believe that as a group they can all effect change. Ninkovic and Floric study the link between teacher self-effiacy as a predictor for teacher collective efficacy (2018). They confirmed that there is a link between the two types of efficacy: self and collective.

Collective Efficacy

Collective teacher efficacy is the belief that a group of teachers can affect student achievement. It is an underlying mindset that if we work together we can make a difference in students. Bandura's research in collective efficacy shows significant relationship between a schools belief in collective efficacy and their students' academic achievement (1993). Hattie ranks it as the number one factor that can effect student achievement (2018). The belief in collective teacher efficacy is directly related the teacher self-efficacy (Kurz et al., 2003). These two beliefs can exist without one another, but findings suggest the affected on students will also be impacted (Kurz et al., 2003).

Collective efficacy involves all school staff and what they believe they can do. Many teachers enter the profession because they love children and want to make an

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impact on other's lives and their success. Therefore, with that mindset education should be producing mass amounts of high achieving students, but that is not the case.

Dr. Anthony Muhammed states that there are four types of teacher mindsets; believers, fundamentalists, tweeners, and survivors (Muhammed, 2018). The tweener is the brand new teacher that needs help finding the teachers' lounge still. The fundamentalist is the teacher that is in the teachers' lounge talking trash about the teacher in the class next door. The survivor is the teacher that is waiting for that retirement countdown clock to hit zero. The believer is the one that believes they can make a difference in the world and in their classroom.

According to Donohoo (2016), there are three enabling conditions that impact collect efficacy. The first condition is "advanced teacher influence" meaning that teachers need to have the opportunity to make decisions. The second condition is having a clear set of goals to work toward. The third step is having responsive leadership. The leaders and teacher leaders need to lead by example and carry out their duties effectively (Donohoo, 2016). This includes time to collaborate with one another in meaningful ways. Working to meet the needs of both the students and the teachers in all buildings. If all of these steps in place then the work toward district-wide collective efficacy can truly begin.

Collective efficacy cannot be obtained quickly and has a direct link to the schools leadership and other teachers perceived self-efficacy (Ninkovic et al., 2016). It can also vary from one environment to another based on teacher perception, school culture and climate, and administrative control. Ninkovic studies the relationship that transformational leadership has on collective efficacy (2016). This study reports that allowing teachers and administrators to work together in a leadership capacity builds a higher sense of collective efficacy and in turn positively effects both staff interactions and student achievement.

Teachers with a high sense of self-efficacy tend to want to collaborate with others and work toward collective efficacy (Arslan, 2017). Adversely, a teacher with a low sense of self-efficacy tends to isolate himself or herself therefore having a negative impact on collective efficacy (2017). One study found that among a group of adolescents having a higher sense of self-efficacy hindered their group performance and in turn lowered their sense of collective efficacy (Khong et al., 2017). This study focuses on ones sense of self-efficacy as a sense of overconfidence and a need to be the sole leader. Arslan's study (2017) focused on ones self-efficacy being that of striving for professional knowledge and skills to achieve a goal.

Teacher Leadership

Teacher leadership roles are becoming the new norm within school districts. Schools are adding Curriculum Instructional Leaders (CILs), teacher leadership teams at the building and district level, and mentors for new or struggling teachers. These leadership roles are often given to teachers based on administrator decision which leads to a sense of satisfaction and appreciation, but can also lead to a controlling style of leadership rather than an influential style (Derrington et al., 2013). The influential style of teacher leadership puts the teacher in a role model position for both staff and students (Derrington et al., 2013).

Teacher leadership can be either a formal or an informal role that allows the teacher to share knowledge and expertise with others. Research shows that teachers in informal leadership roles are successful based on their own sense of self-efficacy which allows them to share knowledge with others, reflect on instructional practice, engage in action research, and mentor others (Derrington et al., 2013). Research also suggests that teachers that step into leadership roles on their own accord have a higher sense of self-efficacy and work satisfaction. They also have a greater impact on policies, student achievement, and a positive and healthy school culture (Derrington et al., 2013). Teachers that show leadership skills also tend to have a higher drive for professional learning. They tend to want to collaborate with others in the professional learning and have tendency for a higher sense of collective efficacy (Loughland et al., 2020).

