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Distributed Leadership in International Baccalaureate Middle Years Program Implementation

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This is to certify that the doctoral dissertation by

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Abstract

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MEd, George Mason University, 2001

BSC, University of Benin, 1987

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

The International Baccalaureate (IB) organization promotes distributed leadership as the ideal leadership model for implementation of all of its 4 programs, and researchers have noted that this leadership model in private international schools with multiple IB programs has been vital to school wide success. The purpose of this qualitative case study was to explore how distributed leadership influenced the implementation of the International Baccalaureate Middle Years Program (IBMYP) in a public middle school that has been successful in meeting academic goals. Spillane's distributed leadership model served as the basis for identifying the organizational structures, routines, and tools that influenced the implementation of the IBMYP and improvement in students' academic achievement. Data included interviews with 2 administrators, 3 teachers, 2 support staff, and 1 coordinator, and documents collected from participants, a district leader, and the school's website. Data analysis entailed coding to identify emerging patterns and themes. Findings from this study indicated that distributed leadership had a positive influence in the implementation of the IBMYP. Major themes included effective distributed leadership practices of positional and informal leaders; collaboration amongst faculty members; positive relationships between administrators and others; shared academic vision; effective organizational structures, routines, and tools; shared learning; and students' behavioral challenges. Positive social change may come from providing leaders in the IB organization, as well as district leaders, strategies for distributing leadership that were found in this study that may increase successful implementation of the IBMYP in public schools and improvement in student academic achievement.

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Dedication

I would like to dedicate this dissertation to my dear husband, Segun, my two daughters, Tara and Tope, my late mother, Sara Ifenkwe, and the rest of my family and friends who supported me through this doctoral journey. Most of all, I would like to dedicate this dissertation to my Lord for His guidance and steadfast love that enabled me to push through despite the many setbacks and obstacles I encountered.

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I would like to acknowledge and thank the faculty at Walden University who were directly or indirectly involved in my doctoral journey. Dr. Cheryl Keen, who served as my committee chair, provided encouragement and guidance and was patient with me throughout the entire process. I am also thankful to Dr. Kate Emmons, who provided the necessary guidance and feedback to enable me to complete this doctoral study.

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Chapter 1: Introduction to the Study

The International Baccalaureate (IB) organization promotes distributed leadership as the most effective leadership model for implementing all of its four programs because school leaders are required to work collaboratively with faculty members to implement the four programs (IB, 2013). Distributed leadership is of particular importance in the implementation of the International Baccalaureate Middle Years Program (IBMYP) serving students in Grades 6 to 10 because leaders in the organization communicate directly with one pedagogical leader who is responsible for ensuring that teachers follow the program curriculum delivery model (IB, 2016). According to the IB (2013), distributed leadership in IBMYP schools engages principals as the pedagogical leader and teachers as curriculum specialists to work together to create a learning environment that allows students to engage in disciplinary and interdisciplinary learning.

Although there has been an increase in the number of public schools adopting IB programs, there has been no research to support leaders in IB positions that explore if distributed leadership is the most effective leadership model for the implementation of the four programs in public schools. Lee, Hallinger, and Walker (2012) conducted qualitative case studies in five international private IB schools located in Thailand, Vietnam, Hong Kong, and China to determine how distributed leadership contributed to the successful transition between programs and overall school-wide success. Lee et al. found that distribution of instructional leadership among multiple faculty members fostered a commitment to a shared vision and understanding of the curriculum framework of various IB programs. However, no research study has addressed the influence of

distributed leadership in the implementation of the IBMYP in public schools, where school leaders have to align their district and state curriculum requirements with that of the program. Bolivar (2009) conducted a case study in an IB school serving K to 11 students in Venezuela. This study addressed how teachers worked collaboratively to use distributed leadership to design and implement the IBMYP curriculum and to identify the supportive conditions that led to their success (Bolivar, 2009). Additional researchers have focused on examining distributed leadership practices from the perspective of individuals involved in the practice in a public IBMYP school and how it may help inform public school leaders regarding how this practice influences the implementation and development of the program.

Founded in Geneva in 1968, the IB, formally known as the International Baccalaureate Organization, offers four programs for K to 12 students in different countries around the world (IB, 2013). The four programs are the International Baccalaureate Primary Years Program (IBPYP), IBMYP, International Baccalaureate Diploma Program (IBDP), and International Baccalaureate Career-Related Program (IBCP). Although originally, the IB offered programs to children of diplomats and other geographically mobile students in international private schools, the IB currently serves more students from diverse socioeconomic and cultural backgrounds in public schools (IB, 2013). Few schools offer the IB continuum of international education for students ages 3 to 19 in kindergarten through 12th grade. Although some schools develop the full continuum over time, many schools offer individual programs (IB, 2016)

Chapter 1 includes the conceptual framework of distributed leadership and the chosen leadership model for implementation of all IB programs with an emphasis on why distributed leadership study is of importance to the IBMYP. Also included is the research problem addressed in this study and its relevance and purpose, which serves as the context for the research questions. The nature and significance of the study, definitions, assumptions, limitations, and delimitations are also included in this chapter.

Background

Over the past 30 years, the number of schools in different parts of the world adopting the IBMYP has increased for various reasons. According to Sperandio (2010), leaders in public middle schools have different reasons for adopting an international education curriculum. Sperandio noted that most middle school leaders serving in public schools in the United States claim to choose the IBMYP because the program involves all stakeholders and emphasizes interdisciplinary and inquiry-based learning as a means for preparing students from diverse backgrounds to participate responsibly in local, national, and global societies. According to Wright, Lee, Tang, and Tsui (2016), most school leaders in the United States and the world claim to choose the IBMYP because of the program's philosophy and its emphasis on holistic learning. As previously stated, IB programs were originally intended for geographically mobile students in international schools. However, the majority of schools now offering the IBMYP are traditional public noninternational schools in the United States. The high adoption rate of the IBMYP by an increasing number of public schools has increased access to a more diverse student population (Alford, Rollins, Stillisano, & Waxman, 2013). Although there has been an

increase in the adoption of the IBMYP by more public middle schools, there have been no studies to support IB leaders' position that distributed leadership is the ideal leadership model for the IBMYP in a public school setting. To address the challenges faced by IB schools in aligning their district and state curriculum requirements with the IB requirements, leaders in the IB organization promote distributed leadership as the ideal leadership model for implementing any of the four IB programs (IB, 2013).

Most of the research regarding the influence of distributed leadership in K to 12 public schools has been in non-IB schools (Botha & Triegaard, 2015; Supovitz & Tognatta, 2013). There are few studies to support the influence of distributed leadership practice in IB schools, and these have been in a private international school context. Hallinger and Lee (2012) noted that widely distributed instructional leadership in private international IB schools with multiple programs contributed to cross-program coherence. Hallinger and Lee indicated that distribution of instructional leadership amongst faculty members from multiple IB programs (IBPYP, IBMYP, and IBDP) in these schools made it easier for consistency in curriculum delivery and for staff members to learn more about the curriculum requirements of all the IB programs. Similarly, Lee et al. (2012) conducted a qualitative study to provide a better understanding of how leaders shared instructional leadership responsibilities in international IB schools in East Asia. The researchers found that curriculum articulation, cross-program activities, and strategic staffing enhanced consistency and coherence across multiple IB programs (Lee et al., 2012). No previous studies addressed in the literature regarding the influence of distributed leadership in the implementation of IB programs have focused on a public

school that has engaged in distributed leadership practices for 7 years. Lee et al. and Hallinger and Lee did not mention how long the international schools offering multiple IB programs and distributed leadership had engaged in the leadership model prior to the research.

Distributed leadership does not mean that all teachers value taking on leadership roles but that all teachers have the opportunity to lead. Klar, Huggins, Hammonds, and Buskey (2016) and T. Williams (2013) suggested that there is a positive relationship between teachers' involvement in distributed leadership practice and teachers' organizational commitment in non-IB schools. Grenda and Hackman (2014), however, argued that because not all teachers have the knowledge, skills, and confidence to serve as leaders, distributed leadership may not always have a positive influence in schools. Cherkowski and Brown (2013) suggested that there is a need to research the impact of failure as a possible component of using the distributed leadership model with teachers and school leaders in public non-IB schools who also face the challenges of answering to the public, parents, and community members. Cherkowski and Brown also noted that research is required to understand the barriers, challenges, and unintended consequences of distributing leadership effectively. Further research in public schools may help to determine how distributed leadership influences the alignment of district, state, and the IBMYP requirements to improve student academic achievement.

Problem Statement

There are many reasons why some public school leaders adopt innovative curriculum such as any of the four IB programs. Stillisano, Waxman, Hostrup, and

Rollins (2011) concluded that in a globalized world, school leaders adopt curriculum such as IB programs to meet the diverse needs of students. Research has shown that school leadership is important to implementing innovative curriculum. Leithwood, Louis, Anderson, and Wahlstrom (2004) noted that in addition to effective classroom instruction, effective leadership is an important factor in involving multiple individuals in distributed leadership practice. Although more public school leaders are adopting innovative curriculum such as the IBMYP, some public school leaders are having difficulty aligning the requirements of the program with their state's and district's curriculum requirements. Leaders in the IB, however, promote the distributed leadership model as the ideal leadership model for implementing all its four programs in both public and private schools. There have been few studies regarding the influence of distributed leadership in the implementation of IB programs in private schools; however, little is known about how distributed leadership contributes to the implementation of any of the programs in public schools. Hallinger and Lee (2012) stated that widely distributed instructional leadership in private international IB schools with multiple programs contributed to cross-program coherence. Hallinger and Lee indicated that distribution of instructional leadership amongst faculty members from multiple IB programs (IBPYP, IBMYP, and IBDP) in these schools made consistency in curriculum delivery easier and for staff members to learn more about the curriculum requirements of all the IB programs.

Based on a lack of research in the literature regarding distributed leadership in public IB schools, there was a need to determine how distributed leadership contributes to

the implementation and development of an IBMYP in a public school, specifically given the different configuration of the middle school model. Understanding the interactions and relationships between formal and informal leaders in a public school that implements any of the four IB programs might be helpful to public school leaders.

Principals and teachers in public schools offering any of the four programs are required to work collaboratively to align their district and state curriculum with that of IB program requirements (IB, 2016). Collaboration in an IBMYP school requires the principal to work with others in formal and informal leadership roles to create structures and provide dedicated time for all teachers to develop disciplinary and interdisciplinary curriculum (IB, 2016). Mayer (2010) indicated that some public school leaders who have adopted IBDP programs faced challenges aligning school and district requirements with IB requirements to influence success in instruction and improvement in student academic achievement. Mayer noted that this challenge created conflicts between parents, district leaders, and school administrators. J. Williams (2013) conducted two case studies in two independent IBMYP schools in Sweden to explore the dilemmas and challenges experienced when implementing and developing IBMYP. J. Williams reported that the balance of meeting the IBMYP program requirements within a national educational context created an ongoing challenge that requires more research in different contexts. Research on distributed leadership and the implementation of IBMYP in a public school may provide a better understanding of the interactions, preparedness, and relationships between formal and informal school leaders.

Purpose of the Study

The purpose of this single case study was to identify the perceptions that administrators, teachers, the IBMYP coordinator, and support staff have regarding how distributed leadership influences the implementation of the IBMYP in a public middle school in one of the U.S. Rocky Mountain states. Researchers have determined that engagement in distributed leadership practices in private international schools and schools with multiple IB programs contribute to cross-program coherence (Hallinger & Lee, 2010; Lee et al., 2012); however, no research has addressed the influence of distributed leadership practice in the implementation of an IBMYP in a public school. To address this gap in research, I collected data on the perspectives of participants who have worked at a school that has implemented distributed leadership over 7 years, are currently implementing an IBMYP successfully, and have improved student academic achievement.

Examination of the interactions and relationships between formal and informal leaders and how related service providers engage in the distribution of instructional leadership might provide an understanding of the influence these practices have on the implementation of an IBMYP in a public middle school. Finally, an examination of the application of the organizational structures, routines, and tools, as well as a better understanding of the contextual factors in place to make distributed leadership practice possible at this public school may be useful in explaining how this practice influences the implementation and development of IBMYPs.

Research Questions

The focus of this study was to understand the perceptions of administrators, teachers, the IBMYP coordinator, and support staff have regarding the influence of distributed leadership practices on the implementation and development of an IBMYP at a public middle school in one of the Rocky Mountain states. There were four related research questions:

- Research Question (RQ)1: How are distributed leadership practice characteristics perceived by administrators, teachers, the IBMYP coordinator, and support staff at a public middle school in one of the Rocky Mountain states implementing the IBMYP?
- RQ2: What organizational structures, routines, and tools influence administrators, teachers, the coordinator, and support staff in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?
- RQ3: What training, professional development, or ongoing educational initiatives are staff aware of when implementing the IBMYP?
- RQ4. What barriers or challenges have staff encountered in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?

Conceptual Framework

The need for policymakers and researchers to address school improvement initiatives by including teachers and other faculty members working collaboratively with

principals in decision making has contributed to some school leaders' choice of distributed leadership theory. Distributed leadership, used by some practitioners, scholars, and researchers to guide leadership practice in schools and determine how formal and informal leaders contribute to improvement in student learning, formed the conceptual framework for my study (see Harris, 2013; Leithwood & Jantzi, 2008; Leithwood, Mascall, & Strauss, 2009; Leithwood & Seashore-Louis, 2011; Spillane, 2006). The leader plus aspect of distributed leadership recognizes that the principal is not solely responsible for the day-to-day running of a school but that multiple individuals in both formal and informal leadership roles at different levels are involved in different tasks (Spillane, 2006; Supovitz & Tognatta, 2013). The practice aspect of distributed leadership, according to Spillane (2006), involves the interactions between leaders and their followers, within their context. Spillane emphasized that the context in which both the leaders and the followers interact, in addition to the tools and structure, which includes their daily routines, contributes more to the distributed leadership practice than their individual roles, skills, and knowledge.

It is important to understand how administrators, teachers, and others involved in distributed leadership practice make decisions required in the day-to-day running of a school (Liljenberg, 2015). The interactions among leaders are not the only focus of the practice aspect of distributed leadership practice (Hairon & Goh, 2015; Spillane, 2006). Successful principals using the distributed leadership model recognize that in addition to interactions among leaders, it is important to create structures, routines, tools, and artifacts for successful leadership distribution in schools (Cherkowski & Brown, 2013;

Vlachadi & Ferla, 2013). It is important to identify the tools, structures, and routines that support the interactions among leaders and followers in a public IBMYP school using distributed leadership practice.

Several researchers have provided insight into the positive influence of the interactions of formal and informal leaders in a distributed leadership model (Grenda & Hackmann, 2014; Hasanvand, Zeinabadi, & Shomami, 2013). Although the central tenet of distributed leadership practice depends on the interactions among principal, teachers, and other faculty members, there is no research regarding how the relationships of multiple individuals in a public school engaging in the leadership practice contribute to the implementation and the development of an IBMYP. According to Hasanvand et al. (2013), understanding how various individuals with different expertise collaborate while implementing innovative curriculum in a public-school setting may provide a deeper understanding of distributed leadership practice. I provide a thorough explanation of the concept of distributed leadership and the adoption of the practice by the IB organization in Chapter 2.

Nature of the Study

A qualitative single case study approach was the research method used to understand how administrators, teachers, the IBMYP coordinator, and support staff perceived distributed leadership practice in the implementation of an IBMYP in a public middle school in one of the Rocky Mountain states. The eight participants in this study included two administrators, three teachers, an IBMYP coordinator, and two support staff in one public middle school implementing an IBMYP. According to Patton (2002), a case

study approach is valuable because it requires researchers to seek an in-depth understanding of a unique problem, situation, or a group of individuals. Creswell (2013) noted that case study research necessitates that the researcher uses a variety of data sources such as observations, interviews, documents, and other related materials to explore a phenomenon within its natural context. A qualitative case study was also chosen because, according to Yin (2014), a case study ensures exploration of the phenomenon through a variety of lenses, which results in the triangulation of the data and a better understanding of the multiple facets of the phenomenon. The case study approach also fit the research questions as it provided a means for creating knowledge and fostering greater understanding of the concept of distributed leadership in the natural context of an IBMYP school. Data for this study came from interviews and documents relevant to the school's distribution of leadership, the IBMYP implementation process, and factors that have sustained the development of the program.

A single case study approach was appropriate for this study because the school where the participants work is a public IBMYP school that had been implementing distributed leadership for 7 years. Louis, Mayrowetz, Murphy, and Smylie (2013) indicated that a single case study is suitable for understanding the perspectives of teachers and administrators in a unique U.S. vocational-technical high school using distributed leadership practice to promote teachers' involvement in professional learning communities (PLCs). Louis et al. noted that a single case study is ideal for unique schools. The school I accessed in the current study can be considered a unique school because in 7 years, this school, which serves diverse students from low socioeconomic

families, went from failing to make adequate yearly progress to being named one of the top schools in the state. Like the vocational-technical public school studied by Louis et al., this school was also a public school showing improvement in student academic achievement on state standardized tests. Public documents on the school website showed improvement in student academic achievement on state standardized tests in English, mathematics, and reading over the 7 years the IBMYP was implemented. The report from the school's evaluation visit in 2015 showed that multiple individuals in formal and informal leadership roles were involved in different aspects of the school improvement plan and the development of the program. This study may also enhance the body of research that addresses distributed leadership practice from multiple individuals involved in the implementation and development of IBMYPs.

Definitions

Adequate yearly progress: The federal government requires that districts and schools make progress in improving academic achievement for students in all subgroups (U.S. Department of Education, 2017).

Approaches to learning: Deliberate strategies, skills, and attitudes spread throughout all IB teaching and learning environments (IB, 2016).

Collaborative team: A group of individuals who share common beliefs and work toward achieving common goals and vision (Sparks, 2013).

Concept-based curriculum and instruction: A three-dimensional curriculum design model based on concepts, which includes skills, and shapes teaching and learning

that requires students to go beyond the acquisition of factual knowledge to apply and transfer ideas to a different time, place, and situation (IB, 2016).

Criterion-related assessment: A type of assessment designed to measure specific skills that are predetermined by teachers or curriculum experts (IB, 2016).

Distributed instructional leadership: The distribution of instructional leadership for instruction (Gedik & Bellibas, 2015; Spillane, Diamond & Jita, 2003).

Distributed leadership: A leadership practice that recognizes in most organizations that multiple individuals are involved in leadership practices (Gronn, 2002; Harris, 2013; Leithwood & Seashore-Louis, 2011; Spillane, 2006).

Every Student Succeeds Act: Signed into law in December 2015, it requires states to measure elementary, middle, and high school students by academic achievement on statewide assessments (U.S. Department of Education, 2017).

Interdisciplinary teaching: A teaching strategy that involves the integration of concepts, theories, methods, and tools from two or more disciplines, allowing students to engage in a deeper understanding of a complex topic such as climate change or homelessness. (IB, 2014)

No Child Left Behind Act: A reauthorization of the Elementary and Secondary Education Act by the U.S. Congress requiring each state to establish an academic standard and state testing system that meets federal accountability requirements (U.S. Department of Education, 2002).

Organizational structure: School culture based on the vision and goals of the school (Harris, 2008).

Positive behavioral intervention and supports (PBIS): A school-wide behavioral intervention system used by schools to achieve important behavior changes (National Education Association, 2014).

Professional learning community (PLC). Organizational structure in schools that enable faculty members to engage in distributed leadership practices (DeMatthews, 2014; Dufour, Dufour, & Eaker, 2008).

Assumptions

There were several assumptions made regarding this case study. The first assumption was that the leaders in the IB Americas office and I had the same understanding of the criteria for measuring distributed leadership practice. By asking the different stakeholders in the school about their perceptions of distributed leadership, I was able to determine if all the participants perceived that leadership responsibilities at the school were distributive or not. This assumption was important because according to Bush and Glover (2012) and Louis et al. (2013), distributed leadership has different meanings for different individuals. A second assumption was that the majority of those invited to be participants at this school would volunteer for the study. Finally, a third assumption was that the participants would be willing to provide responses based on their perspectives of distributed leadership practice at this school.

Scope and Delimitations

The eight participants for this study included one principal, an assistant principal, three teachers, the IBMYP coordinator, and two support staff, all with a minimum of 2 years' experience in a public middle school implementing an IBMYP in one of the Rocky

Mountain states. The classroom teachers included one eighth grade mathematics teacher, who was the collaborative team leader, a seventh grade English teacher, who was also a subject area leader, and an eighth grade civics teacher. I focused on obtaining the perspectives of administrators, and particularly, those of the mathematics and the English teachers because, as a public IBMYP school, the students' scores in English and mathematics account for how the school's annual yearly progress is measured. However, because leaders in the IB organization require that support staff be given an account of their roles during authorization and evaluation of IBMYP schools (IB, 2016), I also focused on determining how the librarian and the lead counselor, as support staff, perceived distributed leadership practice in the implementation of an IBMYP in a public school. The perceptions of the IBMYP coordinator as the midlevel leader were also helpful to gain a better understanding of the distributed leadership practice at this school.