Administrators play a key role in fostering teacher leadership within a school building. They empower those around them to make decisions and share the responsibility when things succeed or fail (Derrington et al., 2013). When principals are willing to relinquish a little power and control to allow teachers to collaborate freely, take risks, and build knowledge school cultures drastically change and student achievement increases (Derrington et al., 2013).

Shared Leadership

Many studies focus solely on formal leadership styles and how they impact teams (Tafvelin et al., 2018; Bass 2008). These studies focus on the leader and the role that they play in the system. Tafvelin's study focuses on sharing the leadership load and how it impacts the behavior of the team (2018). Both formal and informal leaders showed improved leadership skills after the study in turn creating a cultural of shared leadership within the team.

To accomplish shared leadership it must first start with collective teacher efficacy, norms, and professional development. There needs to be a solid foundation of mutual respect and psychological safety to allow for real change to happen. The typical structure of leadership within education works similar to that of a business with a sole leader that trickles jobs and duties down the "chain of command". The traditional leadership model with a sole leader hinders the collaboration among groups and teams (Freund, 2017). This type of leadership known as a hierarchy allows for one person or a small group of people to make decisions that affect the rest of the group in this case a school district.

Society and schools require a new form of leadership that focuses on collaboration to achieve a shared vision or goal. Shared leadership allows schools to work toward a common vision or goal by distributing power across all levels. It requires administration to relinquish some of their power to influence the school improvement process (Hauge et al., 2014). Shared leadership involves ongoing emergence of multiple leaders working to accomplish a common goal (Pearce et al., 2018). It requires leaders to constantly emerge and focus on enabling the talent in others to achieve the task at hand (Pearce et al., 2018). Shared leadership differs from collective decision-making because it includes the phases following the decision-making process (Hoch, 2007). To do this all staff must share the same vision, beliefs, and behaviors (Carpenter, 2018). Shared leadership moves staff to work together as one cohesive unit rather than as individuals.

Most studies that focus on shared leadership focus on the direct effects that it has on team process rather than student outcome. One study on shared leadership have showed that other variables can effect outcomes (Hoch et al., 2010). Researchers have reported both positive and negative effects on team performance based on a team's organization and the age range of the team. Subsequently, the mindset of the team has also both positively and negatively impacted studies. Freund suggests some supportive environmental factors including mindset, culture, roles and responsibilities, and practices and processes be in place to help promote psychological empowerment, trust, safety, and build a common purpose to a team (2017).

Shared leadership has the ability to effective positive student change if done in a manner that allows all members of a school staff to work as equals (Leadership and teaching practice has been shown to be the most influential factors that affect student learning (García-Martínez et al., 2020). Shared leadership is combining leadership and teacher practice into one role that allows teachers and administration to work together as one unit to manage, lead, make decisions, set goals, create professional development, and ensure student achievement.

This type of leadership style is similar to that of distributed leadership which has a leader with followers working to accomplish a goal or task (Goksoy, 2016). Distributed leadership focusing on capacity building and sharing knowledge and responsibility similar to that of shared leadership, but without the ability to make decisions that could impact the group. With distributed leadership there is still a clear leader that makes decisions for the group rather than a group working together to make a decision.

Conclusion

Research shows that teacher self-efficacy, collective efficacy, and shared leadership play a key role in student achievement. Each of these can be present and make an impact on student achievement, but the three together make the largest impact on student achievement. Teacher's previous experiences and administration also have an impact on how they perceive these three concepts. An administrator can also positively or negatively affect a schools sense of collective efficacy and teacher leadership (Versland et al., 2017).

Teacher leaders also have a positive impact on student achievement and school culture. They play a key role in making decisions, influencing practice, and being a role model for staff and students. Principals play an important part in building teacher leaders. When they allow teachers to freely explore and collaborate, it cultivates a sense of empowerment allowing teachers to step into an informal leadership role.

The greatest factor in affecting student achievement is a sense of collective efficacy as a staff (Hattie, 2016). To achieve collective efficacy staff members must work

as a cohesive unit to accomplish shared vision or goal. There are three main factors that help build staff collective efficacy, as determined by Donohoo (2016), are to allow teachers the opportunity to make decisions, have a clear set of goals to work toward, and have responsive leadership. Collective efficacy does co-inside with teacher self-efficacy, but it can be achieved without it.