I chose the eight participants because they volunteered to participate in the study, and it was a sufficient sample size to represent the 55 faculty members at the school. To minimize threats to the quality of the data, I sent transcripts of the interviews to the participants by email for member checking to review my analysis of their responses.

I delimited the study to one public IBMYP school because several program managers identified the school as one that had been using distributed leadership to implement an IBMYP for at least 7 years while demonstrating improvement in student academic achievement. This study was purposefully limited to one school in one of the Rocky Mountain states because my personal and professional relationship with some faculty members at a second identified school may have created bias.

Limitations

The limitations of this study included my use of qualitative case study research design, a personal bias that I may have had as an IB educator, and bias that might have occurred due to the participants' unwillingness to reveal their perspectives about distributed leadership and the IBMYP at this school. Another limitation was the small sample size of eight participants. The use of a qualitative case study design means that the findings from this study may not be generalized to other participants in a different IBMYP school. According to Creswell (2013), lack of generalizability is an issue that occurs with case study research design. I did not generalize the findings to other IBMYP public schools because I did not explore the conditions and experiences of other educators in other IBMYP public schools. To reduce my personal bias as an IB educator and the only researcher, I made sure to challenge preexisting assumptions and beliefs that I might have had about distributed leadership and the IBMYP. I also reduced any bias that the participants might have had by making sure I phrased and posed the questions in ways that allowed them to reveal their perspective about distributed leadership and the IBMYP at this school and not based on what they presumed might be the right answers to the questions. A follow-up email to the participants also increased the responses from three participants. To thank the participants for their time and willingness to participate in the study, I offered a $10.00 gift card.

Significance

A case study that addresses the influence of how leadership is distributed from the multiple perspectives of individuals involved in implementing an IBMYP in a public

school might be helpful to district leaders, principals, administrators, teachers, and other faculty members in IB schools as well as leaders in the IB organization. The examination by Lee et al. (2012) of instructional leadership distributed in five K to 12 international schools delivering multiple IB programs in East Asia indicated the need for further exploration of the practice in different settings. Lee et al. also noted the need for a researcher to examine the specific role of the principal, and how the principal as the instructional leader shares instructional leadership with others. While the Lee et al. study focused on how distributed leadership contributed to the implementation of multiple IB programs in international schools in East Asia, I found no research that addressed a school using distributed leadership in the implementation of an IBMYP in a public middle school setting for at least 7 years. This study might be important to school leaders who can benefit from research on how distributed leadership influenced one public middle school's successful implementation of the IBMYP. The findings of this study supplement the existing literature concerning the influence of distributed leadership in the implementation of the four IB programs. Finally, this study adds to the body of knowledge required to determine how distributed leadership contributes to improvement in student academic achievement on state standardized assessments and implementation of innovative programs in public schools.

Summary

The IB organization offers four programs serving K to 12 students in different parts of the world. Although originally intended for geographically mobile students attending private international schools, the majority of IB students now attend public

schools. The increase in the number of students attending public IB schools has created challenges for school leaders who must meet the requirements of program implementation in addition to their district, state, and national requirements.

Leaders in the IB organization promote distributed leadership practice as the ideal leadership theory for implementing its four programs (IB, 2013). Distributed leadership is of importance in the IBMYP, where collaboration within the leadership team is required to create an effective learning environment for disciplinary and interdisciplinary teaching. The available research studies that addressed the influence of distributed leadership in the implementation of IB programs have, however, been in private international schools with multiple IB programs. The focus on the influence of the practice in private schools with multiple programs has resulted in a gap in the literature regarding distributed leadership practice in public IBMYP schools. This research may fill the gap in the literature concerning the influence of distributed leadership practice in the implementation of IB programs in a public school, but more specifically, in schools offering stand-alone programs such as the IBMYP.

This chapter included a discussion of the conceptual framework of distributed leadership as the chosen leadership practice for all IB programs, especially for the IBMYP. I also highlighted the problems faced by some public-school leaders implementing the IBMYP. In addition, I provided a brief history of IB programs in general with emphasis on the IBMYP. Chapter 2 provides a literature review of studies relevant to distributed leadership and its relationship to teaching and learning.

Chapter 2: Literature Review

Founded in 1968 in Geneva, Switzerland, the IB, formally known as the International Baccalaureate Organization, initially offered its programs to a majority of students in international schools (IB, 2014). As of March 2017, there were 6,402 IB programs across 4,783 schools worldwide, 3,528 of which were in the United States in 2,866 schools (IB, 2018). According to the organization, 91% of the IB programs in the United States are in public schools (IB, 2018). Of the total number of IB schools in the United States, 543 are IBPYP schools, 647 are IBMYP schools, 913 are IBDP schools, and 97 are IBCP schools (IB, 2018). The difference between the IBDP and IBCP is that even though both programs serve students in the 11th and 12th grades, the IBDP is for college-bound students, while the IBCP is also for students wishing to attend college, or follow a career or vocational path.

Since 2012, 63% more public schools designated as Title I have adopted IBMYPs serving students in Grades 6 to 10 (IB, 2016). A growing number of public middle schools internationally and in the United States are adopting the IBMYP as a means of improving academic achievement for diverse students with limited English, students with special education needs, and students from low socioeconomic families (IB, 2016). The adoption of the IBMYP by increasing numbers of public schools has increased its access to a more diverse population.

The growth in adoption of the IBMYP has, however, created challenges for schools, which must reconcile the demands of program implementation with meeting district, state, and national accountability requirements (Beckwitt, Van Camp, & Carter,

2015; Stillisano et al., 2011; Wright et al., 2016). To cope with the challenges faced by schools, leaders in the IB organization promote distributed leadership practice as the ideal leadership practice for the implementation of its four programs (IB, 2013). Although leaders in the IB organization view this as the ideal leadership model, there has been limited research on how distributed leadership has influenced the implementation of any of the IB programs. The few research studies regarding distributed leadership in IB schools exist in the context of private international schools and schools with multiple IB programs (Hallinger & Lee, 2010; Lee et al., 2012). The purpose of this case study was to identify the perceptions of administrators, teachers, the IBMYP coordinator, and support staff regarding how distributed leadership influenced the implementation of the IBMYP in a public middle school in one of the Rocky Mountain states.

Although the enthusiasm for using distributed leadership has risen since the early 2000s, the concept has been around longer. Gronn (2002) indicated that distributed leadership theory came about as an alternative to the study of leadership that emphasized the behavior of a single individual. Distributed leadership, however, remains an elusive concept because there are competing and sometimes conflicting interpretations of what the term means (Harris, 2008). Most of the research regarding the influence of distributed leadership in K to 12 schools has been in non-IB schools (Botha & Triegaard, 2015; Supovitz & Tognatta, 2013). Few studies in IB schools were in international private schools with multiple IB programs (Hallinger & Lee, 2012; Lee et al., 2012). I found no studies that addressed the use of the practice in public IBMYP schools in the United States. Prior studies in non-IB and private international IB schools have identified many

benefits and challenges for schools using the distributed leadership model. These benefits include principals working with teachers and others on different tasks in schools (Larsen & Rieckhoff, 2014; Lee et al. 2012; Vlachadi & Ferla, 2013) and development of the leadership abilities of informal leaders in schools. The challenges include difficulty defining distributed leadership practice without understanding the contexts and the individuals involved in the practice (Bush & Glover, 2012) and having multiple individuals as leaders, which may create a challenge in the communication of school goals and vision (Grenda & Hackman, 2014).

Literature Search Strategies

The research databases examined included Education Resources Information Center (ERIC), Education Research Complete, Education: A SAGE full-text database, ProQuest Central, SocIndex with full-text, ProQuest Dissertations, Academic Search Complete, and EBSCOHost. The key terms and combination of terms used included the following: *distributed leadership*, *distributive leadership*, *shared leadership*, *delegated leadership*, *dispersed leadership*, *democratic leadership*, *teacher leadership*, *teacher effectiveness*, *school leadership*, *school education*, *collaborative leadership*, *transformational leadership*, *building capacity*, *school reform*, *school improvement*, *leadership in International Baccalaureate Organization*, *International Baccalaureate Middle Years Program*, and *leadership for learning*. I assessed over 200 peer-reviewed journal articles and relevant books with the above terms.

I then examined reference lists of several key studies from the articles I read, including published articles, books, and recent dissertations. I intended to expand on

available research studies on distributed leadership in K to 12 schools; doing this provided me with a list of the most frequently referenced studies in distributed leadership, specifically, the implementation of the IB programs. This search led me to the *Journal of Research in International Education*, *International Journal of Educational Research*, and the IB Education Research Database, where I successfully searched for recent IB research and studies in international education. Although research is scarce regarding the use of distributed leadership in the implementation of innovative programs, several researchers suggested further exploration to include the influence of distributed leadership in the implementation of innovative programs in schools.

Conceptual Framework

Distributed leadership has gained attention in educational leadership research studies as an alternative to the hierarchical form of leadership. Distributed leadership practice, made familiar by Spillane (2006), formed the conceptual framework for this study. According to Diamond and Spillane (2007), a distributed leadership conceptual framework involves the leader plus aspect and the practice aspect of distributed leadership influenced by the situation. Leithwood, Louis, et al. (2009) noted that because a distributed leadership model requires the participation of multiple individuals, it enhances the opportunities for organizations, such as schools, to benefit from the capacities of more of its members and not just those in leadership roles. Bush and Glover (2012) and Cherkowski and Brown (2013) noted that when more teachers are involved in decision making in a distributed leadership model, and school leaders align the school's vision and goals for teaching and learning, improvement in students' academic

achievement may occur. With this study, I built on the conceptual framework of distributed leadership with the purpose of gaining a deeper understanding of the concept through the perceptions of administrators and others at one public IBMYP school. My analysis of distributed leadership as a framework included a historical perspective on this approach to school leadership and different approaches to the definition of leadership.

Historical Perspective

While it has only been since the early 2000s that practitioners and researchers have embraced the concept of distributed leadership, researchers have indicated that the origin of the concept has been around longer. Harris (2008) indicated that the genesis of distributed leadership could be traced back to the field of organizational theory in the 1960s and possibly earlier. Gronn (2002) noted that distributed leadership theory came about as an alternative to the study of leadership that emphasized the behavior of a single individual. This alternative, Harris argued, came from the work of leaders outside the field of education. Gronn (2000) noted that the practice of school leadership shifted in the 1980s from leadership focusing on the principal to one shared and distributed with other individuals in the school. Thorpe, Gold, and Lawler (2011) found that research using distributed leadership in education began to appear in the early 2000s. While the concept of distributed leadership has gained attention in both practice and theory in education, Spillane (2006) noted that most leadership research at that time focused on an individual leader-centric theory through which researchers studied and understood the practice.

In an era of increased accountability, schools needed a new effective leadership model (Harris, 2008). According to Senge, Cambron-McCabe, Lucas, Smith, and Dutton

(2012), a system-wide leadership model shared by many people was more effective in securing change that ensured sustained school improvement and resulted in better student learning. Distributed leadership could offer an alternative emerging leadership model that provides a collective approach to system-wide leadership in schools (Harris, 2009; Leithwood, Louis, et al., 2009). Distributed leadership, however, remains an elusive concept because there are competing and sometimes conflicting interpretations of what the term means (Harris, 2008). Harris (2009) also noted that conflicting interpretations of distributed leadership arise because researchers use the term synonymously to describe different types of leadership practices such as shared, collective, collaborative, democratic, and participative. Harris (2009) argued that the many variations of distributed leadership reflect variations in the parent concept of leadership itself.

Using the concept of distributed leadership synonymously with other leadership models may have resulted in the lack of understanding of the concept. Distributed leadership allows for shared leadership depending on the situation, but shared leadership is not sufficient or necessarily considered distributed (Spillane, 2006). Spillane (2006) argued that shared leadership is different from distributed leadership because some leadership activity may require only one individual working on the activity. Spillane emphasized that while leaders may share leadership roles and it may be democratic in some situations, it does not necessarily mean that the expertise of every individual in an organization is required for all activity. Furthermore, Spillane, Halverson, and Diamond (2001) considered participatory leadership of organizational members as a form of democratic leadership. The researchers indicated that distributed leadership practice

could be democratic, but democratic leadership cannot be distributive (Spillane et al., 2001). Harris (2008) argued that team leadership is different from distributed leadership because, unlike team leadership, distributed leadership involves the interactions of leaders, followers, and their situation.

Researchers have further identified why distributed leadership is different from other forms of leadership models (Supovitz & Tognatta, 2013; Wahab, Hamid, Zainal, & Rafik, 2013). Spillane (2006) noted that distributed leadership is not autocratic because it requires principals relinquishing some authority and power to engage more individuals in an organization in a more collaborative leadership style. Spillane also emphasized that while distributed leadership may be democratic, it was not autocratic, and although leadership can stretch over members of the group, it does not mean that it is democratic.

Leithwood, Mascall, et al. (2009) suggested that although there is an overlap between the concepts of shared, collaborative, democratic, and participative leadership, these concepts are not the same as distributed leadership or that everyone in an organization is a leader. Harris (2008) argued that using these concepts synonymously with distributed leadership might mean that distributed leadership implies all attempts by leaders to engage others in leadership roles, which might make it difficult to investigate distributed leadership as an alternate form of leadership model. The difficulty arises in trying to find a consensus by researchers and scholars on a consistent definition of the concept of distributed leadership. Leithwood, Mascall, et al. (2009) noted that because there is little gained from debating the variability and difficulty of defining distributed leadership practice, more research should focus on measuring the degree and extent of the

practice on organizational change and the influence of the individuals involved. Differences in the approaches to defining the concept of distributed leadership depend on the context in which leadership distribution occurs, the goal of the distribution, the expertise of the individuals, and in the practice and execution of duties and responsibilities. In the following section, I describe the lack of consensus and offer the operational definition used in my study.

Operational Definition of Distributed Leadership

The broad operational definition for distributed leadership I used in this study is a practice that recognizes multiple individuals are responsible for leadership responsibilities in an organization (Gronn, 2002; Harris, 2013, Leithwood & Seashore-Louis, 2011, Spillane, 2006). For this study, distributed leadership occurs when formal leaders, such as principals, change their beliefs about leadership, change school culture and organizational structures, and provide opportunities for teachers and others to take on leadership roles in schools (Bush & Glover, 2012; Vlachadi & Ferla, 2013). Spillane (2006) noted that in a distributed leadership model, the emphasis is on the interactions of multiple individuals at different levels in an organization, artifacts, and the situation.

Researchers have indicated that distributed leadership involves the interactions of multiple individuals (Cherkowski & Brown, 2013; Ozdemir, & Demirciog˘lu, 2014). The most consistent operational definition of distributed leadership offered by Spillane (2006) is that distributed leadership is a function that stretches over multiple individuals and the interactions of those individuals required to carry out various leadership tasks. Spillane's definition of distributed leadership is similar to Bolden's (2011) statement that when the

focus of leadership is on the social influence, the expertise of the individuals involved, rather than the individual actions of those in formal positions, is more important. Gronn (2002) suggested that because "schools operate in complex, data-rich task environments as never-before" (p.18) school leaders need to involve others in leadership tasks in schools. The complex nature of a school requires leaders to foster an environment where individuals with different expertise are encouraged to share leadership responsibilities (Harris, 2008). In addition to the principal, the assistant principal and other faculty members with or without formal leadership roles may be responsible for the daily tasks required for leading and managing a school.

Empirical Literature Review

In the following section, I analyze studies using the distributed leadership framework as it relates to the interactions of formal and informal leaders to include teachers and other faculty members who are involved in different leadership tasks in schools. Additionally, I focus on how the expertise of others and not just of those with formally designated leadership roles and responsibilities contribute to school leadership. The overall objective of this study was to explore how formally and informally designated leaders such as a principal, assistant principal, teachers, and others took on leadership responsibility required for the day-to-day running of a school.

Importance of Distributed Leadership in Schools

The involvement of teachers in the distribution of leadership may be important because of school complexity and because teachers have valuable instructional and curriculum expertise. Spillane (2006) indicated that distributed leadership does not mean

that principals simply delegate duties to others, but that they further involve other faculty members and stretch leadership functions over the social context in a school. Vlachadi and Ferla (2013) argued that because schools are complex and curricular demands particularly challenging, it is important for principals to work with teachers as experts in instruction and content curriculum to improve teaching and learning. Vlachadi and Ferla noted that in addition to the recognition of the expertise of teachers, principals are responsible for recognizing the differences in the level and kind of expertise within their school and for aligning the skills and knowledge of faculty members with the goals and visions of their schools. Finally, because various school tasks require different knowledge bases, which do not reside in one individual, it is important for principals to involve individuals at different levels in various leadership tasks (Larsen & Rieckhoff, 2014). In a distributed leadership environment, principals utilize the expertise of others but engage in a sole leadership position for some tasks and functions.

Although one individual can successfully lead school change, scholars and researchers (Harris, 2009; Larsen & Rieckhoff, 2014; Senge et al., 2012; Spillane & Coldren, 2011) have argued that attaining systemic and sustainable change will require a critical mass of individuals at all levels of the system. Senge et al. (2012) indicated that system-wide thinking characterizes successful organizations such as a school's ability to enact changes that involve principals and multiple individuals at different levels in leadership roles. In other studies, Law, Galton, and Wan (2010) and Shakir, Issa, and Mustafa (2011) noted that informal leaders (i.e., classroom teachers) are key players in the day-to-day running of a school. Cherkowski and Brown (2013), however, indicated

that because there are many tasks in schools that are important in the day-to-day operations, determination of the influence of the expertise of the different contributors becomes vital.

Benefits and Challenges of Distributed Leadership

In addition to the importance of engaging in distributed leadership, researchers have identified benefits and challenges to the distribution of leadership in schools. According to Cherkowski and Brown (2013), distributed leadership can be successful when the practice is purposefully structured and aligned with the shared visions and goals of a school, but there are internal dilemmas and challenges faced by administrators and teachers engaged in distributed leadership practice. Grenda and Hackmann, (2014) also indicated that even though teachers and midlevel leaders benefited from involvement in distributed leadership, there were challenges faced by formal and informal leaders sharing leadership in schools. Liljenberg (2015) noted that the potential for the positive outcomes of distributed leadership in schools depends on understanding what the challenges of engaging in distributed leadership are in different settings.

Benefits of Distributed Leadership

Researchers have noted that engaging in distributed leadership is beneficial to schools because the practice involves the interactions of multiple individuals in daily activities. Using the conceptual framework of distributed leadership in which principals share administrative duties, Larsen and Reickhoff (2014) conducted a case study to investigate how principal behaviors influenced student learning in a professional development school (PDS) environment. The researchers sampled four administrators

who participated in a PDS partnership in a Midwestern urban area using semistructured interviews, observation, and analysis of PDS schools' action plans. The researchers identified leadership vision, teacher leadership, and shared decision making as themes concerning the role of the PDS. Larsen and Rieckhoff's analysis of several themes in the data concluded that principals in the PDS believed that the key to distributed leadership was sharing leadership and empowering more individuals in their schools to take on decision-making responsibilities.

Engagement in distributed leadership does not imply that principals become less relevant. Harris (2012) argued that distributed leadership does not advocate the loss of the role of the principal but acknowledges that principals are responsible for recognizing there are others in a school with different expertise capable of taking on various leadership roles. Cherkowski and Brown (2013) conducted multiple case studies with the goal of understanding how four administrators in British Columbia schools experienced distributed leadership. According to Cherkowski and Brown, the principals believed that by recognizing the strengths of their staff and determining ways to develop their leadership abilities, informal leadership developed in their schools. Similarly, Torrance (2013a) also conducted multiple case studies to gain a deeper understanding of how three primary school head teachers and their entire staff made sense of distributed leadership. Analysis of the data showed that distributed leadership provided the staff the opportunity to share the knowledge and expertise needed to develop a learning school community. Consequently, distributed leadership can be a means for principals to acknowledge the

expertise in their schools, and a way to foster and utilize the expertise of different faculty members to positively influence the school.

Engagement in distributed leadership practice may free up principals to focus on meeting individual staff needs. Torrance (2013b) conducted another multiple case study to determine how three other primary head teachers and their faculty made sense of the practice of distributed leadership. According to the data analysis, the head teachers indicated that distributed leadership provided them with time to focus on building capacity and differentiating support for staff in leadership roles. Torrance (2013b) reported that the teachers felt that distributed leadership allowed them time to focus on curriculum, teaching, and assessment. Similarly, Liljenberg (2015) also conducted a qualitative case study with purposeful sampling to investigate how school managers, principals, deputy principals, and teachers in formal and informal leadership positions from three schools explained the different outcomes from distributed leadership practice. Analysis of the data showed that distributed leadership practice enhanced the development of leadership capacity in teachers and helped principals focus on teaching and learning. Although evidence from the study by Liljenberg showed the positive influence of distributed leadership on both principals and teachers, none of the schools involved in this study was an IBMYP school, and the evidence did not show how distributed leadership contributed to the improvement in student learning.

Challenges of Distributed Leadership

Despite the findings of several researchers pointing to the benefits of engaging in distributed leadership in non-IB and IB schools (Cherkowski & Brown, 2013; Hallinger

& Lee, 2012; Larsen & Rieckhoff, 2014), several researchers have reported the potential limitations of using the leadership practice in schools. Bush and Glover (2012) noted that distributed leadership might be challenging when the roles of the individuals involved in distributed leadership are not clear, and their responsibilities are not linked to the strategic aims of the school. Bush and Glover further noted that because school context varies, it might be challenging if not impossible to define distributed leadership practice without understanding how the contexts and the interactions of the individuals involved in the practice constitute the practice in different settings.

Principals can limit the potentials of engaging in distributed leadership in schools. According to Cherkowski and Brown (2013), principals reported tension could occur when trying to provide opportunities for teachers to try out new ideas and preserving public confidence in their roles as leaders in their schools. Cherkowski and Brown noted that the perspectives of administrators were important to learn more about the internal struggles, dilemmas, and challenges faced by administrators and teachers as they shifted between roles and expectations when engaged in distributed leadership practice.

Even though several researchers have noted that involving multiple individuals could be beneficial (Cherkowski & Brown, 2013; Hallinger & Lee, 2012; Larsen & Reickhoff, 2014; Liljenberg, 2015; Torrance, 2013a; Torrance, 2013b), others also noted that including several individuals as leaders may create a challenge in communications of the school's goals and vision (Bush & Glover, 2012; Cherkowski & Brown, 2013). Grenda and Hackman (2014) indicated that although it may be helpful to have multiple leaders convey important information in schools, this might create challenges because the

same message may not be conveyed with one voice or from a unified perspective to all faculty members.

Mackenzie and Locke (2014) conducted a single case study to identify the challenges experienced by teacher leaders involved in distributed leadership at one urban elementary school. Mackenzie and Locke reported that in addition to the challenges of addressing conflict with other teachers, teacher leaders had difficulty meeting leadership responsibilities in addition to their responsibilities as classroom teachers. Singh (2012) conducted an analytical autoethnography research study to describe a Mexican high school principal's experience in distributed leadership. Singh reported that despite the positive impact of having more individuals with different perspectives involved in the distributed leadership model, including more people required additional effort and not all individuals were comfortable serving leadership roles at the school.

Involvement in distributed leadership practice may have a positive influence on the relationship between principals and teachers but may not influence a principal's commitment level. Price (2012) conducted a correlative quantitative study using the Schools and Staffing Survey with a nationally representative group of districts, schools, principals, and teachers to measure the perceived effects of the relationship between public elementary school principals and teachers in the 2003-2004 school year. Using structural equation modeling techniques, Price was interested in why and how the relationships between elementary school principals and teachers created the desirable outcome of both principal and teacher satisfaction, cohesion, and commitment in the school. Price found that the principals' relationships with their teachers affected the

principals and teachers' satisfaction, cohesion, and commitment levels. Price also indicated that principals who reported sharing power with teachers on school decisions reported greater frequency of interactions with teachers ($\beta = .051$) and increased their teachers' satisfaction and cohesion levels by 0.071 and 0.082 SD, respectively. Price, however, found that the principals' commitment levels were not affected by sharing power with teachers.

Leader Plus and Practice Aspects of Distributed Leadership

There are two aspects of distributed leadership. According to Spillane (2006), distributed leadership involves the principal plus and practice aspects. Spillane indicated that distributed leadership is the product of the interactions of leaders in formal and informal leadership positions and their situations. Bush and Glover (2012) noted that the situation regarding the organizational structures and culture might have a positive or negative influence on the practice aspect of distributed leadership.

Leader plus aspect. Leadership roles in schools stretch beyond the principal and those in formal leadership roles. The leaders plus aspect, according to Harris (2012), requires the principal to create conditions for others in both formal and informal leadership positions in schools to lead effectively. Distributed leadership is the product of a combined effort that emerges from multiple individuals in different levels in an organization working towards a common goal (Gronn, 2002; Spillane, 2006). Analysis of data from studies conducted by Larsen and Rieckhoff (2014) and Supovitz and Tognatta (2013) showed that principals encouraged teachers to take on leadership roles beyond their classroom and to participate in collaborative decision making. Larsen and

Rieckhoff, however, noted that in a distributed leadership model, it is not enough to focus on who is involved in leadership activities, but that it was more important to focus on the interactions among the individuals involved in the tasks. Larsen and Rieckhoff implied that collaboration among the principal and the different individuals at different levels is a central tenant of the leader plus aspect of distributed leadership.

Practice aspect. The actions and the tools used by the individuals involved in different school leadership roles are as important as their roles in the organization. Spillane (2006) stated that the practice aspect of distributed leadership depends on the interactions between leaders and followers. Lumby (2013) noted that without an understanding of how the relationship that exists between principal and teachers impact leadership distribution, it might be difficult to determine the influence of distributed leadership in schools. Spillane also noted that the sociocultural context of the group, routines, and ways of functioning aid in the definition of the practice. Harris (2009) posited that in the practice aspect of distributed leadership, the individual actions of the people involved are not as important as the interactions that exist among them. Vlachadi and Ferla (2013) argued that in the practice aspect of distributed leadership, the interactions that exist among leaders when carrying out different activities in a school depends on the artifacts, goals, intentions of the leaders, and the situation. Spillane and Vlachadi and Ferla both imply that the practice aspect of distributed leadership provides insight into how leaders interact with others, leadership routines, and the school situation.

Principals' Practice of Distributed Leadership

A principals' ability to share leadership with other individuals with different expertise in formal and informal leadership roles is a vital aspect of distributed leadership practice (Harris, 2012). For example, Botha and Triegaard (2015) interviewed and observed five principals from selected primary schools in a district in KwaZulu-Natal province of South Africa regarding the use of distributed leadership in school improvement. Botha and Triegaard noted that the principals believed they were effective because they shared leadership tasks with all faculty members and not just designated leaders in their schools. Although the principals were responsible for making final decisions, many important initiatives began with their staff. Most recently, Klar et al. (2016) conducted a multisite qualitative study to determine how six high school principals fostered the leadership capacity of others. Analysis of data showed that the principals increased leadership capacity in four ways: identification of potential leaders, the creation of leadership prospects, facilitation of role alterations, and ongoing support (Klar et al., 2016).

Another approach to understanding principals' role in distributed leadership is through an understanding of principals' perceptions of their self-efficacy. To determine whether principals' feelings regarding their self-efficacy influenced their roles in a distributed leadership model, Hasanvand et al. (2013) conducted a descriptive quantitative study using 20 self-reported items on a questionnaire from all Iranian high school principals (n = 418). Through random cluster sampling and using a Morgan table, the researchers selected 200 principals from the overall sample. Hasanvand et al. reported

a significant correlation between distributed leadership and principals' self-efficacy (R= 0.343). The findings suggest that self-efficacious principals are more inclined to share leadership.

Principals also have a role in distributed leadership through hiring practices. Supovitz and Tongatta (2013) noted that principals in distributed leadership schools often made staff hiring decisions independently without involving all team members, although they involved multiple individuals in most decision making. For example, findings from a multisite qualitative study by Bush and Glover (2012) conducted in nine London schools indicated that principals believed they were successful because they were responsible for hiring faculty members who shared the school's values, vision, and goals. Bush and Glover noted that role clarity is central to effective distribution of leadership and that principals must ensure a link between the individual responsibilities of newly hired faculty members and the strategic aims of the school. The findings suggest that a principal's ability to hire effective faculty members is a prerequisite for effective distribution of leadership.

Midlevel Leaders

In addition to principals, midlevel leaders, such as instructional coaches and department chairs, are involved in distributed leadership practices in schools. Klar (2012) conducted a multisite case study to determine how three high school principals fostered the instructional leadership capacities of their department chairs. The principals in the study reported using distributed leadership to transform the leadership capacities of their department chairs into PLC leaders. Although Klar provided some empirical data of how

principals used distributed leadership to enhance the leadership capabilities of midlevel leaders (e.g., department chairs), further research could provide a better understanding of their practices.

In addition to understanding the principals' perspective of distributed leadership practice, it is important to understand the viewpoint of midlevel leaders. T. Williams (2013) conducted a phenomenological study to explore the distributed leadership experiences of 10 midlevel leaders who served as full-time mentors and instructional coaches in a school district in the United States. Analysis of the data obtained from repeated in-depth interviews showed that distribution of instructional leadership between principals and formal midlevel leaders began with an understanding of the shared vision and goals. Williams stated that there was a positive impact on instruction when the main goal of distributed leadership was to support collaboration regarding instruction. Williams noted, however, that to sustain distributed leadership in schools and for midlevel leaders to be effective, principals must be willing to let go of some leadership roles and power. Williams indicated that in addition to the initial induction training as coaches or mentors, there should be ongoing professional development by principals and district leaders to prepare teachers to take on their new roles as leaders in a distributed leadership model.

Klar (2012) also conducted multisite case studies in three high schools in a district in Wisconsin to determine how department chairs contributed to the distribution of instructional leadership. Data collection from the three schools was from semistructured interviews, observation, and analyses of relevant documents. The principals from the

three schools reported that the department chairs contributed positively to distributed leadership practice because the principals fostered understanding of the distributed leadership model by clarifying expectations and building commitment (Klar, 2012). Klar also indicated that the department chairs contributed to distributed instructional leadership because the principals of the three schools modeled how distributed leadership and provided them with individual and team professional development opportunities. Klar, however, reported that even though the principals engaged in similar strategies to develop the distributed instructional leadership abilities of their department chairs, each principal used specific strategies that served the unique needs of their school. Klar and T. Williams (2013) noted the need for more studies to focus on the way midlevel leaders, such as instructional coaches and department chairs, contribute to distributed leadership practice.

Teachers' Roles

Involving teachers in leadership roles is not a new concept in schools. Boyd-Dimock and McGree (1995) indicated that in the past teachers served in different roles such as team leaders, department heads, and curriculum developers. Spillane et al. (2003) added that the distributed leadership model required teachers, either individually or collectively, to take on leadership responsibilities beyond the classroom including mentoring, supervising peers, or providing professional development. Harris (2008) noted that teacher leadership involves teachers at different levels in an organization to engage in decision-making opportunities. The emphasis on educator guidance shifts the focus from the principal as a single heroic leader to the involvement of teachers and others in

school leadership roles (Leithwood, Louis, et al., 2009). Louis et al. (2013), however, argued that a change of leadership style, particularly in schools serving disadvantaged students, would require teachers to take on leadership responsibilities beyond the classroom to ensure school-level improvement.

In a distributed leadership model that has teachers sharing leadership responsibilities with principals and others in formal leadership roles, leadership shifts from the sole responsibility of the principal to include multiple individuals. The shift in leadership from principal to teachers and others, however, does not imply that principals are no longer important, but that they share power and decision making with teachers and others (Hairon & Goh, 2014; Harris, 2009). Louis et al. (2013) conducted a 3-year interpretative qualitative study to examine how teachers and administrators from a suburban U.S. technical-vocational high school who were engaged in distributed leadership practice interpreted their experiences. Collection of data were from 23 interviews over 3 years from teachers and school and district administrators, as well as observations, and document analysis. Staff at the school stated how grateful they were for the many opportunities they had to improve their work and to contribute to overall school improvement (Louis et al., 2013). Louis et al. noted that in addition to their classroom roles, teachers also served in different leadership capacities as department chairs, committee chairs, and mentors. The researchers also stated that distributed leadership allowed teachers to be involved in interviews to replace a well-loved principal and three of the four original and senior vice principals. Louis et al. found that even with

substantial staff turnover at the school, teachers understood distributed leadership better by the third year.

Distributed leadership involving teachers and others depends on the leadership activities and responsibilities principals are willing to relinquish. Analysis of data from a study by Grenda and Hackmann (2014) showed that administrators from each case study setting shared the organizational tasks and responsibilities with teachers and offered them many opportunities for engagement. Grenda and Hackmann reported that the teachers performed several different tasks and roles (i.e., developing elements of the master schedule in addition to planning and executing activities, standardized testing, and student discipline). The researchers considered the perspectives of teachers in understanding what leadership roles principals gave up for teachers to engage in leadership roles in different schools. Further research in a school using distributed leadership might reveal other powers that a principal is willing to relinquish to ensure that multiple individuals are involved in decision making in the school.

Although multiple individuals are involved in a distributed leadership model, the findings from several research studies indicated that one person is still in charge of making sure the school is moving in the right direction. Vlachadi and Ferla (2013) stated that not all teachers are leaders, but that all teachers should have the opportunity to lead. In schools using the distributed leadership practice model, the principal retains the central role in decision making (Grenda & Hackmann, 2014; Hairon & Goh, 2015). However, findings from the multiple-site case study conducted by Grenda and Hackmann (2014) to examine instances of distributed leadership in three midlevel schools, showed that

principals are not experts in all things. Grenda and Hackmann argued that because principals are not authorities in all areas but serve as facilitators in curricular issues, they must work closely with subject-area leaders to provide the resources teachers need to move forward in their roles as teachers and instructional experts. Grenda and Hackmann also noted that even though teacher leaders typically are not in formally designated leadership roles, they complement formal leaders in taking on leadership roles when they understand the school's vision and are involved in decision making.

PLCs as Leadership Strategy

PLCs are an example of organizational structures that leaders in some schools employ to aid in the distribution of school leadership tasks. Sanzo, Sherman, and Clayton (2011) conducted an exploratory multisite case study by interviewing 10 successful middle school principals in the state of Virginia. Sanzo et al. focused on answering the following research questions: "(1) How do leaders develop a shared understanding of their organizations? (2) How do leaders support and sustain school performance? (3) What do leaders do to facilitate change?" (p.34). Sanzo et al. reported that the principals referenced their use of PLCs to promote a shared vision and leadership responsibilities in their schools. The principals also reported using PLCs as a structural organizational tool to promote shared leadership and to empower their staff members (Sanzo et al., 2011). Sanzo et al. concluded from their analysis of data that the principals used PLCs as an organizational structure within each school to aid distribution of leadership and shared decision making. However, the researchers pointed out that for school leaders to use

PLCs effectively in a distributed leadership model, administrators and teacher leaders need ongoing training on how to use PLCs to meet the needs of students.

PLCs may serve as organizational tools adopted by leaders in some schools using the distributed leadership model to develop teachers' knowledge and skills. Klar (2012) conducted a secondary analysis of previous research findings to identify specific ways in which principals in three urban high schools used PLCs to foster the leadership capacities of their departmental chairs. Klar found that the principals used PLCs as the organizational structure for faculty members to work collaboratively to enhance their knowledge and to the acquire skills needed to increase the organizational capacity of the school and to improve student learning. Klar also reported that each principal used a combination of individual and team activities to model the approaches to distributed leadership and collaborative learning they hoped their chairs would employ when working with teachers in their departments.

In some schools, principals may use PLCs as a means to clarify the expectations of the distributed leadership model. Louis et al. (2013) conducted a single case study using interviews, observations, and document analysis to examine how teachers and administrators who engaged in a 3-year distributed leadership practice in a vocational U.S. high school interpreted their experiences. The principal used PLCs as the main tool for distributing instructional and curriculum improvement strategies to better student learning. Louis et al. noted that the principal deliberately selected teachers who had not previously served in committee chair leadership positions at the school and trained them in group facilitation skills. Three years into implementation of distributed leadership

practice at the school, most faculty members understood that school-wide PLC committees served as a vehicle for influencing successful implementation of distributed leadership practice (Louis et al., 2013). Finally, Louis et al. noted that developing the culture of the PLC was one of the structural changes that favored distributed leadership practice at the school.

An essential component of principals using PLCs as an effective tool for distributed leadership in schools is working collaboratively with teachers. DeMatthews (2014) conducted an interpretative qualitative study to understand how leadership distribution occurred across six elementary schools in West Texas to facilitate PLCs. DeMatthews found that the principals used PLCs as a tool to share the schools' vision and goals and to distribute leadership roles among teachers. DeMatthews also noted that the principals used PLCs to provide time and structure for teacher leaders to lead their peers in the use of effective instructional teaching strategies. DeMatthews concluded that PLCs served as a way for teachers to generate new knowledge, new practice, and as an avenue for teachers to work together to share ideas and practices to improve their pedagogy. DeMatthews's finding support the Dufour et al. (2008) argument that in a school using a PLC as an organizational tool to improve instructional practices, faculty members must work together to create structures to promote a collaborative culture and to achieve their collective goal of improving students' learning.

Principals' willingness to share leadership and to work collaboratively with teachers is vital to using a PLC as an effective school improvement tool. For example, Liljenberg (2015) noted that in a distributed leadership model, involving teachers in

PLCs and collaboration supported positive school change by influencing the developmental growth of all faculty members and creating a culture that enhanced trust. Liljenberg also argued that positive outcomes of distributed leadership in schools engaged in PLCs depend on the professional attitude of the faculty towards collaboration and development within the school. According to DeMatthews (2014) and Liljenberg, distributed leadership practice plays a significant role in creating the conditions that initiate PLCs in schools. Hulpia, Devos, and Van Keer (2011) have shown that in some schools, PLCs served as a means of distributing leadership responsibilities. Ozdemir and Demirciog˘lu (2014) have also noted that distributed leadership exists in schools in the form of collaboration and social interactions among colleagues without PLCs.

PLC as a Structure for Distributing Instructional Strategy

PLCs may serve as a means for teachers to learn continually from each other about specific content-based instructional strategies. Drawing upon the distributed leadership framework, Richmond and Manokore (2010) analyzed data from a 5-year reform project that aimed to educate students in science through inquiry. The data collected came from teachers' PLC unity meetings. Richmond and Manokore analyzed the transcripts of first and fourth-grade teachers who described how they utilized their professional development time to identify elements that made their learning community productive and sustainable. All teachers interviewed indicated that they developed confidence in their content knowledge and teaching practices by participating in regular PLC meetings with their team members. Richmond and Manokore stated that the teachers perceived positive benefits for student achievement on a day-to-day basis as well as for

larger scale assessments. The teachers in the study valued PLC meetings as a forum for sharing and reflecting on instructional practices and demonstrating evidence of student learning (Richmond & Manokore, 2010). Richmond and Manokore, however, reported that despite teachers' success in using PLCs as an organizational structure for distributing leadership, the impact of district policies on the teachers' ability to use PLCs efficiently was a cause for concern. While Richmond and Manokore provided meaningful data that PLCs contributed to effective distributed leadership, they only examined a single subject and one grade level from a school that was not an IBMYP school.

To ensure the effectiveness of PLCs, school leaders must shift their attention from goals that improve instruction to goals that focus on improving students' learning. In schools using PLCs as an organizational tool to distribute leadership, administrators along with teachers and other faculty members clarify their different roles and identify how their actions and leadership contribute to organizational learning (Spillane, 2012). Distributed leadership is used to develop teachers as leaders, while PLCs may be used by schools to align professional development activities with the school's goal of improving students' learning (Walker & Ko, 2011). McKenzie and Locke (2014) found that several schools used PLCs differently but mainly as a tool for to improve instruction and for teachers' continual professional development.

Challenges Faced by Teachers as Leaders

Distributed leadership requires teachers to take on additional responsibilities in schools, but researchers have shown that not all teachers and staff are willing or capable of leading. The hierarchical nature of leadership that existed in education in the past can

also challenge the notion of principals sharing leadership roles with teachers and other faculty members. To identify challenges faced by teachers as leaders working in schools to improve instruction, McKenzie and Locke (2014) conducted a year-long case study involving six teacher leaders working in an urban elementary school. The teacher leaders stated that in addition to dealing with the conflict that resulted from the responsibility of improving instruction they also had difficulty raising overall school ratings, closing the achievement gap, and building the expertise of new and experienced teachers (McKenzie & Locke, 2014). Cherkowoski and Brown (2013) and Torrance (2013b) noted that with so many additional responsibilities, teacher leaders have difficulty taking on leadership responsibilities. Lumby (2013) suggested that additional research should focus on understanding how the relationship between the principal and teachers influences leadership distribution and if the practice increases teacher the workload.