Many studies on collective efficacy and shared leadership focus on shared leadership and collective efficacy in a school or in a group setting. The current study focuses on shared leadership and collective efficacy among a school district that has multiple elementary schools. The study creates a group of teacher leaders that share a vision in order to effect change in a district.

Need for Plan

In this school district, there is one preschool, six elementary schools, one middle school, and one high school. Each school believes in their abilities to influence student achievement to an extent, but when looking at the district as a whole there is a lack of a cohesive vision. The teachers believe in their own students within the confines of their individual school walls, but not as a district. This gap in collective efficacy has led to many issues during district-wide grade-level PLC meetings. The district mission statement states that ALL students can achieve at high levels and every student matters and that they will collaborate to ensure the success of all students, but many of these things are not currently present.

There is a lot of transient movement from elementary to elementary school. Many schools student population changes drastically throughout the school year. This is in part due to students moving out of district, but moving within the district to another part of the city. This causes a need for teachers from different elementary schools to have discussions about students and their needs. This was not present at the district used in this study.

There was not currently a team in place to allow for such a thing. From 2017-2020, there was a Literacy Leadership team that was focused on literacy and standards work only. That team was comprised of 3 to 4 teachers per grade level and would meet two to three times a year to look at literacy resources and assessments. The teams did not have representation from each elementary school building for each grade level and some teams had multiple members to represent their school. In 2020, that team was dismantled due to a growing need to include more teachers and leaders. The Curriculum Council was formed in place of the Literacy Leadership team and focused on all subject areas rather than just literacy.

School Improvement Goals

The goal for this school improvement plan is to allow all staff within the Ottumwa Community School District work together toward shared leadership to make a positive impact on student achievement. The purpose of the Curriculum Council is to develop leaders in the areas of curriculum, instruction, and assessment who will serve as a liaison between the building level PLC's and District for the purpose of achieving a guaranteed and viable curriculum.

The Curriculum Council will have several responsibilities throughout the 2020-2021 school year. These responsibility include participate in decision making around curriculum, instruction, and assessment, participate in learning opportunities around content focus area, be the liaison between the building grade level PLC's and the District Curriculum Council, assist in facilitating professional development with building and/or grade CC members, collaborate with grade level Curriculum Council representatives, coaches and administrators to provide curriculum, instruction, and assessment leadership, provide feedback for annual curriculum/instructional goals , provide input for the professional development planning, and participate in monthly meetings. The focus for the 2020-2021 school year was to assist in the "return to learn" instructional planning and implementation, assist in a leadership role regarding literacy and essential standards, and assist in social studies curriculum review/adoption.

Plan Implementation

Membership was voluntary for the Curriculum Council, but each school was encouraged to have at least one teacher per grade level, all CILs, all administrators, and one title, special education, or English language teacher per school. Participants include four kindergarten teachers, five 1st grade teachers, six 2nd grade teachers, five 3rd grade teachers, six 4th grade teachers, six 5th grade teachers, three special education, title, or English language teachers, and twelve CILs/administrators. Each council member was compensated for their time spent outside of school hours attending professional development and meetings.

Curriculum Council meetings were held once a month after school from 3:15 to 5:30 starting in August of 2020. The meetings were split into two days. Day one included kindergarten through second grade teams and day two included third through fifth grade teams. This was done in order to keep discussions relevant to lower elementary and upper elementary topics. There were several meetings that were held with all participants in order to have discussions with teachers from other grade levels. The meeting agenda and dates are located in the table located in the appendix.

Each meeting consisted of whole group discussions and small grade level group sessions that were focused on need. When in small group the grades would work on/discuss material that was agree upon by the district grade level. This could include creating common assessments, creating rubrics, discussing report cards, or creating parent friendly handouts for parent teacher conferences. The purpose of these small group sessions was to allow a small group of people to accomplish goals set by their grade level. The Curriculum Council was a leadership team that created materials based off of their grade level expertise.