Another challenge identified by researchers is the lack of training for teachers and administrators using distributed leadership practice. Torrance (2013b) noted that lack of training and experience for teachers as leaders made it difficult for some teachers and faculty members to take on leadership responsibilities in schools. Vlachadi and Ferla (2013) indicated that lack of training for principals using the distributed leadership model makes it more difficult to distribute leadership successfully. Liljenberg (2015), however, argued that distributed leadership could only flourish when teacher leaders are empowered and trained to take on leadership responsibilities. Harris (2013) noted the greater challenge that teachers and schools faced was determining how distributed leadership contributes to school improvement goals and student learning outcomes. To

determine how teachers and principals contribute to leadership distribution to improve students' learning outcomes, researchers must understand the challenges that come with involving teachers and other nonformal faculty members in school leadership roles.

Implementation of International Baccalaureate Programs

The context of this study is a public IBMYP school in one of the Rocky Mountain states. The rapid adoption of IB programs in public schools in the United States has made international education curriculum more accessible to students from diverse socioeconomic backgrounds (IB, 2016). Many public-school leaders in the United States choose IB programs for different reasons as a means to promote global citizenship and to offer quality education that allows students to compete in the global economy (Bunnell, 2011; Monreal, 2016; Resnik, 2012). Sperandio (2010) stated that one of the many reasons given by school leaders in the United States for choosing IB programs is the perception of the success of the programs in other schools. Sperandio noted that some public school leaders adopt the IBMYP as a way of providing students innovative curriculum to improve academic performance.

Reasons Why Public-School Leaders Adopt the IBMYP

The IBMYP is one of the four IB programs adopted by public school leaders in the United States. Monreal (2016) conducted a case study to understand why one public school in the United States chose to adopt the IBMYP. Monreal obtained data by analyzing documents and interviewing the principal, vice principal of curriculum and instruction, vice president of student services, and the IB coordinator from a public middle school in the Midland region of South Carolina. Monreal noted that the findings

at this one school were similar to earlier studies by Sperandio (2011). Findings revealed that five of the administrators from this school chose IBMYP for different reasons. One of the reasons given by many of the school leaders was that the flexibility of the IBMYP made it a preferred curriculum framework for the school. Because the few research studies conducted in IBMYP schools have been in international private schools, future research should focus on the implementation and coordination of the program in a public-school setting (Monreal, 2016). The current study focused on how distributed leadership influences the implementation of the IBMYP in public school setting.

Distributed Leadership in IB Schools

The few research studies that have focused on distributed leadership in IB schools have been in international private school settings. Hallinger and Lee (2012) conducted case studies in five full-continuum IB schools located in Thailand, Vietnam, Hong Kong, and China to investigate leadership strategies associated with successful IB program implementation. Hallinger and Lee noted that distributed instructional leadership at the schools occurred when teachers engaged in cross-program collaboration and teaching (i.e., IBMYPs and IBDPs). Engagement in distributed leadership may also be associated with successful implementation of innovative programs in schools. Participants from Hallinger and Lee's study reported a greater understanding of the schools' mission and vision as influenced through distributed leadership activity rather than as goals the participants may have perceived in an achievement-based structure. Hallinger and Lee, however, noted that it was important to determine the challenges of program transition when instructional and distributed leadership do not aligned in IB schools.

Data obtained from another study involving multiple individuals involved in distributed leadership practices in private international IB schools also revealed that in addition to the benefits of engaging in the distribution of leadership, there were also challenges associated with the practice. Lee et al. (2012) also conducted case studies in five international IB schools located in Thailand, Vietnam, Hong Kong, and China. Lee et al. wanted to determine how instructional leadership responsibilities were distributed in full continuum IB schools and if distributed leadership contributed to more successful transition between programs and school-wide success. Data collected through interviews with teachers, administrators, and students revealed that school contexts presented challenges to successful implementation of multiple IB programs. The researchers reported that the case study schools needed to address parents' understanding or lack of understanding about the IB programs. Lee et al. noted that differences in pedagogical approaches embedded in the different IB programs served as another distinctive factor of concern to teachers and administrators at the case study schools. Lee et al. also reported that the external IB diploma exams and university requirements functioned as constraints and shaped different learning cultures, learning styles, teaching methods, and assessments for IBMYP and IBDP students. The researchers noted that the constraint students faced was because IBMYP was about the processes and skills required for learning, while the IBDP was more content driven.

Summary and Conclusions

Chapter 2 began with an introduction, an overview of the structure of the IB programs, and a rationale for the conceptual framework used. To help provide insight

into what researchers know and what is still unknown about distributed leadership practice, the literature review featured the following topics: historical perspective, operational definition, leader plus and practice aspects of distributed leadership, teacher leadership, professional learning communities, and challenges faced by teachers in distributed leadership roles in schools.

The role of principals, teachers, and other formal and informal leaders has become an essential component of effective leadership in schools (Bush & Glover, 2012). Many schools adopt the IBMYP as an innovative educational program for school reform or a model of schooling (IB, 2016). Distributed leadership has recently gained attention with the multisite study conducted by Lee et al. (2012) at five international schools in Thailand, Vietnam, Hong Kong, and China with multiple IB programs. What has not been explored is how principals, teachers, counselors, librarians, and other formal and informal leaders involved in distributed leadership practice contributes to the implementation and development of IB programs, specifically, the IBMYP in public school settings. The adoption of the IBMYP by a growing number of public schools has increased its access to a more diverse student population. The increased adoption of the IBMYP by public schools serving a more diverse student population has, however, created challenges for schools that must reconcile the demands of the program with their local, state, and external educational requirements (Beckwitt et al., 2015; Stillisano et al., 2011).

There are many reasons given by public school leaders for adopting any of the four IB programs. Some public school leaders choose to adopt IBMYP as a way of

improving student academic achievement (Sperandio, 2010) or as means of providing students with the tools to compete in the global economy (Resnik, 2012). Monreal (2016), however, revealed that the flexibility of using the IBMYP curriculum framework to address local and national standards is the reason why some public-school leaders adopt the IBMYP. Monreal noted that because the few research studies in IBMYP schools have been in international private schools, future studies should focus on the implementation and the coordination of the program in public school settings.

While several studies have focused on distributed leadership in non-IB schools, few studies have focused on private IB schools, and none exists in public IBMYP schools. Researchers have noted that because schools have unique contextual and sociocultural needs, distributed leadership practice occurs differently in different contexts (Bush & Glover, 2012; Horon & Goh, 2015; Torrance, 2013b, & Vlachadi & Ferla, 2013). There has been limited exploration of the influence of distributed leadership in the context of the IBMYP, and none exploring how distributed leadership contributes to the implementation and development of the program in a public-school setting. The need for research is necessary to understand how the organizational structures in a public IBMYP school and the roles and relationships of the individuals involved distributed leadership play a role in the practice.

In Chapter 3, I explain the research methodology and rationale for the design of this study. I address my role as researcher, data collection procedures, instrumentation, and data analysis plan. I also discuss issues of credibility, dependability, confirmability, and ethical procedures.

Chapter 3: Research Method

The purpose of this case study was to identify the perceptions of administrators, teachers, the IBMYP coordinator, and support staff regarding how distributed leadership influences the implementation of the IBMYP at a public middle school in one of the Rocky Mountain states. I explored the interactions and relationships between formal and informal leaders, and how support staff engaged in the distribution of instructional leadership to gain an understanding of the influences these practices have on to the implementation of the IBMYP at this public middle school. I examined documents related to the application of the organizational structures, routines, and tools to gain a better understanding of the contextual factors in place to make distributed leadership practice possible at this public school and to explain how the practice influenced the implementation and development of the IBMYP. Finally, I explored how the participants' involvement in distributed leadership contributed to the improvement of student academic achievement at this school.

In this chapter, I introduce the research design and outline its rationale, explain my role as researcher, and discuss the methodology used for this study. This chapter also includes justification for the targeted population and participants, the procedures for recruiting and selecting participants, instrumentation, the data collection process, and the data analysis plan. Finally, included in Chapter 3 is a discussion of issues of trustworthiness involving credibility, transferability, dependability, conformability, and coding reliability.

Research Design and Rationale

In this section of Chapter 3, I restate my research questions, describe the research design, and provide the rationale for choosing a qualitative research design. I also justify the selection of a case study research approach over other qualitative research methods.

Research Questions

The focus of this study was to understand the perceptions of administrators, teachers, the IBMYP coordinator, and support staff regarding the influence of distributed leadership practices on the implementation and development of the IBMYP at a public middle school in one of the Rocky Mountain states.

There are four related research questions:

- RQ1: How are distributed leadership practice characteristics perceived by administrators, teachers, the IBMYP coordinator, and support staff at a public middle school in one of the Rocky Mountain states implementing the IBMYP?
- RQ2: What organizational structures, routines, and tools influence administrators, teachers, the coordinator, and support staff in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?
- RQ3: What training, professional development, or ongoing educational initiatives are staff aware of when implementing the IBMYP?

- RQ4: What barriers or challenges have staff encountered in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?

Research Design

The purpose of this case study was to identify the distributed leadership practices that administrators, teachers, the IBMYP coordinator, and support staff in one public middle school in one of the Rocky Mountain states have demonstrated in implementing the IBMYP. A qualitative form of inquiry guided this case study. The elements of qualitative research align with the study's primary focus: to determine how distributed leadership contributes to the implementation and development of the IBMYP in a public school, what characteristics of the practice are evident, and what structures have been and continue to be in place to implement the IBMYP successfully. Unlike a quantitative study where researchers seek to understand the cause of phenomenon through an experiment often involving a large random sample, Patton (2002) indicated that qualitative researchers build an understanding of a phenomenon through purposeful sampling with small samples, even as few as one individual. Qualitative inquiry was appropriate for this study because the focus was an in-depth investigation of distributed leadership practice in one public IBMYP school.

The choice of a single case study aligned with Yin's (2009) statement that a case study is appropriate when researchers have an opportunity to observe and analyze a situation that has not been accessible to other researchers. Yin also noted that a single case study is useful when the case is unique or studied from a unique setting. The school I

chose was unique because the school had used distributed leadership for at least 7 years to implement the IBMYP during the same period. Data from the school website also showed an improvement in student academic achievement on standardized state tests.

A case study aligned with the research questions for this study and the conceptual framework of distributed leadership where multiple perspectives are most appropriate for understanding the interactions among formal and informal leaders in carrying out leadership tasks in a school (see Spillane, 2006). According to Yin (2009), case studies are better for answering how and why questions because such questions "deal with operational links needing to be traced over time, rather than mere frequencies or incidence" (p. 9). Another advantage of using a case study design approach is that it allows researchers to use information from a variety of sources such as interviews, observations, relevant documents, and artifacts to understand the concept. The triangulation of data from multiple data sources in case studies helps to establish credibility and increases generalizability. Finally, Merriam (2002) noted that because a case study offers a means of analyzing complex problems consisting of multiple variables, it can assist in explaining why an innovation worked or did not work in education. The case study seemed the best approach given my desire to understand how this school used distributed leadership to align the IBMYP requirements with local and national standardization requirements.

I considered a phenomenological approach for this study but did not select it because, unlike a case study, a phenomenological study focuses on understanding the shared lived experiences of the participants. A case study also allows researchers to

engage in a detailed investigation of a single event or subject over time (Merriam, 2009). Moreover, a case study, according to Yin (2009), focuses on individual experiences including differences in the experiences of each and not just their shared experiences. Although a phenomenological study contains elements similar to those of a case study, a phenomenological study uses in-depth interviews as the primary source of data collection, while case-study researchers use multiple methods of data collection to gain insight and knowledge from emergent themes. Patton (2002) noted that using multiple sources rather than one data source contributes to the overall credibility of the research findings.

I also considered an ethnographic approach for this study, but Creswell (2013) noted that it would have shifted the focus from an in-depth understanding of the concept of distributed leadership at this school to determining the shared values of the faculty members. Ethnographic research would have involved immersion in the culture of the school and would have required detailed observation and description of the activity of the entire faculty of this one school. While this might produce a rich data, data collection would have required a significant time commitment.

Previous researchers determining the influence of distributed leadership in private international schools have also used case study. The goal of this study was to examine the experiences of a sample group of eight participants serving in different roles from the public IBMYP school under study. Rather than capture the meaning of their experiences and its relationship to the concept, I sought to gain an in-depth understanding of the practice from the individual experiences of a few participants at this one school.

Role of the Researcher

As the only researcher, I served as the key instrument (as suggested by Maxwell, 2013). I was responsible for developing the data collection instruments as well as collecting, interpreting, analyzing, and synthesizing the data from interviews, documents, and artifacts. To collect accurate data that describe and provide a deeper understanding of the concept from the perspectives of the few individuals at this school, I collected data from interviews and documents. Even though I am a district IBMYP educator in another school district, I have never worked at this school or its district. I did not have children attending the school or any school in the district, and I have not had any personal affiliation with anyone working at this school or district. There was no conflict of interest or ethical issues because I conducted the study at this school. Although I may have met some of the personnel and administrators of the chosen school at IB conferences and workshops, I did not know any faculty members at this school. My initial contact with the principal was through the phone number I obtained from the school's website. There was also no conflict of interest related to my personal or professional affiliations with the district and the local community. Since the perceptions and the individual experiences of the participants were at the center of this case study investigation, privacy and confidentiality were of the utmost concern.

Methodology

In this section, I explain the reasons for selecting one school rather than the two identified sites for the study, the population, and sampling strategies used including participant selection criteria. I list additional sources of data, including instrumentation

and protocols for interviews and observations. I briefly highlight document and artifact analysis in this section.

Site Selection

I refer to the data collection site selected for this study by the pseudonym Rocky Mountain Middle School (RMMS). I used this pseudonym to protect the participants and increase the trustworthiness of the data as well as round out demographic data to disguise the school. RMMS is a diverse IBMYP school, serving approximately 800 students in Grades 6 to 8. Data retrieved from the school's website showed that the total number of students increased by 60% from 2010 to 2016. During this same period, the Hispanic student population increased by 30%, the White student population increased by 25%, the African-American student population decreased by 30%, the Asian student population increased by nearly 40%, and students identified as others decreased by 50%. The number of students receiving free and reduced lunch decreased from 70% in 2010 to 40% in 2016.

I chose RMMS as the only data collection site for this study because several program managers in the IB America office identified the school as a public school using distributed leadership to implement the IBMYP while demonstrating improved student academic achievement. I also chose RMMS because the principal was willing for me to conduct the study at the school. I considered two other schools with similar cultures, resources, and student demographics, but my personal and professional ties to some of the faculty members and administrators at these schools may have impacted my role as

researcher and the overall results of the study. Therefore, RMMS was the most appropriate site for this study.

Participant Selection Logic

The eight participants included two administrators, one IBMYP coordinator, and six teachers who fit the preestablished criteria, and one support staff member. To meet the criteria for this study, the participants must have worked at the school for at least 1 year since the school adopted the IBMYP 7 years prior to this study. The teachers needed to be certified mathematics, reading, or English instructors; all others must have had direct contact working with students in Grades 6 to 8 for at least half a day. The selection criteria were necessary for all participants because individuals who spent less than 1 year at the school or had less frequent contact with students might not have provided enough information to answer the research questions. I also invited instructors to participate who were not English or mathematics teachers, as well as the IBMYP coordinator (a midlevel leader), and one support staff member to help understand their various perspectives and views of distributed leadership and the implementation of the IBMYP at this school. As noted, no previous studies discussed in the literature regarding the influence of distributed leadership in the implementation of IB programs focused on a school that had engaged in distributed leadership practice for at least 7 years. There was also no mention of how long the international private schools offering multiple IB programs and using distributed leadership studied by Hallinger and Lee (2012) and Lee et al. (2012) had been engaged in the leadership model prior to the research.

To gather sufficient and appropriate data, I used purposeful, strategic sampling to select and invite participants who met the preestablished criteria. I proposed to use snowballing sampling, but it was not necessary because I had enough participants volunteer to participate in the study. Purposeful sampling of individuals with different levels of experience serving in different roles was helpful in strengthening this single case study (Patton, 2002). Rich data from multiple sources, including the eight individuals who represented the larger group of 55 faculty members, helped provide information to answer the four research questions.

It was important to interview the mathematics and English teachers because a school's adequate yearly progress towards meeting the No Child Left Behind Act or Every Student Succeed Act goals are measured using students' scores on state assessment tests in these areas. I had anticipated interviewing support staff who met my established study criteria to identify services and programs available for meeting students' needs in a public middle school implementing the IBMYP.

Achieving the sample size necessary for meaningful qualitative data according to Patton (2002) depended on collecting enough data to understand the characteristics of distributed leadership at this school, determining what data was useful and credible, what I, as the researcher, could accomplish during the research period, and the resources I had for this study. Yin (2009) suggested that to be accurate, sample size should not be too large or too small; however, it should be enough to extract enough meaningful data for the research study. The sample size of eight individuals for my research considered both Patton and Yin's direction for appropriate sample size. A sample size of eight aligned

with the goals of my study, and I anticipated that the information received from this number of participants would provide me with information-rich data until I reached the point of saturation.

Participant Identification and Recruitment Procedures

My first contact with RMMS was via a telephone call to the principal who gave me permission to conduct the study in the school. The principal connected me with the individual responsible for approving research studies at the school district level. I received the application from the district, which I submitted after I received approval from Walden University's Institutional Review Board (IRB). I followed the school and district's guidelines and established policies to conduct research. The participant identification and recruitment process began after requesting and receiving approval from the IRB.

To facilitate participant recruitment, I asked the principal's permission to contact all faculty members at the school directly. After, the principal permitted me to contact all faculty members, I sent out the initial email inviting all 55 faculty members to participate in the study. I sent a second email, contacting only the 20 participants who responded to the initial recruitment email and who met the preestablished criteria and characteristics of the study. The purpose of the second email was to ensure there were adequate data to answer the research questions (as guided by Patton, 2002).

The letter to the participants who met the preestablished criteria included my name as the researcher, the criteria I used to identify the school, the purpose of my request and the study, what was involved in participation, and how to contact me if they

chose to participate or not, or if they had questions. After a week of waiting for the potential participants to respond, only eight of the 20 participants responded to the second email, I sent an email reminder to the 12 participants who had not responded to my second email and did not receive additional email response back.

Maxwell (2013) advised establishing a positive relationship with participants from the onset and throughout the study as an essential aspect of the research design. Building a trusting and respectful relationship between the researcher and participants according to Seidman (2006) is also ethical and necessary to obtain a rich data. Once I received emails back from the eight potential participants willing to volunteer for the study, I sent a third email with the consent document attached as a way of providing participants with detailed information about the study. Potential participants had a week to review the consent document and to contact me with further questions or concerns regarding the study. I did not have to use snowball sampling and did not ask teachers already participating in the study to assist in recruiting other participants, because I had enough volunteers after I sent the recruitment and third emails. I did not turn away any participant who volunteered to participate in the study.

The third email containing the consent agreement included a description of the purpose of the study, my name and identification as the researcher, what was involved in participation, and the criteria for identifying the school and participants. I stated the benefits or potential risks of participating, the procedures and voluntary nature of the study, my dissertation chairperson, contact information, and IRB approval number. I also indicated where and how to get answers to additional questions and included the consent

and confidentiality form with proper notification of confidentiality. I discussed issues concerning protection of the participants and school's identity, confidentiality issues associated with communication via email, and an invitation to respond.

After the participants had reviewed the documents, they contacted me by email indicating their willingness to participate or not. Once I received the emails from the participants willing to participate in the study, I sent the consent form to the participants via email. I told all participants to bring a hard copy of the signed consent form with them to the one-on-one interview. My visit to the study site enabled me to interview participants and review relevant documents such as professional development certificates, unit and lesson plans, meeting notes, sample students' assessments, program evaluation reports, meeting agendas, curriculum plans, and communication to students. According to Yin (2009), in addition to interviewing participants, reviewing relevant documents in a case study was also necessary because there was little or no historical background of the concept under study. My visit enabled me to interview participants and to obtain relevant documents from the participants involved in distributed leadership practice at this school.

To protect participants' confidentiality, although I emailed and contacted participants using their real names, I selected pseudonyms to identify them throughout the study, and I did not include any identifying information about them or their school in the report. In addition to protecting participants' confidentiality, I informed them they had the right to decline to respond to any question or withdraw from the interview or the study at any time. Finally, once the participants understood the purpose of the study and their right to participate or not, I gave them the opportunity to ask questions regarding the

consent form or the interview guide. The interview only proceeded after the participants had signed the consent form. I took into consideration the convenience and schedule of each participant to determine the best time for the interview. I explained to the participants that the interviews would last 45 minutes to respect the demands of their workday and schedules. For member checking, I informed the participants that I would send the transcript to them via email so they could review my analysis of their responses and clarify and correct errors in my transcription of their views.

Instrumentation

The instrumentation for this case study included administrators and faculty interview protocol (Appendix A) and a coding sheet for the relevant documents and artifacts. To address the how and what questions of this case study, I used multiple data collection tools that aligned with the purpose of the study and that made it possible to answer the research questions. I also involved participants with different roles and experiences, which provided enough data to answer the research questions.

Interviews. Interviews were the primary source of data collection to capture the lived experiences of administrators, teachers, and staff at RMMS associated with the implementation of IBMYP and the meaning they made of their experiences. As suggested by Patton (2002), I used the same predefined questions for all participants and asked the questions in the same order to minimize the effect of my role as the interviewer on the results and to enhance triangulation. I created a semistructured interview guide (Appendix A) for all faculty members with open-ended questions, prompts, and additional follow up questions as a means for the participants to provide additional

detailed answers and responses based on their roles at the school. Face-to-face interviews, inspired by Yin (2009), also allowed for spontaneous answers from the participants without extended reflection I used my computer for recording to ensure high-quality audio responses during the interviews. I brought my iPhone and iPad as additional recording devices in case the computer became problematic or failed. I brought extra copies of the consent form and interview guide in case I had to interview other participants who volunteered to participate in the study.

With the participants' permission, I took notes and recorded the interviews. Audio recorded interviews, according to Yin (2009), ensure an accurate account of the interview. I took Patton's (2002) advice by taking notes during the interview as a way to help me pace the interview and to formulate new questions or clarify an earlier statement made by a participant. In addition to reviewing the interview notes and keeping a memo of my thoughts and reflections from each interview session, I also observed the nonverbal communications of participants during the interviews.

The strength of the interview guide depended on my ability to design questions to help me obtain the same or similar information from all the participants. The categories of the interview questions used in developing the interview guide were from the four research questions, the conceptual framework, and the implementation requirements for IBMYP. In creating the interview guide, I also adhered to Janesick's (2011) advice by making sure that the interview questions had a combination of descriptive, follow-up, structural, and contrast questions. Creswell (2013) suggested that providing the appropriate transition from question to question can help maintain the goal of the

interview, so the procession will flow as planned. Following Janesick and Creswell's advice ensured the logical flow of the interview.

Following the closing comments, I thanked the participants for their time, and I offered a $10.00 gift card. Finally, I reminded the participants that I would share the transcripts with them by email for member checking and asked them to review the transcript for my analysis of their responses.

I created a contact summary form and used it in summarizing all the information from each contact. Each contact summary form contained the names of the participant and how documents collected from each participant related to the research questions and conceptual framework. The analysis of data collected from each participant was ongoing from the first to the last interview.

Public document review. Public documents relating to the implementation of the IBMYP, the research questions, identified themes, and issues related to the conceptual framework of distributed leadership were useful to identify areas related to the study. I followed Marshall and Rossman's, 2006) advice by reviewing related documents as a way of gaining knowledge of the school's history, how the school publicised their standardized assessment results, and a deeper understanding of the policies produced by the school to support implementation of the IBMYP. Information obtained from reviewing the documents was useful for comparing data collected from interviewing the participants. The information found in the public documents further guided my clarification questions to gain a better understanding of distributed leadership practice in this school.

Public documents included information found on the school website such as the school's 3 years scores on state standardized tests and the behavior plan. The principal permitted me to review the master schedule, school and district improvement plans, the evaluation report from the last visit by the IB site visitors, and the school organizational chart showing job descriptions of all school-level positions and responsibilities.

Documents relating to collaboration within the school, professional development plans, minutes of meetings, newsletters, and formal policy documents relating to the implementation of the IBMYP and student academic achievement were useful. School documents such as the staff handbook, a complete list of all staff assignments, and the current and past years' professional learning calendar helped provide the background of the school's focus on staff development and professional learning. Analysis of other school documents relevant to the conceptual framework, research questions, program implementation, and school instructional processes were appropriate.

Private document and artifact review. The participants shared individual private documents relevant to their practice of distributed leadership and the implementation of IBMYP at this school. Yin (2009), indicated that document and artifact reviews help corroborate data from other sources. I also requested school district demographic data regarding the percentage of students receiving free and reduced lunches, the percentage of students identified as special education, and English language learners. The participants also shared personal and professional documents such as IBMYP unit and lesson plans, evidence of recent or past professional development training, and their recent IBMYP evaluation report. According to Marshall and Rossman

(2006), individual archival documents helped with corroborating data obtained from interviewing the participants.

Researchers noted the importance of maintaining the confidentiality of all school and individual private files, related program documents, and artifacts. I created a document summary form that I used to list each document and its relevance to the study. Content analysis helped me to describe, interpret, manage, and organize all data obtained from the documents as they related to the research questions and conceptual framework.

Data Analysis Plan

The purpose of this research was to identify the perceptions of multiple individuals on how distributed leadership influenced the implementation of the IBMYP at a public middle school. I began analyzing the data from the interviews and documents collected on the first day of interviews. The first step in data analysis consisted of ongoing hand coding of both the data from the interviews and documents to discover trends, themes, and patterns. The second step in data analysis involved further coding and memoing to reduce data and identify themes and patterns. According to Creswell (2013), qualitative case study analysis involves the description of data, development of categories, and organization of data around topics, themes, or research questions to serve as a guide for data analysis.

Content analysis of the documents also helped me to determine if information from the documents supported the interview responses. Yin (2009) advised the qualitative researcher to use information from documents to corroborate and augment findings from other data collection sources. Content analysis was helpful in analyzing, coding, and

organizing the data into different categories to understand the concept from the perspectives of the participants in this study. I shared my findings with professionals in the field as a way to double-check the accuracy of the research findings and identify conflicting and inconsistent results. I did not seek outside help from practitioners and experts who are familiar with qualitative case study research to determine whether the findings, conclusions, and interpretations support the information obtained from the data.

Issues of Trustworthiness

According to Merriam (2009), it is vital for qualitative researchers to provide and demonstrate that the research findings are solely from the study and not influenced by the researcher in any way. Maxwell (2013) noted that because it is impossible to eliminate validity threats, it is fundamental for qualitative researchers to identify how to reduce or minimize them. Maxwell also indicated that bias and reactivity threaten the credibility of qualitative research. According to Creswell (2013), an explanation of how my values and experiences as an IBMYP educator may have influenced the data collection and outcomes of the study, either positively or negatively, helped reduce bias. Regarding reactivity or the influence of the researcher on the setting or participants, Maxwell (2013), advised researchers avoid leading the participants in any direction but allow them to share their individual experiences.

Credibility

To help establish credibility, I was conscious of separating my previous understanding of distributed leadership practice acquired from the literature review from the data obtained from the participants. Maxwell (2013) indicated that contacting the

participants several times before traveling to the data collection site and spending several days at the site in the case of this study, so 4 days at the site collecting data allowed engagement with the participants, which I believe might have been helpful in developing trust and establishing credibility (Maxwell, 2013). Another strategy for qualitative researchers to improve credibility of their study, according to Merriam (2009), is through member checks to ensure credibility; I did this by sending the interview transcripts to the participants to review my analysis of their responses. Feedback from all participants involved in the study helped to ensure accurate representation of their input. Finally, Miles, Huberman, and Saldana (2014) suggested using data from interviews, researcher notes, and document analysis to triangulate data to reduce bias and improve credibility. Triangulation of my interview, notes and relevant documents also helped to improve validity.

Transferability of the research findings to other similar contexts, according to Miles et al. (2014) requires a detailed and thick description of the data collection process, setting, and questions used during the interview phase. To address external validity, Merriam (2009) indicated that qualitative researchers use rich and thick data from multiple sources including observations, interviews, documents, and archival records to address transferability threats. Description of the participants' experiences included direct quotes. Data from interviews and the documents collected from all eight participants produced thick, rich data, according to Creswell (2013), will make it easier for readers to decide if the research findings are transferable to different contexts.

Concerning the dependability and confirmability of the study, Merriam (2009) suggested that qualitative researchers conduct an audit trail. Patton (2002) also argued that because qualitative researchers are the primary instrument, it is important to ensure the stability of the findings over time. To facilitate an audit trail by my committee chair and methodologist, I kept the raw data from the interviews, documents, and reflective interview notes.

Ethical Procedures

The checklist provided by Miles et al. (2014) helped me address ethical issues for the fieldwork required in this study. The checklist also included consideration of the worthiness or contribution of the project, competence as a researcher and interviewer, the informed consent and disclosure of the purpose of the study, and the benefits to both the participants and future researchers. The checklist also addressed avoidance of harm and risk to participants, trust between the researcher and participants, privacy and confidentiality, and intervention and advocacy. Finally, Miles et al. provided guidelines that assisted me with research integrity and the quality, ownership, and use of data; conclusions; and the use and misuse of results.

IRB documents. I followed the IRB protocol by utilizing proper information and consent forms. Approval for this study came from Walden University, and I obtained IRB approval (2017.06.05-15:16:33-05’00’) before collecting data and abided by all established protocol for protecting human subjects throughout the study. To protect the privacy and maintain the confidentiality of the participants and the school, I used

pseudonyms for all participants and the pseudonym Rocky Mountain Middle School (RMMS) to serve as means to identify the school throughout the study and in the report.

Ethical concerns. I did not encounter any ethical problems during the recruitment process and interaction with faculty members of RMMS. The consent and confidentiality form helped me maintain integrity throughout the study and respect the individual autonomy and fundamental principle of ethics in qualitative research. In addition to using pseudonyms to fulfill the ethical responsibility of confidentiality of the participants involved in a research study, Miles et al. (2014), noted the importance of using appropriate measures to guard and protect the participants' information. These actions included the following:

- Guarding and protecting participants' information from unauthorized access, use, disclosure, modification, loss, or theft by making sure that data were secured and inaccessible to others.
- Assuring that the participants' information was safe on my personal computer that required a username and password for login. I also stored the participants' information on a flash drive and password-protected dropbox.
- Storing written documentation and transcriptions in a safe in my home office.

Treatment of data. I have kept all data obtained from each participant in this study confidential. The data will be securely stored for 5 years and then destroyed. As previously discussed, there were no professional or personal conflicts of interest or power differentials. Miles et al. (2014) advised qualitative researchers to secure data by backing up data regularly and storing all transcribed files in several locations. I kept three

electronic copies of the data in two different locations to ensure that the data were available if the originals were lost or corrupted.

Summary

Chapter 3 began with a reiteration of the purpose of the study, which was to determine if and how distributed leadership practice contributes to the effective implementation of the IBMYP in a public school. I restated the research and subquestions and explained my role as a case-study researcher. I provided a rationale for why a case study approach was the most appropriate as opposed to phenomenological or ethnographical research methods. I discussed the justification for the site, participant selection logic, and instrumentation employed in the study. The data analysis plan, including Creswell's (2013) use of qualitative case study analysis involving a description of the data, development of categories, and organization of data around topics, themes and relevant codes, served as a guide for data analysis. This chapter also included the description of issues of trustworthiness, including credibility, transferability, dependability, and confirmability. The final segment of the chapter included a review of ethical obligations, IRB requirements, and the protection of human subjects before, during, and after the data collection process, as well as data storage, and the future handling of data.

Chapter 4: Results

Introduction

The purpose of this case study was to explore the perspectives of administrators, teachers, an IBMYP coordinator, and support staff regarding how leadership distribution supports the implementation of the IBMYP at a public middle school in a Rocky Mountain U.S. state. I used a single case study to explore the perceptions of these educators to answer the four research questions. Chapter 4 includes an overview of the research questions, a description of the setting and demographics, the data collection and analysis process, and evidence of trustworthiness for this study. I present my findings from analysis of the participants' interview responses and the relevant documents they provided. I organize the results by emerging themes and their relationship to the research questions.

Research Questions

- RQ1: How are distributed leadership practice characteristics perceived by administrators, teachers, the IBMYP coordinator, and support staff at a public middle school in one of the Rocky Mountain states implementing the IBMYP?
- RQ2: What organizational structures, routines, and tools influence administrators, teachers, the coordinator, and support staff in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?

- RQ3: What training, professional development, or ongoing educational initiatives are staff aware of when implementing the IBMYP?
- RQ4: What barriers or challenges have staff encountered in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?

From these questions, I developed open-ended interview questions and a strategy to analyze related documents from the participants.

Setting

The single qualitative case study was at an IBMYP middle school in one of the Rocky Mountain states serving approximately 800 students. I used the pseudonym RMMS and rounded the data to disguise the school and protect the participants' privacy. I chose RMMS as the only data collection site because several program managers in the IB America office identified the school as a public school using distributed leadership to implement an IBMYP while demonstrating improved student academic achievement. I also chose RMMS as the data collection site because a school leader was willing for me to conduct the study at the school. I considered two other schools with similar cultures, resources, and student demographics. My personal and professional ties to some of the faculty members and administrators at these two other schools may have had an impact on my role as researcher and the overall results of the study; therefore, RMMS was the most appropriate site for this study.

Demographics

RMMS is a diverse IBMYP school, serving students in Grades 6 to 8. Information retrieved from the school's website shows that the total number of students increased by approximately 60% from 2010 to 2016., During this time, the Hispanic student population increased by about 30%, White students increased by approximately 25%, and Asian students increased by about 30%. The African-American student population decreased by about 20%, and students who identified as others also decreased by about 40% during the same 6 years. The number of students receiving free and reduced lunch decreased from approximately 70% in 2010 to about 40% in 2016.

The population for this single case study included a school principal, an assistant principal, the IBMYP coordinator, a librarian, a lead counselor, and three teachers who had all been at the school for at least 2 of the 7 years the school was engaged in the distributed leadership model. The three teachers included the English subject area leader, who was also a seventh grade English teacher, the Math 8 collaborative team leader, who was also an algebra teacher, and an eighth grade civics teacher. To ensure confidentiality and to help identify the data from each of the participants, I have used pseudonyms.

Data Collection

Data collection for this study included participant recruitment, consent, semistructured interviews of eight participants, district and school documents collected from the participants, and follow up email interviews for member checking. The population for this study included eight participants with experience in education ranging from 7 to 15 years. I earned the participants' trust in the way I interviewed them and

allowed them to choose the time and the different coffee sites for the interviews. Six of the eight participants requested the interview take place after classes were over and at locations other than the school. The interviews of the principal and the assistant principal took place after school in their individual school offices.

The original plan for data collection for this study was to interview 10 participants; however, I was only able to interview the eight participants who volunteered to participate in the study. Data from these participants, however, were sufficient because the participants were diverse individuals with multiple perspectives. I included all changes and suggestions made by three of the eight participants in the final transcription. The data also included insights from documents obtained from the district leader, the school's website, and the eight participants for corroboration of the interview responses.

Recruitment

To gain permission to collect data at the site, I first had to establish a community partner. To do this, I sent an email to the principal of the school who directed me to the district's director of assessment and accountability. I sent an email to the director of accountability and assessment, copying the school principal. After receiving partial IRB approval from the director of accountability and assessment, I sent an email attaching the IRB approval from Walden University to both the director of accountability and the school principal. After obtaining permission from both the director and the principal to conduct the study, I sent their emails granting permission to conduct the study at the school to Walden University for a full IRB approval. Upon receiving the IRB approval, I sent the approval to the district leader and the school principal.

With permission to collect data, I began to recruit participants. Next, I sent another email asking the principal to participate in the study. I also asked the principal for the emails of potential participants who met the criteria for the study and permission to contact them. I sent a letter of invitation to each potential participant via email. Once I received the emails back from the potential participants with the signed consent forms, I sent another email to the principal to arrange dates to visit the school for data collection. The principal was very helpful in scheduling this visit; however, previously planned school events and other multiple unplanned events at the school required me to reschedule the visit twice.

Once I finalized the dates for a visit, I sent individual emails to all the participants who had responded back to my previous emails and returned consent forms to inform them of the dates of my visit. I asked them to contact me with the date and time that was convenient to schedule the interview during the 4 days of my 5-day visit. Next, I contacted each participant to confirm the receipt of their emails and finalize the meeting dates, places, and times of the interviews. Finally, I asked them to contact me if they had any questions or concerns. I left the fifth day of the visit open in case I had to reschedule an interview or if an additional person volunteered to participate in the study.

One day before my first day on the site, I sent emails to each of the participants to inform them of my arrival and to once again inform them of the purpose of the interview. In my email, I reminded each participant to bring any relevant documents relating to their practice of distributed leadership and implementation of the IBMYP at this school. As

noted, the participants decided when the interview occurred and where the interview took place.

Interviews

On the days of the interviews, I arrived at the two different coffee shops or the regional library, which served as the interview sites for four of the eight participants, or the school, at least 30 minutes before the interview time to identify a quiet space and to set up. I had several interview guides, an extra recording device, and extra batteries, which I used for the interviews and to transcribe the data. Once the participants arrived, I greeted them and thanked them for volunteering to participate in the study and for agreeing to have the interview recorded. I went over the purpose of the study before I gave them a new consent form to read and sign after they were comfortable with the requirements of the study.

The interviews began only after each participant appeared comfortable and I had reassured them that the information they provided would remain confidential. I informed them that they had a right to withdraw from the interview at any time or refuse to respond to any question. I reminded the participants that the interview would be 45 minutes, but three of the eight participants spent more time than initially planned. In my proposal, I planned to interview 10 participants, but only eight participants volunteered to participate in the study.

I asked open-ended questions based on my interview guide (Appendix A), and I used the same interview questions for all the participants. I rephrased some of the questions for different participants to emphasize different aspects of the questions and to

obtain multiple sources of information based on the participants' roles at the school. I asked probing questions to clarify and or expand on the participants' responses. The interview guide contained 14 open-ended questions, which explored the participants' implementation of the IBMYP, perspectives, and practice of distributed leadership at the school. With the participants' permission, I used a minirecorder to record all the interviews to ensure the accuracy of the participants' responses. I took handwritten notes to emphasize key points made by the participants, which helped me keep track of the participants' responses to the questions. I conducted four of the eight interviews in a private room at a local library close to the school. I conducted two of the interviews at a coffee shop that was close to the homes of two of the participants. For the interviews held outside the school, I called the regional library to reserve a private room for 3 days. For the interviews I held at the coffee shop, I spoke with the store manager to request a quiet space away from crowds to ensure the privacy of the participants. The participants I interviewed outside of the school thanked me for honoring their requests and ensuring their privacy. I conducted the last two interviews at the principal's office and the assistant principal's office after school.

During the interview, all eight participants shared documents that I had asked them ahead of time to bring to the interview and explained how they used the documents for their jobs. At the end of the interview, three of the participants shared additional documents; however, they were unsure if they were relevant to the study. After they explained how they used these (a media newsletter from the librarian, a sample formative assessment, and a certificate of attendance at a formal IBMYP workshop), I informed

them they were relevant to the study, because the documents corroborated their answers to some of the interview questions. At the completion of all the interviews and after all the participants had shared the documents, I thanked each participant and informed them that I would send a transcript of the interview as an email attachment for their review for accuracy.

Documents

Before visiting the data collection site, the director of accountability sent me the school's demographics and free/reduced lunch data in comparison with other schools in the district. From the school's website, I downloaded 3 years of standardized student test scores and the school's behavior policy. The standardized test scores from the school's website showed a yearly improvement in students' scores in mathematics and English in all grade level. The principal shared the SIP, the most recent newsletter, and the master schedule with me. The 2017-2018 SIP included student academic performance measures for state and federal accountability, which showed the school's overall success criteria in relation to students' learning outcomes as well as their target for improvement in students learning outcomes. The SIP did not address students' behavior, but the behavior policy addressed attendance and procedure for addressing disruptive behavior.

The subject area leaders and collaborative team leaders shared their IBMYP unit and lesson plans and sample assessment and rubric with me. The teachers all provided a sample summative assessment designed using the IBMYP assessment requirement and aligned with the state standards. The teachers also gave me their individual collaborative team meeting agendas and minutes from their last meeting. The librarian shared a media

school newsletter showing the number of academic integrity lessons taught, books checked out, individual student visits made to check out books or get help finding books for class research or projects, classroom visits, and student or parent volunteer hours for the first quarter of the 2017-2018 school year. The counselor shared an example of a character education lesson from the beginning of the 2017-2018 school year using the IBMYP learner profile traits. The coordinator provided a record of faculty training since 2014 and the required IBMYP assessment, language, inclusion, and academic honesty policies. The documents were all relevant because they corroborated participants' responses to the interview questions and helped me answer the research questions. I will describe later how I analyzed the documents.

Data Collection Summary

The data collection process and methods that I presented in Chapter 3 served as my guide to the data collection. I relied on my professional experience as an IB educator and my abilities as a detail oriented listener to collect and organize the data. Because of my professional experience as an IBMYP educator, I tried to minimize bias throughout the data collection process by making sure that my knowledge and experiences did not affect the data collection and interpretation. I focused on my role as a student researcher by actively listening to the participants' responses to the interview questions. The only change to the data collection process was that I interviewed eight participants rather than the10, I proposed in Chapter 3.