One barrier that impacted these meetings was that they were virtual for most of the meetings due to COVID restrictions. This was a barrier because virtual meetings via Zoom was new and required some training for teachers to be able to share their screens with one another. There were also complications with participant attendance due to COVID this school year. The April and May meetings were held face to face due to restrictions being lifted. This provided a second barrier due to some teachers choosing to participate virtually due to their comfort level.

Assessment

Data was collected using a quantitative approach throughout the course of the 2020-2021 school year. The data collected was from a state screener called FAST AReading. The screener is given to all students grades 2 and beyond three times a year (Fall, Winter, and Spring). The data was analyzed using a One-Way Anova.

Findings

There were significant differences in 2nd graders' reading scores over the course of the school year. Their scores were lower in Fall (M = 456.58, SD = 34.59), but increased in both Winter (M = 473.09, SD = 30.51) and Spring (M = 483.74, SD = 25.7), F(2, 858) = 57.36, p > 05.

There were significant differences in 3rd graders' reading scores over the course of the school year. Their scores were lower in Fall (M = 478.75, SD = 35.61) and Winter (M = 478.75, SD = 35.61), but increased in the Spring (M = 493.88, SD = 30.54), F(2, 857) = 18.73, p > .05.

There were significant differences in 4th graders' reading scores over the course of the school year. Their scores were lower in Fall (M = 498.85, SD = 28.71), but increased in both Winter (M = 505.91, SD = 26.42) and Spring (M = 509.44, SD = 25.29), F(2, 996) = 13.42, p > .05.

There were significant differences in 5th graders' reading scores over the course of the school year. Their scores were lower in Fall (M = 510.38, SD = 26.91), but increased

in both Winter (*M* = 515.35, *SD* = 24.45) and Spring (*M* = 519.65, *SD* =24.18), *F*(2, 981) = 11.15, *p* >.05.

Conclusion

There is a common theme across multiple studies that collective efficacy and shared leadership can have a positive impact on student achievement (Ninkovic et al., 2016; Derrington, et al., 2013; García-Martínez et al., 2020). The goal of this study was to create shared leadership and collective efficacy among a group of teachers, administrators, and CILs to affect student achievement. This study showed that there was no effect on student achievement when those two concepts were implemented across multiple elementary schools.

There were several unique circumstances during the course of this study due to the COVID-19 pandemic. Majority of the meetings had to be held virtually with attendance issues. There were several meetings that were done via email updates due to snow days and virtual learning days.

Going forward the Curriculum Council has some changes that need to be made in order to be more successful. These changes were made for the April and May 2021 meetings due to restrictions being lifted. The Council was able to meet in person to collaborate with all members present.

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Appendix

Table 1

Curriculum Council Meetings 2020-21

Meeting Date	Meeting Goals
May 25	
	 Feedback regarding Second Step Curriculum Work 2021-22 Professional Development Needs Supply list- come with suggestions as needed
April 26/27	 Updates Summer School Social Skills Subcommittee recommendation Dyslexia Services
	 Debrief of April 23rd work Planning for May 7th Curriculum resources pilot Newslela- plus/delta to date Dreambox- information PD needs for 2021-22
March/April	Grade level meetingsPrioritizing common assessment work for the final PD afternoons
February	 PD Calendar updates Examine Resource Requests Analyze Literacy Block Survey results Curriculum updates

January 25/26	Snow day- no meeting- update only via email
November 23/30	 Gather feedback regarding virtual parent conferences and learning Share resources for complex text Plan for Complex Text PD_ Dec 4th District GL PLC
October 26/27	
	 Share upcoming PD schedule Clarification on Progress Reports/Comm. Tool Plan for common assessment work_Nov & Dec District GL PLC's dates
September 28/29	 Share Director Action Plan Review purpose of Diagnostic/Intervention protocol Share update regarding Tech Tools Planning for Oct 2 District PD Progress Report Common Assessments
August 31/ Sept 1	 Feedback from Aug13th Reflections on 1st week Support needed Share Diagnostic/Intervention Protocol Tech Update Pear Deck demo/training Remind RGR update_digital playground Science units/resources/plan PD Schedule 2020-21 Short/Long term goals_
August 13th	 Share information and gather feedback around: Preservice Schedule Accelerated Learning Plan Gather input around supports needed for Return to Learn Technology needs Resources Training

Share CC Schedule and next meeting dates