It was also important for me to develop a system for managing and organizing the data obtained from the participants in this study. I stored all the data collected for this

study in a folder on my computer. I organized all the documents shared by the participants according to type and the pseudonym assigned to each participant. A backup folder was stored on a flash drive and kept in my home safe.

Data Analysis

I followed the multistage data analysis procedure for qualitative data suggested by Miles et al. (2014) to analyze the data from the interviews and documents. First, I used an ongoing cyclical data analysis process that began during the data collection stage and continued during the data analysis. The process involved reading the transcribed data at least 5 times during the initial coding stage to become familiarized with the data and to ensure that I had an accurate account of what each participant said during the interview. The process also included an ongoing data analysis through coding and memoing to reduce data and identify themes and patterns. Second, I used codes from the literature and codes that emerged from the data collected from participants and documents (Miles et al., 2014). The third stage of data analysis was the display of themes and patterns obtained from coding the data; the fourth stage involved verification and drawing conclusions from the data obtained (Miles et al., 2014). Seven major themes and 14 subthemes emerged using codes drawn from the literature and emerging codes from multiple analysis of the data.

I used hand coding guided by Miles et al.'s (2014) multistage analysis procedure for qualitative data. I continued coding after completion of data collection and received all member checking from the participants. I analyzed the data following the recommendation of Miles et al., using open codes to reduce data and identify, label, and

determine the differences and similarities between the participants' responses to the same question to identify themes and categories. This section provides a detailed description of the four stages recommended by Miles et al.: data familiarization, data reduction, data display, and data verification, and my conclusions from the data analyzed for this study.

Data familiarization. I began familiarizing myself with the data while transcribing the participants' interviews. I recorded and reread the reflective notes I took during the interviews to capture the participants' tone in response to various questions as well as body language. As soon as each interview was over, I transcribed it into a Word document. I completed the interview transcription the same day it took place. The transcription process helped me immerse myself in the data.

All but one of the eight participants replied within 2 days after receiving my email. The last participant took 5 days to respond, but I received it within the first week of sending all the emails. Four of the eight participants returned the transcribed notes via email with no corrections, additions, or deletions. I requested further clarification from one of the participants who was in a hurry on the day of the interview and provided me with more detailed explanations by adding to her initial response. Three of the participants made minor corrections to my transcriptions of their responses. I continued analyzing and familiarizing myself with the data while coding to identify themes and patterns from the participants' responses.

Data reduction. Data reduction required me to reread the interview transcripts and manually highlight words, sentences, and phrases to reduce the data, which produced 60 initial codes. I reduced the 60 initial codes to 30 by grouping key words from the

participants' responses to the research questions and discarding irrelevant data. For example, key words such as *collaborative, team,* and *leader,* became *collaborative team leader*. *Improvement, student, academic,* and *achievement,* became *improvement in student academic achievement*. To reduce the data further, I reexamined the initial codes and categorized the data from all participants as suggested by Merriam (2009) to determine patterns, themes, and relationships to the codes from literature. Merriam also suggested the use of a constant comparative method to identify relationships in the participants' responses. Finally, I compared the emerging codes to the prior codes from the literature to determine relationships as suggested by Miles et al. (2014). Table 1 illustrated the documents I collected from the participants and obtained from the school's website and how I used them to answer the research questions in triangulation with the interview data.

Table 1

Document Analysis

Document	RQ1 Distributed leadership characteristics perceived by the participants	RQ2 Organizational structures, routines, and tools influencing staff in distributed leadership effort	RQ3 Training, professional development, or ongoing educational initiatives	RQ4 Challenges or barriers encountered by staff in the distributed leadership effort
Students standardized test scores	School's 5 years of standardized test scores showed improvement in mathematics and English			
School improvement plan	Confirmed instructional strategies including peer classroom observation, and reading and mathematics improvement criteria for all student demographic	Evidence of plans in place for ongoing intervention and enrichment for students' learning	Evidence of professional development plans for faculty	
Master schedule	Evidence of the school's block scheduling providing longer instructional period	Evidence of the school wide intervention and enrichment period and staff collaboration period	Evidence of staff professional development and collaboration days	
IBMYP evaluation report	Evidence of information regarding school's development of the IBMYP and list of all staff members, parents, and students involved in the self-study for evaluation	Evidence of structures and tools used by school leaders to communicate students' IBMYP achievement	Commendation for sending teacher representatives in all content areas to IBMYP training	Mention of school leaders ensuring that support staff are sent to official IBMYP training

(table continues)

Document	RQ1 Distributed leadership characteristics perceived by the participants	RQ2 Organizational structures, routines, and tools influencing staff in distributed leadership effort	RQ3 Training, professional development, or ongoing educational initiatives	RQ4 Challenges or barriers encountered by staff in the distributed leadership effort
School newsletter	Evidence of the principal communicating plans, updates, and the ways the school plans on achieving its academic goals	Evidence of upcoming PTA meeting dates and upcoming teacher planning days		Evidence of reminder to parents of the importance of regular school attendance
Certificate of attendance to official IBMYP professional development	Evidence of teachers and administrators attendance at formal IB workshop			Lack of evidence of support staff attending professional IB workshop
IBMYP unit planner	Evidence of teachers using the IBMYP unit planner to document unit and assessments for learning		Evidence of the collaborative effort of multiple individuals involved in developing units and assessments	
Collaborative team (CT) agenda and notes	Evidence of instructional strategies focused on student centered learning	Evidence of meeting notes showing multiple individuals in CT's involved in CT meetings		
IB policies	Evidence of IBMYP assessment, academic honesty, inclusion, and language policies developed by staff and parents	Evidence of alignment of state and IBMYP assessment requirements		
School organization chart			Evidence of the school's internal organizational structure showing names and formal and informal positions of the faculty.	The school's organizational chart showed evidence of overlapping responsibilities for 12 out of the 55 staff members
School website	Confirmed limited student behavior policy			Confirmed limited student behavior policy

Although interviews were the main source of data for this study, I learned a significant amount about the participants' roles and their day-to-day practices of distributed leadership by reading and analyzing several documents that they shared with me. Reduction of the data also involved analysis of the documents provided by the participants and the district leader as well as those I obtained online from the school's website. For the analysis of the documents, I employed content analysis to determine the context of the document. Miles et al. (2014) noted that understanding both the social production and the context of the document helps in document analysis. I identified emerging codes and themes from analysis of the documents by highlighting the documents by hand. After analyzing the documents, I listed 75 codes, which I condensed to 11 major themes and 18 subthemes that emerged from the codes.

I analyzed the documents shared by the participants to determine how they supported their understanding of distributed leadership practice at this school. For example, the master schedule showed how the school allotted time in block schedule to support curricula needs of students and time for teachers to collaborate. The recent IBMYP evaluation report commended the school for progress made in the implementation of the program but noted the need for the school to build in time for teachers to engage in interdisciplinary planning. The academic honesty policy showed the school's plan to address academic integrity. The assessment policy showed how the school aligned their state and IBMYP assessment requirements. The inclusion policy showed how the school supports the needs of students with learning needs. The sample

collaborative team agenda and notes shared by the teachers showed how the teachers plan and document the outcomes of their collaborative team meetings.

The analysis of data from the interviews and documents revealed 11 major themes that supported the purpose of the study, which was to identify the perceptions of administrators, teachers, the IBMYP coordinator, and support staff regarding how distributing leadership influences the implementation of the IBMYP at a middle school in one of the Rocky Mountain states. As I identified tentative findings and explanations developed from the themes, I returned to the data to further revise the coding, reduce the data, and test the findings and explanations against the participants' responses to the interview questions. Revising the codes allowed me to reduce the categories further from 11 major themes to seven with 14 subthemes.

Data display. Data display is the next level of the qualitative data analysis process. Miles et al. (2014) recommended using data display to organize data and describe and predict qualitative research findings. Miles et al. also suggested using visual displays to show connections between separate pieces of data or to display information succinctly while providing more detailed information in the text. Miles et al. noted that a good display of data in tables and charts is an effective way of providing organized and reduced information that facilitates drawing conclusions from the data (see Table 1).

Data verification and conclusions. The final level of qualitative data analysis is to verify and draw conclusions. This process involved stepping back and revisiting the data to determine if I could make meaning from the analyzed data. The data display made it easier to interpret the research findings. Revisiting the data several times to cross-check

the emerging themes during data analysis was helpful in beginning to verify and draw conclusions from the data.

Findings

The purpose of this exploratory case study was to identify the distributed leadership practices that administrators, teachers, the IBMYP coordinator, and support staff in one public middle school in a Rocky Mountain state demonstrated in implementing the IBMYP. The four research questions served as the framework for the research findings. I answer the research questions by summarizing the research findings from the seven major themes and subthemes identified from coding data from the interviews and the documents collected.

I analyzed, coded, and themed the patterns that emerged from the participants' interview transcripts and documents obtained from the participants and the school's website. Due to the volume and extensive nature of the data obtained from the interviews and documents, I analyzed the data sets separately. Next, I combined them to identify common themes and patterns from the data obtained from analysis of the documents and the interviews to arrive at the seven major themes and 14 subthemes. Appendix B lists the codes and themes that emerged from the content analysis of the documents collected for this study. Table 2 matches the research questions with the major themes and subthemes drawn from data obtained from participants' interview responses and documents.

Table 2

Research Questions Related to Themes and Subthemes That Emerged From Interview and Document Analysis

Research questions	Themes	Subthemes
RQ1. How are distributed leadership practice characteristics perceived by administrators, teachers, the IBMYP coordinator, and support staff at a public middle school in one of the Rocky Mountain states implementing the IBMYP?	Effective distributed leadership practices of positional and informal leaders	Multiple roles of leaders
		Situational challenges of distributed leadership
		Regular and ongoing collaboration
	Collaboration amongst faculty members	Shared strategies
		Positive interactions amongst faculty members
	Positive relationships among administrators and others	
		Positive school culture
	Shared academic vision	Communication of shared vision and roles
		Shared decision making
RQ2. What organizational structures, routines, and tools influence administrators, teachers, the coordinator, and support staff in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?	Effective organizational structures, routines, and tools	Regular and common collaborative planning time
		Improvement in student academic achievement
RQ3. What training, professional development, or ongoing educational initiatives are staff aware of when implementing the IBMYP?	Shared learning	Informal professional development
		Formal professional training
RQ4. What barriers or challenges have staff encountered in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?	Students' behavioral challenges	Lack of shared decision making regarding students' behavior
		Irregular communication of students' behavioral goals and expectations

Effective Distributed Leadership Practices of Positional and Informal Leaders

The first research question was the following: How are distributed leadership practice characteristics perceived by administrators, teachers, the IBMYP coordinator, and support staff at a public middle school in one of the Rocky Mountain states? *Effective distributed leadership practices of positional and informal leaders* was one of the three major themes that described the distributed leadership characteristics at this school. All eight participants identified the effective distributed leadership practices that supported the implementation of the IBMYP and attainment of the school's vision and goals. This major theme of effective distributed leadership practices of positional and informal leaders is defined by two subthemes: *multiple roles of leaders* and *situational challenges of distributed leadership*.

For instance, Bailey, Kelly, and Heather (pseudonyms) recounted their experiences of effective distributed leadership practices and stated that they believed that leadership was the responsibility of everyone at this school. For example, Bailey, the principal, said, "Distributed leadership is everything. When you have a distributed leadership model in your building, you are able involve more people in implementing school-wide goals." Bailey further emphasized,

> I believe 100% that school leadership is the responsibility of everyone at this school. Since I took over as the principal, I have given several teachers opportunity to serve in leadership roles. I am still working on identifying several other leaders in the school to serve in various leadership capacities.

Similarly, Heather, a teacher said,

> I believe that 100% of faculty members should be involved in some form of leadership role at school, but leadership roles should depend on the expertise and experience of the individuals and their ability to share in the school's goals and vision.

Kelly, the assistant principal, also shared her belief that everyone at the school should have an opportunity to serve in a leadership role at different times. Kelly also provided examples of how the principal shared leadership roles with others. Kelly noted,

> Teachers are encouraged to be involved with professional development, be representatives for their groups on leadership teams and ad hoc groups, and be team leaders, building curriculum coordinators, and district level curriculum coordinators.

Findings from the analysis of the SIP, master calendar, and the school's organizational chart showed the different leadership roles held by nonadministrative staff at this school.

Multiple roles of leaders. The multiple roles of leaders emerged as a subtheme to the major theme of effective distributed leadership practices of positional and informal leaders. Six of the eight participants shared their experiences regarding the multiple leadership roles that faculty members, parents, and students were involved in at the school. For example, Tanya, a teacher said, "I am an algebra teacher, an algebra collaborative team leader, and a mentor teacher." Dean, another teacher, said that even though he did not currently serve in formal leadership role at the time of the interview, but that he had served in multiple leadership roles at other times. Two of the support staff also indicated that there are several opportunities for others to take on leadership roles at

this school. Maxine who serves as a school counselor and mentor counselor noted that team leaders and subject area leaders are identified based on their expertise. Diana, the librarian, noted, “We have all served as leaders in different roles on our teams, departments, and the library, but not necessarily as leaders for the whole school.”

All eight participants also gave examples of how students as stakeholders participated in leadership roles at this school. According to Tanya, the math teacher, it was more common for students taking advance math classes to serve as mentors and tutors to other students.

Regarding parental involvement in multiple leadership roles at this school, all eight participants identified how parents serve in different leadership roles at this school. Mary, the IBMYP coordinator, expressed, “several parents serve on different advisory committees and focus groups, such as the IBMYP advisory committee and inclusion policy group.” Mary also indicated that the parents on the different focus groups were involved with faculty members in developing the different policies required by IB.

Analysis of the assessment, academic honesty, inclusion, and language policies all showed signatures of teacher, administrative, and parent representatives who the IBMYP coordinator indicated worked together on the policies. Findings from the analysis of the meeting agendas, notes, school planning documents, SIP, and the newsletter shared by the two lead teachers and the school principal supported their responses to the interview questions regarding the characteristics of distributed leadership practice resulting in the themes of effective distributes leadership and the subtheme of multiple roles of leaders.

Situational challenges of distributed leadership. The second subtheme, situational challenges of distributed leadership, emerged from the major theme of effective distributed leadership practices of positional and informal leaders. While eight of the participants identified several ways the principal distributed leadership with multiple individuals at the school, they also described challenges to distributing leadership and implementing IBMYP. The first challenge according to Bailey, the principal, was that the school's current schedule made it difficult to distribute leadership responsibilities to all faculty members such as teachers and others in non-formal leadership roles. Bailey also stated that one of the challenges to distributing leadership to multiple individuals, was the time it takes to identify and match individuals with different expertise to different roles and responsibilities at this school.

Like Bailey, Kelly, the assistant principal, noted that even though she believed that the principal should involve everyone in a leadership role, she acknowledged that it was difficult to do so in a large public school setting. Kelly noted that school administrators had done a good job of distributing leadership, but admitted, "It has been challenging to navigate district level directives and distributing leadership appropriately with all that we are doing as a large public IBMYP school."

Two of the support staff also shared the difficulties experienced by administrators distributing leadership roles to others at this school. Maxine, noted that the principal had done a good job of involving more faculty members in leadership roles. Maxine however, explained that individuals like her serving in multiple roles often "feel overwhelmed, and

while those not involved in leadership roles feel resentment toward towards those serving in multiple leadership roles."

Similarly, Heather recounted the tensions and the emotional conflict she experienced because of the several leadership roles she performs in addition to doing her main job as a teacher:

> My first role is as an English classroom teacher. I am also the English subject area leader, a mentor for a new English teacher, and a mentor to the new English CT leader on a daily basis. It is sometimes difficult to serve well in all these roles and be an effective English teacher. I have too many roles with little or no directives from administrators on how I can achieve all the goals from all the roles I currently have.

In describing the challenge of distributing leadership at this school, Heather noted that involving more individuals in leadership roles might help to address the challenge of having few individuals like herself serving in multiple leadership roles. Heather indicated that doing so might make it easier to sustain their school's current success in meeting district and IBMYP requirements and improvement in student academic achievement on standardized tests.

Analysis of the school's organizational chart showed that some teacher leaders served in multiple leadership roles and committees while others did not have any roles assigned to them.

Another challenge to distributing leadership at this school according to Diana, the librarian, was not having the right people serving in certain leadership positions. For

example, Diana noted that the because the principal did not include individuals with knowledge and experience in using PBIS as a behavior strategy on the PBIS committee as one of the reason that student behavior continued to be a problem at the school. Diana stated, “Students’ behavior continues to be a problem because we do not have the right people serving on the committee.”

Similarly, Bailey shared that not having the right people serving in the right leadership position is a challenge to distributing leadership at this school. For example, Bailey said “there has been times when collaborative leaders have not been effective as leaders, and I have had to assign others to their position.”

In addition to the difficulties of distributing leadership roles to teachers and support staff, the participants also identified areas of concern with parents and students serving in leadership roles. Regarding the need to involve more students with disabilities in these roles, Bailey explained that “student involvement in their community was an area of strength,” but that “the school could increase student involvement by findings ways to involve more students with disabilities as leaders academically and in service to their community.”

When asked to describe any changes that had occurred since the school began to implement IBMYP, several participants shared that students had become more engaged in their academics, but all eight participants noted on the need to involve students in making decisions to address students’ behavioral problems. For example, Tanya noted,

> We have done a good job of involving students taking higher-level math courses, and students who love to read as math tutors and reading buddies for their peers. I

> think that we can involve the student leaders to help solve students' behavior problems as well.

Similarly, Dean, a teacher with no current formal leadership role, also indicated the need to involve students in making decisions regarding teaching, learning, and addressing students' behavior. He explained,

> I believe that we have done a good job as a team, teaching students to apply their knowledge from civics to solving real-life problems such as how to improve their engagement in the classroom and arriving to class on time. The only challenge I can think of for this school year is how to involve my students and other students in addressing some of the same behavior and other behavior problems that some other students are exhibiting at this school.

Kelly, the assistant principal, also found the lack of involvement by students in solving behavior problems as challenging. Kelly stated,

> We have worked very hard at distributing leadership to students and being on the same page regarding how to improve academic achievement. We have not made the same effort to include students in solving students' behavioral issues.
>
> Involvement of students in solving behavior issues is an area we need to focus on.

Analysis of the school's newsletter, SIP, assessment, and inclusion policies showed the effort the school leaders and staff made to involve students in different leadership roles to improve student academic achievement. Analysis of the academic honesty policy provided by the IBMYP coordinator and the students' behavior policy found on the

school's website identified how school leaders hoped to begin to involve students in addressing students' behavioral goals at this school.

All participants recognized the challenges of distributing leadership roles for parents at the school. Three of the teacher participants shared their experiences regarding parental involvement in leadership roles and students' learning. For example, Tanya, a math teacher, said, "Some of the parents of students with special education needs that I would like to be more involved in their children's learning are not as involved, but other parents of gifted and grade level students are overly involved."

Dean shared that it was a challenge to involve more parents in distributed leadership roles at this school because of the inconsistency among tasks. Dean stated,

> Sometimes we have many parents wanting to participate in leadership opportunities, such as volunteering to chaperone field trips, but at other times, we have very few parents willing to serve in advisory committees or community service supervisors. Most times parents are reactive rather than proactive.

Heather explained that parental involvement is not consistent because, "Parents of gifted students tend to be more involved than other parents." Bailey provided reasons why some parents may not be involved in leadership roles:

> We have a small group of parents who are heavily involved. Most of our parents of students with special education needs or ELLs [English language learners] care but may not have the time because of the conflicts with their job schedules or difficulties with reliable transportation. It is difficult for these parents to be as involved as other parents are.

Analysis of SIP and school newsletters supported efforts made by the school leaders to increase the involvement of parents in leadership roles. In addition, analysis of the data from collaborative meetings agendas, notes, the organizational chart, and the master schedule pinpointed the challenges of distributing leadership at this school. For example, the school's organizational chart showed a hierarchy of leadership, with the principal at the top, followed by the assistant principals, and the next level of others in formal leadership roles. From this organizational chart it appears that the decision-making power mainly resided with those at the top and in formal leadership roles. The current hierarchical school's organizational chart seems to make it difficult for some teachers to take on leadership roles or to make decisions. The school's master schedule also showed that teachers were grouped in departments that might make it difficult to involve teachers in interdisciplinary leadership roles. The times assigned for collaborative meetings in the master schedule were also for grade-level meetings amongst teachers in the same discipline and not for interdisciplinary teams. Finally, the school's schedule showed that the counselors and teachers only met once a quarter during 1-hour department meetings, which might make it difficult for teachers and counselors to work together to meet both the academic and social emotional needs of all students on a more regular basis.

Collaboration Amongst Faculty Members

The second major theme that addressed RQ1 and emerged from coding the data from the interviews and documents was *collaboration amongst faculty members*. All eight participants reported valuing collaboration when describing the characteristics of

distributed leadership practice. The collaborative culture of the school was also evident throughout the analysis of several school documents. The school improvement plan and master schedule received from the principal, as well as the collaborative team agendas shared by the collaborative team leaders, showed that the teachers met according to subject and grade levels 2-3 times a week for 1 hour depending on the block schedule. Block scheduling are classes that meet 90 minutes at a time; students have fewer classes a day but meet for longer sessions. The teachers' planning periods also lasted for 90 minutes, rather than 45 minutes. Department meetings occurred after school for 1 hour once a month. The IBMYP committee meetings occurred 2 hours once a quarter on the teachers' prescheduled workdays. The participants noted that collaboration also took place during parent-teacher meetings and faculty meetings.

All the participants attributed the regular and ongoing collaborative culture of the school to the successful IBMYP evaluation and improvement in student academic achievement. For example, Dean, a teacher, stated,

> One thing that I know for sure that the school does well and I believe has helped in overall improvement in student academic achievement and our success in implementation of IBMYP is our commitment to common planning in our CT [collaborative teams]. We spend 2-3 hours a week in our CT sharing effective instructional strategies to help us keep our focus on student-centered learning as a way to improve academic achievement of all students. Regular and ongoing collaboration with others in our collaborative team has also helped us plan units, lessons, and to design common formatives and summative assessments.

Collaboration has also been a good way for CT leaders to share instructional leadership with others at the school.

Regular and ongoing collaboration. All eight participants stated that *regular and ongoing collaboration* contributed to the school's major accomplishments of successful IBMYP authorization, evaluation, and improvement in student academic achievement over the past 5 years. Mary, the IBMYP coordinator, attributed the school's major accomplishment over the past 5 years to the collaboration of teachers in their collaborative teams to create "rigorous assessment that is aligned with IBMYP's objective criteria and meets the state standards in different content areas." Mary further explained that the school collaborative culture allows her to support teachers in their collaborative teams by ensuring that "teachers identify effective teaching strategies to teach both concepts and skills and to plan for different ways to check for student understanding of the concepts and skills."

The administrators also commented on their role in teacher collaboration. Kelly, the assistant principal, stated that in addition to all administrators "meeting once a week as a team," they were also "required to attend teachers' collaborative team meetings at least once a week to address any concerns or questions that teachers might have." Kelly explained, "I meet with other administrators once a week to plan and determine the instructional focus of the school, and I attend at least 1-grade level CT meeting for the individual teams that I supervise."

Diana, a support staff (librarian), also provided examples of collaboration between support and instructional staff:

> I collaborate with teachers regularly in different collaborative teams to determine and find appropriate books, magazines, newspapers, and websites to support classroom instruction. I coplan with some English teachers, and I teach students in their English classes at the beginning of the year how to cite sources and lessons on academic integrity. I support individual teachers in their classrooms on specific projects that they request my assistance.

Data from the meeting agendas, notes, and the reflection section of the IBMYP unit planners and daily lesson plans developed by teachers in their collaborative teams also showed comments regarding how teachers and others at the school collaborated by sharing ideas during meetings.

Shared strategies. *Shared strategies* emerged as a subtheme from the participants' responses to interview questions and analysis of the collaborative team agendas, notes, and the IBMYP unit planner reflections. All participants stated that the culture of collaboration made it easier for faculty members to share instructional strategies and experiences needed to distribute leadership and implement the IBMYP effectively.

The administrators noted that the collaborative culture at the school was an effective way for the principal and administrators to share effective leadership strategies and to develop and promote teacher leadership at the school. For example, the principal stated, "Collaboration with administrators and instructional leaders allows me to share

how to have the right conversation and effective leadership strategies." The assistant principal recounted how collaboration had been an effective way for administrators to share effective leadership strategies amongst the administrative team. She stated, "As assistant principal, I work with other assistant principals, the principal, and our IBMYP coordinator to determine the effective strategies to share with teachers to support IBMYP teaching, student learning, and assessment in a public-school setting."

The teachers indicated that the collaboration amongst teachers allowed them to share a variety of strategies to improve individual student learning needs.

Dean explained,

> A culture of collaboration means willingness to learn from others, and, visiting other teachers' classrooms to learn from them on how to improve student academic achievement. We also meet in different communities, including faculty meetings, to collaborate and promote a culture of shared learning.

Another teacher, Tanya, observed how collaboration was an effective way for teachers to share IBMYP instructional strategies. Tanya noted that she and others in her collaborative team have done "a good job of determining what instruction should look like in the classroom and sharing effective strategies to teach different IBMYP concepts." She stated that in addition to sharing resources and designing assessment together, that they also worked together as a team to make decisions on how to "remediate instruction for students who are struggling." Heather, another teacher, shared how collaboration "allowed the experienced IBMYP teachers on her team to share effective ways of exposing all students to the higher-level thinking needed to complete complex tasks."

Heather went on to explain how she and other experienced teachers in her collaborative team share effective instructional strategies with other team members:

> In my CT, I, and other experienced IBMYP teachers share effective strategies on how to include scaffolding as differentiation strategies to support our ELL students and students receiving special education accommodations with teachers who are new to teaching or to teaching in an IBMYP school.

Regarding the role of support staff in the collaborative culture of the school, Maxine, a counselor, explained that since she started collaborating with other counselors, the director of guidance, and teachers, she has become a better counselor because she is able to work with others to meet students' academic and socioemotional needs:

> All counselors meet on a weekly basis for about an hour; we meet once a month with our director of guidance and once a quarter with our assigned departments. Having the time to collaborate with other counselors, our director, and teachers in different departments has made it easier for us to share strategies with each other and with teachers on how we can all work together to support our students' emotional and academic needs.

Analysis of the school's monthly calendar, master schedule, and IBMYP evaluation report also showed several opportunities such as mentoring relationships and built in collaboration days that leaders provided for teachers to collaborate and for the distributed leadership effort needed in the implementation of the IBMYP. The overall analysis of these documents showed that faculty collaboration was regular and ongoing and was a

means for them to share strategies to support the learning needed to teach in a public IBMYP school.

Positive Relationships Among Administrators and Others

Another major theme that emerged in response to RQ1 was the *positive relationships between administrators and others*. This emerged during the initial coding process as a theme that the teacher participants identified as vital to the success of their collaborative teams and their role as curriculum and instructional leaders at the school. Administrators and teacher participants noted that having a positive relationship with each other was important in promoting trusting relationships between teachers and their students and was vital in improving students' learning. The principal identified the school's major accomplishment since embracing the distributed leadership model for implementing IBMYP at the school as improvement in the relationships between administrators and other faculty members. She stated,

> I believe our biggest accomplishment as a school over the past 5 years is the strong relationship that exists between teachers and administrators that supports the collaborative culture we have at this school. This positive relationship is why administrators know that every voice and perspective is important to the work we do. Administrators have learned to listen and provide opportunities for everyone to become involved in leadership tasks.

Tanya corroborated the principal's belief in how improvement in the relationships among administrators and others contributed to the positive culture of the school. "The

relationships between teachers and administrators has improved over the years as more teachers are now involved in leadership roles at this school."

Positive school culture. *Positive school culture* emerged as a subtheme from analysis of participants' responses regarding the positive relationships between administrators and others at the school. The administrators believed that the teachers collaborated with each other and others to improve instruction because the administrators trusted that the teachers, as professionals, and were able to do their work with little support from administrators. Kelly, the assistant principal, shared,

> Administrators trust our highly qualified staff to deliver quality instruction to promote student academic achievement. We promote what the district requires, we advance what the IBMYP requires, we provide and encourage staff development, and we expect and encourage collaboration. High expectations are important, but we promote it with an understanding that everyone is already working hard, and they do not need our reminders as much as they need our support.

Bailey, the principal, indicated that the principal is responsible for creating a positive culture that encourages all staff to work together to achieve the school's vision and goals:

> My job is to cultivate a culture of trust so that teachers are comfortable sharing their ideas and working with each other, students, and parents. We are good at listening to other viewpoints regarding how to improve student academic achievement. I believe that if we as administrators and teachers agree on how we

> align instruction, I know that student academic achievement will continue to improve.

However, Kelly, the assistant principal noted that culture and climate at the school was not always positive during the tenure of the past school principal. Kelly explained that culture and climate has improved with the new principal, but that there was still room for improvement:

> Culture and climate related to trust has been a challenge at this school. Our staff needed a major regrouping following a tough time of leadership or lack thereof; however, when a new leader came in, the changes, while needed and somewhat refreshing, made some on the staff resent the difficult work. This led to some tough times until a new transition in leadership. We have come a long way as a school regarding having a positive school culture, but we still have to keep working at it.

The three teacher participants stated that the collaborative school culture made it easier for teachers to have a positive relationship with other teachers, which translated to student engagement in the classroom. For example, Dean said,

> Teachers and administrators have worked together to change the way we teach to student-centered instruction, which I believe have made students more focused in the classroom. The challenge we now have is how to work together to make sure that students' get to class on time and with the needed materials they need to learn.

Another teacher, Heather, expressed the empowerment she felt as a subject area leader and part of the instructional leadership team in charge of working with administrators to make curriculum and instructional decisions:

> I interact with English teachers, members of the English 7 CT, and an assistant principal regularly. It has been good for me to work with teachers in my CT and department to make decisions on how we teach and assess using the IBMYP criteria. Being part of the leadership team makes me trust and buy into the decisions we make as a school regarding how to continue making learning meaningful for all students.

Finally, Mary, the IBMYP coordinator, shared how making an effort to use the IBMYP learner profile as a common language by administrators, teachers, and students have helped to improve the culture:

> The principal tasked the IBMYP steering committee to come up with ways for administrators to celebrate staff by using the IB learner profile explicitly to celebrate at least five faculty members at our monthly faculty meetings. I truly believe that this monthly celebration has made a positive impact on our school culture and the overall relationships between administrators and others at this school. I would love to see us extend the use of the learner profile to our work with PBIS.

It was evident from participants' response to the interview questions that all participants believed that having a positive school culture was vital to distributing leadership and the implementation of IBMYP. Data from the collaborative meeting

agendas, meeting notes, the reflection section of the IBMYP unit plan, and the school's newsletter showed how administrators and others worked on continuing to improve the school culture and the relationships between administrators and teachers needed to distribute leadership and implement the IBMYP.

Positive interactions amongst faculty members. *Positive interactions amongst faculty members* emerged as the second subtheme from analysis of participants' responses to interview questions regarding the relationships between administrators and others at the school. All the participants indicated that the positive interactions amongst faculty members were important to distributing leadership and the successful implementation of the IBMYP. The analysis of the IBMYP unit and lesson plans, SIP, collaborative meeting agendas, and notes also showed that multiple individuals were involved in developing units and lesson plans as well as the development of the SIP.

All the participants credited the constant interactions amongst faculty members as vital to the improvement in relationships between administrators and others at the school and the distribution of leadership needed to implement the IBMYP. For example, one of the teachers, Dean, claimed that he had a "great relationship with others" in his collaborative team because they spent a lot of time planning and interacting with each other. He also indicated that in addition to members of his collaborative team, he had a positive relationship with the IBMYP coordinator and the subject area administrator and other content area teachers who he had worked with on different projects. Dean further added, "Honestly, I know that most teachers have a great relationship with others in their collaborative teams because we spend a lot of time together."

The assistant principal, Kelly, shared that having administrators meet once a month with collaborative team leaders and subject area leaders was a way for administrators and teachers to interact and to improve the relationships they have with each other. When asked about her role and responsibility as it relates to teaching and learning, she stated that she "worked with CT leaders and subject area leaders to plan curriculum and instruction together and to share common ideas or strategies" to support their work as a public IBMYP school. Kelly further explained her role as an administrator, she said, "When we as administrators meet with these leaders, it is more to interact with them, identify issues, share leadership strategies, resources, or provide ideas that they may need to do the work in their CT's or departments."

Heather, a teacher, also identified others she interacted with regularly to improve the relationship amongst faculty members:

> As mentor to a new English CT leader and a new English teacher, I eat lunch with these two teachers and go over other things going in their lives. When we meet, we have a quick checking jar, which helps us build trust.

Documents such as the CT agenda notes and the IBMYP unit plans and the SIP collected from participants also showed that there was a good relationship between teachers and administrators in meeting the vision of improvement in student academic achievement at the school. Analysis of the collaborative team meeting agendas and notes and the school planning document also supported the participants' beliefs that the positive interactions amongst faculty members made it easier for the principal to distribute leadership needed to implement IBMYP.

Shared Academic Vision

The fourth major theme that emerged in response to RQ1 was *shared academic vision*. All participants noted that the principal had done a good job of sharing the school's academic vision with all stakeholders. Analysis of the SIP, school newsletter, and website also showed how school leaders shared the school's vision of improvement in student academic achievement with all stakeholders. Bailey, the principal, claimed that it was important for her, as the instructional leader, to establish the school's vision of improvement in student academic achievement, but more importantly, to invite all stakeholders to develop the vision:

> As the lead learner, my job is to determine how we develop a vision for what we, as a school, want we our vision to look like, and how we build capacity for all stakeholders both in and out of the building to work together to implement and sustain our vision.

The three teacher participants reported that all stakeholders had played a vital role in improvement in student academic achievement. Heather, an English teacher and subject area leader, explained,

> As a school, we all share the same vision of improvement in student academic achievement, which drives everything we do in our teams, departments, and the work we do in our classrooms. When I talk about all, I mean students, the entire faculty, parents, and even our community partners.

Maxine, the school counselor, corroborated Bailey and Heather's view of all stakeholders sharing a common vision of improvement in student academic achievement.

"Regardless of one's role, or how long someone has been at this school, one thing we all have in common is that we know that our school's academic vision is to continue to work on improving students' academic achievement."

Communication of shared vision and roles. *Communication of shared vision and roles* and *shared decision making* emerged as the two subthemes from participants' responses to interview questions and analysis of the SIP, school newsletter, meeting agenda, and notes regarding the major theme of shared academic vision. Six of the eight participants reported that because the principal regularly communicated the school's vision to improve students' academic achievement and their roles in attaining that vision, it was easier for all stakeholders to work together to attain the vision. The eight participants indicated that continuous communication of the vision to stakeholders was vital to accomplishing all the goals of the vision. According to the principal, all administrators, instructional staff, and parents have a role in promoting student academic achievement "to make sure that everyone, including students and parents, understands our vision." The principal went on to say,

> I have regular conversations with assistant principals, collaborative team leaders, students, and parents regarding their role in making sure that we all work together regardless of our role to achieve the vision of improvement in students' academic achievement. I am always coaching my assistant principals on how to have effective conversations with teachers and CT leaders, regarding how to communicate our vision of improvement in student academic achievement in all content.

Tanya explained in detail how her role as a collaborative team leader was important in meeting the school's academic vision of improving academic achievement. Tanya shared that as the math collaborative team leader she was responsible for making sure that she works with all other teachers on her team to make sure that their instruction is focused on improvement in student academic achievement. She further explained that she was also responsible for listening to teachers' concerns and sharing with her subject area administrator. Tanya noted,

> Even though all teachers have a different role, we all have a responsibility in making sure that we communicate our school's academic vision to students and parents and work together to make sure that the work we do as a team and individually is to make this vision our focus.

Heather, another teacher leader, shared how she works with English collaborative team leaders and teachers in her department to address the school's academic vision of improvement in student academic achievement. She explained that it was her job as the English subject area leader to work with team leaders to make sure that any struggling team is doing the work they need to meet the school's vision. She stated,

> It is also my job to provide feedback to our administrator so that the struggling team gets the help they need right away. We are constantly communicating and working with teachers on effective instructional strategies to meet our school's vision of improvement in academic achievement. Everything we do in our department and collaborative team meetings, from data dialogue to designing of

> assessments and discussions on how we teach, is to make sure that our students' scores on standardized tests continues to improve.

Heather expressed that as a team they knew that the "ultimate goal of the school" was to make sure that their "students continue to do well on their state tests."

Information from the school's newsletter and website supports the participants' claims that the principal communicated the school's vision of student improvement in academic achievement with all stakeholders.

Shared decision making. The second subtheme, shared decision making, emerged from participants' responses to interview questions regarding shared academic vision. Findings from analysis of the SIP, meeting agendas, notes, IBMYP unit planner, and lesson plan reflections also showed how teachers were involved in making instructional decisions at the school. All the participants noted that it was the principal's responsibility to involve all stakeholders in making decisions on how to meet the school's vision of improvement in academic achievement. For example, Bailey the principal noted,

> As the instructional leader, I do not make instructional decisions by myself; I work with administrators, subject area leaders, and team leaders to make instructional decision to meet our school's vision of improvement in students' academic achievement. Even though some teachers may have a different perspective, we make instructional decisions together. Every decision we make must support our vision of improvement in students' academic achievement.

Similarly, Kelly noted, “As one of the assistant principals, I communicate our school’s vision regularly with teachers in the department I supervise. I also provide them with the feedback they need to make instructional decisions.”

Tanya, a teacher and collaborative team leader, shared that she was involved in developing the SIP and implementing the vision of improvement in academic achievement with teachers on her team. Tanya said, “I was involved in developing the SIP and working with teachers on my team to ensure that we are using effective teaching strategies that will help us meet the goals of the plan.”

Effective Organizational Structures, Routines, and Tools

The theme *effective organizational structures, routines, and tools* emerged from the data as important to the distributed leadership effort at the school in response to RQ2: What organizational structures, routines, and tools influence administrators, teachers, the coordinator, and support staff in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states? In the interview responses, all eight participants noted that the principal had instituted organizational structures, routines, and tools to support the distribution of leadership needed for the implementation of the IBMYP. Participants identified the block schedule, built in time for response intervention and an advisory enrichment period, after-school activities, team teaching, collaborative grade level meetings, and subject area meetings as examples of effective organizational structures, routines, and tools that administrators created to influence the distribution of leadership at this school.

The principal described several effective organizational structures, routines, and tools that supported the school's initial IBMYP authorization requirements and others that school leaders, working together, put into place to support the school's vision of improvement in academic achievement and the ongoing implementation of IBMYP:

> We have structures built into our master schedule: how we assign staff, locate classes, and distribute resources to support our vision and goals. We have built into the schedule, at the end of each day, time for intervention and enrichment. We have embedded common planning time for all collaborative teams to meet. We determine how many times members of each team meets, and we are explicit as to how we expect each collaborative team to share responsibilities to make curriculum decisions during the meetings, and we specify what we expect from teachers engaging in common planning.

Bailey further explained, "I review the expectations and monitor the outcomes regularly with the CT leads. I am responsible for making sure that we have the right structures and tools to support our vision and goals and implementation of IBMYP."

The assistant principal also identified the outcomes, organizational structures, routines, and tools the school leaders adopted to support the distribution of leadership efforts and implementation of the IBMYP at the school. She noted,

> We have embedded instructional collaboration as part of our ongoing practices. Through team planning opportunities, teachers develop units and lessons, and administrators make sure that teachers have opportunities and expectations to work together to plan, deliver, assess, and review instructional practices.

Regular and common collaborative planning time. *Regular and common collaborative planning time* and *improvement in student academic achievement* are the two subthemes that emerged from the participants' responses to interview questions regarding the effective organizational structures, routines, and tools. Analysis of the master schedule showed the frequency of teachers engaging in grade level team and department collaboration. Analysis of the planning document, team meeting notes, and agendas also provided information regarding the extent to which teachers worked collaboratively in their grade level teams to develop the school's IBMYP assessment and academic honesty policies.

Kelly, the assistant principal, noted that the switch to a 90-minute alternate A/B schedule that allows students to attend fewer, but longer class periods has made it easier to meet the course selection and most teachers' planning requirements needed for IBMYP implementation. Kelly said, "Switching to a new block schedule has made it easier for administrators to support planning in grade level teams." Maxine, the school counselor, also noted that the master schedule made it easier for staff to meet individual student needs:

> At the beginning of the year, as counselors, we use needs assessments to help identify students' academic and social-emotional needs and other concerns students might have during the year to schedule students in the right groups for the rest of the school year. The flexible block schedule has made it easier to support the socio-emotional and academic needs of all students either through intervention or enrichment activities.

Maxine further explained that the master schedule made it possible for support staff, like her, to offer a variety of supplementary sessions for students.

Another support staff, Diana, shared how the change to the schedule made it easier for her to collaborate with teachers, students, and other support staff:

> I now have time with the new schedule to support colleagues in any way that they choose. I have worked with the reading specialist and sometimes with counselors, teachers, and students on specific projects such as the whole school service learning activities, the diversity book club, and advocacy letters to different organizations.

Tanya, a teacher, indicated that the adoption of a block schedule supported the school's switch to the IBMYP focus on student-centered instruction. Tanya noted,

> Having students work in stations to meet the IBMYP student-centered model was a stiff learning curve for me, but the change to block scheduling has made it easier because we now have longer class periods, which makes it easier to engage students in different stations.

Improvement in student academic achievement. This subtheme emerged from the participants' responses as one of the effects of effective organizational structures, routines, and tools to support distributed leadership effort and the implementation of the IBMYP. Analysis of unit planner reflections, formative and summative assessments, collaborative team meeting agendas, notes, and data from students' scores on standardized tests over 3 years, supported the participants' claims that having effective

organizational structures resulted in improvement in student academic achievement at this school. For example, Tanya stated,

> Since I started working here 5 years ago, our algebra scores on our state test have increased. We have done a good job as a school identifying and placing students who are able to take algebra in seventh and eighth grade. Having good placement in algebra has also had a positive effect on students' scores in Math 8.

Dean, a teacher, also reported that students' engagement in the class had improved because of the structural changes and tools that school leaders had put in place to support the implementation of the IBMYP. Dean said,

> Student learning is the most important responsibility I have here at this school. Having students for 90 minutes in class has made it easier for me to engage students more in critical thinking and to apply what they learn in civics to solving real-life problems through inquiry.

Maxine, the counselor, shared how the changes to the organizational structures, routines, and tools at the school made it easier to the distributed leadership effort and improvement in student academic achievement:

> I successfully ran an academic support group last year with a seventh grade English teacher to help struggling students identify what they needed to improve in their test scores. We focused on topics such as having a growth mindset and building stamina needed when reading long paragraphs. The scores of all the seventh graders we had in the group went up significantly by double digits.

Mary, the IBMYP coordinator, noted that the change to the block schedule has made it easier for teachers to have time in their collaborative team meetings to plan and to align IBMYP assessments requirements to both their state and district requirements. Mary, however, expressed concern that the current schedule did not support all the IBMYP planning requirements:

> We have made several changes since we became an IBMYP school; the one that stands out for me is the change to our schedule. Changing to block schedule has made it possible for all curricular grade level teams to have the time to align the IBMYP assessment requirements to our state and district standards, which has contributed to the improvement in students' academic achievement on our state's standardized tests.

Mary, however noted, that with the current master schedule, it takes a long time for teachers teaching different subject to plan interdisciplinary units because there is no built in time for teachers to develop interdisciplinary unit, which is vital requirement of the implementation of IBMYP.

Even though some interviewees suggested that leaders made more structural changes to meet all the IBMYP curriculum planning requirements, it was evident that the structural changes, routines, and tools acquired by the school leaders made it easier to distribute the leadership needed to implement the IBMYP and to meet the school's vision of improvement in student academic achievement.

Shared Learning

The third research question was as follows: What training, professional development, or ongoing educational initiatives are staff aware of when implementing the IBMYP? My analysis of both the participants' responses to interview questions and analysis of the school's professional development planning document, meeting agendas, notes, and the staff training documents suggested that the leaders created structures to promote continuous collaborative team learning amongst all staff, which I characterized as *shared learning*. The data went beyond the research question, because the findings from both the interview and documents showed that the participants were not only aware of the training and professional development when implementing, but that the school had structures in place to support ongoing culture of shared learning. All eight participants identified different ways that faculty members continuously shared learning at this school including collaboration.

The eight participants noted that the collaborative culture at the school made it easier for teachers and others to use a variety of approaches to share learning strategies and knowledge. For example, Heather, a teacher, said, "Because we are a diverse faculty with different expertise, it has been easy for us to go along with the culture of shared learning that our IBMYP coordinator has encouraged." Dean, another teacher, stated, "The use of technology has made it easier to embrace the culture of shared learning; technology has also made it faster for teachers and others to receive and provide feedback on a variety of professional development needs."

Mary, the IBMYP coordinator, explained how the collaborative culture of the school supported a shared learning environment where faculty members learn together about what it means to be a public IBMYP school. Mary explained that she worked with subject area administrators, CT leaders, and teachers on different teams to develop IBMYP units, lessons, and assessments that are aligned with their state and district standards. Mary stated,

> I also work regularly with administrators and teachers to analyze students' formative and summative assessments data to make sure that we take immediate actions based on the data to address any challenges. We do this by having teachers who were successful share instructional changes that they believe made the most impact on students learning.

Kelly, the assistant principal, also noted,

> I believe that our collaborative culture has made it easier for all instructional and support staff to share their insights on effective instructional strategies with others to meet the needs of all learners. I think that having people comfortable sharing their knowledge and expertise, especially from those who are closest to the students, has made it easier to accomplish more in terms of what is right for all students.

Tanya, a mentor teacher, discussed the different ways she shared learning with her mentee teacher on a regular basis. She said,

> I share materials with her and help her figure out how to use those materials and others that other individuals in the school have shared with her. We sometimes

> combine students in our enrichment classes to make it easier to work together on some activities but more to ease the burden of her working by herself. I try to eat lunch with her at least once a week to check in and see how things are going with her generally.

Analysis of the school's IBMYP evaluation report also indicated that new faculty members identified the culture of shared learning and the use of technology as factors that made it easier to transition to working in an IBMYP school and to sharing knowledge and experiences with others at the school.

Informal professional development. Two subthemes developed from the major theme of shared learning. The first subtheme to emerge from the data was *informal professional development*. Participants noted engagement in ongoing informal professional development opportunities as a way for faculty members to share the knowledge needed to implement the IBMYP and improve student academic achievement. Six of the eight participants noted that the knowledge they gained from a regular and ongoing culture of shared learning by faculty members supported them in their work as IBMYP educators. For example, Bailey, the principal stated, "What has made us successful as an IBMYP school is that we have been able to meet most of our faculty professional development needs by having experts in the building share learning with others." Bailey explained that they did this by having faculty members who attended formal IBMYP training and IBMYP workshop leaders at the school engage other faculty members in continuous learning individually, in collaborative teams, in departments, or during whole school faculty meetings.

Kelly noted that administrators expected faculty members with different expertise and experiences to share knowledge with new faculty members. She stated, “Another way that we share learning informally at this school is by making sure that our mentors provide ongoing training to new faculty members so that they know what IB is and not.” In addition, Kelly noted that administrators expect faculty members who serve as collaborative team leaders to engage their team members in ongoing learning both during their team planning time and at times during the once a month after school department meetings.

The participants identified the use of the data dialogue tool, college courses, and online courses focused on effective teaching strategies for all students as examples of informal training offered to improve student academic achievement. Kelly noted,

> Another way that we share learning at this school is by making sure that we provide ongoing training, both in school and outside school, for our CT leaders on what it means to be a collaborative team leader at an IBMYP school. We sometimes bring in experts from outside to work with them, or we send them to informal training outside school to support their role as collaborative team leaders.

The three teacher leaders shared that they have been successful as CT leaders and subject area leaders by sharing knowledge with others and encouraging other members of their teams to share knowledge based on their expertise. Analysis of faculty training documents, school’s professional development calendar, and SIP provided by the IBMYP coordinator and school principal, also identified several professional development

opportunities that faculty members have participated or will participate in during the school year.

Formal professional training. *Formal professional training* is the second subtheme that emerged from participants' response to interview questions and analysis of the school's professional development and training documents, and the IBMYP evaluation report regarding shared learning. Six out of the eight participants noted that in addition to a culture of shared learning at the school, that attending formal IBMYP training has made them successful in their roles as educators, but most especially as leaders at this school. Analysis of the faculty training documents and the school's IBMYP evaluation reported also showed that staff credited attending IBMYP training to their success in the implementation of the program at this school. For example, Tanya a teacher said,

> I attended one official IBMYP Level 2, math workshop about 3 years ago. It was very helpful to work with other math teachers from other IBMYP schools to create units and meaningful assessments. As a collaborative team lead, I am constantly sharing the knowledge I gained from that training with other teachers on my team who have not yet attended any IBMYP training. I focus on teaching the IBMYP way of student-centered because I have been at the school for long and have attended formal IBMYP training.

Dean, another teacher, emphasized the importance of attending formal IBMYP training. Dean said,

> The most important training I have attended so far are the category 3 IBMYP assessment training and the IBMYP professional development training to become an IBMYP workshop leader. These two trainings have helped me in my job as a classroom teacher as well as making it possible for me to work with others in my team. The most valuable benefit of becoming a workshop leader has been the ongoing learning about IBMYP practices in different schools. I often come back to our school and share what I learn from other schools with our IBMYP coordinator and administrators.

The two administrators also shared how attending formal IBMYP training have supported them in meeting the needs of different stakeholders at this school. The administrators shared information regarding how the focus of specific training has armed them with the skills they need to serve as leaders at the school. For example, Kelly, one of the administrators said,

> I have attended the IBMYP Heads of School category 1 training, monitoring and a moderation of learning and assessment category 3 training, and a category 3 social and emotional learning training. The information from the social-emotional learning session really grounded us to what is most important for meeting the social-emotional needs of students.

Kelly also indicated that she shares what she learned from the IBMYP social-emotional learning training she attended with others supports the school's focus on reducing bullying, stress, and anxiety cases.

Bailey another administrator stated,

> I attended IBMYP category 2 Heads of School training, two summers ago which helped me to know how to structure the IBMYP unit plan and how to help teachers align it with what we are already doing in our school.

Two support staff, however, expressed concerns at not being able to perform their jobs effectively because they had not attended formal IBMYP training. For example, Diana stated that even though she has taken advantage of attending several of the informal in-school training, she still had not attended formal IBMYP training for her role as a librarian at an IBMYP school:

> I would like to attend a formal training for IBMYP librarians so that I can be more successful in my role as a librarian in an IBMYP school. I have talked to several librarians in other IBMYP schools, and I have read several articles online. The little I know about IBMYP fascinates me. Not having attended an IBMYP professional development makes it difficult for me to perform my job as an IBMYP educator and effectively serve in my role as teacher specialist.

Maxine, another support staff, expressed her feelings regarding attending an official IBMYP training for counselors as this would help her in her role as a school counselor:

> My job as a school counselor is to support students in their academic and socio-emotional learning. Working as a school counselor in an IBMYP school comes with other responsibilities, the little informal training I have received on the basic framework and philosophy of IB has been helpful, but not enough to serve in my role as an IBMYP counselor. I would like to attend a formal IBMYP training for school counselors to help me serve students at this school better.

The participants' responses and analysis of faculty training and school professional development documents showed that the school leaders developed a system for faculty members to share learning with others in the school. Responses from the participants who attended formal IBMYP training, and those who had not attended but would have liked to, imply that all participants valued the information from formal and informal training as helpful to their success as educators in an IBMYP school.

Students' Behavioral Challenges

RQ4 was as follows: What barriers or challenges have staff encountered in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states? There were no barriers identified from analysis of participants' responses to the interview questions and the analysis of all documents collected. However, *students' behavioral challenges* emerged as a major theme from the participants' interview responses and analysis of the school's behavior goals found on the school's website. This major theme was defined by two subthemes: *lack of shared decision making regarding students' behavior* and *irregular communication of students' behavioral goals and expectations.* All eight participants noted that students' behavior was becoming a challenge at this school. For example, Dean a teacher, noted, "I feel that we are only focused on making sure that our students' scores on standardized tests improves, but not on some students' behavior, such as chronic tardiness and bullying, which seems to be getting worse." Maxine, the school counselor, also shared, "I would love to spend more time working with teachers who are increasingly having more

difficulty addressing students' behavior problems, but I am not part of the PBIS committee."

Lack of shared vision regarding students' behavioral goals. Lack of shared vision regarding students' behavioral goals emerged as one of the two subthemes from the analysis of the assessment policy and school improvement plan. The focus of these two documents was on improvement in student academic achievement, and there was no mention of the school's PBIS behavioral system being in place. Six of the eight participants stated that even though the school leaders involved all stakeholders in developing and maintaining the vision of improvement in academic achievement, few individuals made decisions regarding addressing students' behavior problems. However, I found a school behavior policy on the school's website, which only the two administrators mentioned they were involved in developing.

Heather, a teacher, noted, "I know what our school's vision on improvement in academic achievement is, but I have no idea what our school's vision is on students' behavior." Heather further shared, "The way we address students' behavior using PBIS does not seem to be working because the principal did not involve all teachers in identifying the behavior goals that complement our school's academic goals." Bailey, the principal, indicated that students' behavior is a challenge because school leaders have not done a good job of soliciting the input of all stakeholders in developing the school's behavioral goals:

> Challenges in my primary area involve students' behavior and upset parents. When spending time in meetings, working with colleagues, and communicating

> effectively, these behavioral concerns are addressed, and usually, parent concerns can be alleviated as well, but we need to find a way to be proactive and identify these behavior problems before they occur, rather than wait to be reactive when students misbehave.

Kelly, like Bailey, acknowledged that while administrators had done a good job in involving all stakeholders in developing the vision of improvement in students' academic achievement, only few individuals made decisions regarding improvement in the students' behavior at this school. Kelly shared that she was aware that, as a school, their primary focus has been on students passing their state's standardized test. She also acknowledged that the requirements of IBMYP include both the academic and social emotional component. She indicated that they had to involve students in addressing improvement in students' behavior at the school. Kelly stated,

> The challenge we currently have as a school is to make sure that just as we involve all stakeholders in addressing improvement in students' academic needs we also need to work with all stakeholders in addressing improvement in students' behavioral goals.

Tanya, a teacher and collaborative team leader, shared that she was involved in developing the SIP and implementing the vision of improvement in student academic achievement but was not involved in making decisions regarding the development of students' behavior policy:

> I was involved in developing the school improvement plan and working with teachers on my team to ensure that we are using effective teaching strategies that

> will help us meet the goals of the plan. I would, however, love to be involved in addressing students' chronic tardiness, which seems to be getting worse.

Lack of shared decision making regarding students' behavior. Lack of shared students' behavior decision making is one of the two subthemes that emerged from the participants' response to interview questions regarding shared vision. All participants noted that it was the principal's responsibility to involve stakeholders in developing and reviewing the school's academic vision and students' behavioral goals. Six of the eight participants, however, indicated that although they were involved in making decisions regarding the school's vision of improvement in student's academic achievement, they were not involved in developing students' behavioral goals or making decisions regarding students' behavior. For example, Bailey the principal, shared that to improve student academic achievement, administrators worked with teachers and others "to identify the best instructional strategies to improve students' learning." Bailey further explained administrators also worked with teachers "to determine what types of assessments will be best to measure students' learning outcomes and to analyze the data after the assessments." Bailey however, shared,

> regarding our vision of improving students' behavior, I realize that I have not done a good job of involving all stakeholders, especially parents and students and even some faculty members in making decisions regarding our students' behavioral goals. I have been focused on improving students' academic achievement that I seemed to have allowed students behavior go by the wayside.

Kelly, like Bailey, acknowledged that while administrators had done a good job in involving all stakeholders in developing the vision of improvement in students' academic achievement, that only a few individuals made decisions regarding improvement in students' behavior:

> We have done a good job working with teachers to make the shift to the IBMYP student-centered learning and using effective instructional strategies to improve students' academic achievement. We also need to work with all stakeholders to determine effective strategies to address improvement in students' behavior of some of our students.

Tanya, a teacher and collaborative team leader, also shared that she was involved in developing the SIP and implementing the vision of improvement in student academic achievement but was not involved in making decisions regarding the development of student's behavior policy:

> I was involved in developing the school improvement plan and working with teachers on my team to ensure that we are using effective teaching strategies that will help us meet the goals of the plan. I would, however, love to be involved in addressing students' chronic tardiness, which seems to be getting worse.

Two of the eight participants stated that even though they were not involved in developing the SIP and the students' behavior policy, administrators had involved them in working with others to implement the goals of both the SIP and the students' behavior policy. Diana expressed that even though she was not sure how the school improvement plan was developed or who was involved, she knew that the plan focused on

improvement in students' scores on their state test. She also shared that she was aware that some aspect of the school's behavior policy was focused on addressing students' behavior such as cheating and plagiarism. Diana said,

> The principal reached out to me to work with the reading specialist to provide reading intervention to struggling readers and to work with teachers to help students understand the implications of academic dishonesty. I am happy to help but would have loved to be involved in developing the plans.

Similar to Diana, Maxine, the counselor, indicated that although she was not involved in the development of the SIP, the director of guidance asked her to work with teachers to achieve the goals. Maxine stated,

> I think administrators developed the SIP-based on students' scores. I am not very sure how or who was involved in developing our behavior policy. Over the past 5 years, our school's vision has focused on improvement in student academic achievement, which is easier to work with teachers to address. The problem we currently have is that because the principal has not involved all stakeholders in making decisions regarding our school's behavioral goals for students, it is very difficult to get teachers and students to buy-in.

Mary, the IBMYP coordinator, indicated that the requirements of the IBMYP go beyond the school's current focus on getting students to pass state standardized tests, but because this has been the school's focus, other requirements of the IBMYP, such as the ability of students to apply their knowledge in solving real-life problems, has ceased to be important:

> We took a whole school approach to improving students' academic achievement; we need to do the same to improve students' behavior. Our principal has involved all stakeholders in improving students' academic achievement but has not involved all stakeholders in making decisions regarding other aspects of IBMYP requirements, such as the development of interdisciplinary learning and service learning, which will allow students to transfer the skills they acquire from one content to another.

Bailey, the principal, offered reasons why it has been difficult to involve the right people in addressing students' behavior goals at this school:

> There are teachers who have strong classroom management and experiences handling students' behavior at this school, but it has proved difficult getting them to accept leadership responsibility beyond their classrooms. I know that we need to involve students and parents as stakeholders in making decisions regarding the development of our school's behavior plan, but we have not done a good job reaching out to them. I will find a teacher to lead that initiative before the end of the school year.

Furthermore, Bailey noted why, at times, not all stakeholders are involved in making decisions:

> There are times when it is easier for me to make quick decisions without involving multiple individuals or trust my assistant principals to make decisions on certain issues without involving me. For example, I do not need to know when my assistants schedule the fire drill. I also do not need to involve multiple

> stakeholders in making decisions, especially leaders whose vision does not match our school's vision or who are not willing to work with others to meet our vision or goals.

Findings from the participants' responses to interview questions and analysis of the SIP indicate that school leaders have not involved most staff members in making decisions regarding developing students' behavioral goals or regarding students' behavior at this school.

Irregular communication of students' behavioral goals and expectations.

Irregular communication of students' behavioral goals and expectations emerged as the second subtheme that emerged from the participants' responses to interview question and from analysis of the school newsletter, SIP, and the behavior plan found on the school's website regarding lack of shared vision regarding students' behavioral goals. Six of the eight participants noted that it was not enough for school leaders to involve all stakeholders in developing students' behavioral goals, but that it was also important for school leaders to establish and maintain regular communication with all stakeholders. For example, Bailey stated,

> I am the principal of the school. I am responsible for leading the learning, ensuring that we are creating a safe and positive learning environment for all stakeholders. A positive learning environment is a place where all stakeholders feel welcome and safe and willing to work together to ensure that all have access to a rigorous curriculum. It is my job as the principal to communicate both our academic and behavior expectations to all stakeholders.

Kelly, the assistant principal, noted the school had put in place PBIS and a PBIS leader to address students' behavior but admitted that school leaders had not done a good job of communicating the school's behavior goals to all stakeholders. Kelly acknowledged that because administrators had not done a good job of communicating the school's behavior policy to teachers as was shared with parents that student behavior policy continues to be a challenge. Kelly said,

> To ensure effective communication of our school's vision of academic improvement and students' behavioral goals to all stakeholders, we need to communicate regularly to all stakeholders using a variety of methods such as morning announcements, faculty meetings, and at our monthly PTA meetings.

All eight participants stated that continuous communication of the vision by the principal to stakeholders is vital to accomplishing the school's vision of improvement in student academic achievement and students' behavior goals. Six of the participants, however, noted that students' behavior continues to be a challenge because the principal regularly communicates the school's academic vision but not the students' behavioral goals. Diana, the librarian, stated, "We must post our school's academic vision and behavioral goals in different areas of the school, such as the library, cafeteria, the school's website, and the library so that students see it regularly."

Mary, the IBMYP coordinator, explained that in addition to communicating the vision in different areas of the school, it was also important to make sure that parents, including parents with limited English, can access the school's vision and behavioral goals in different languages:

> To make sure that everyone including students and parents understands our vision of improvement in students' academic achievement and our behavioral goals, we need to make sure that we also communicate our school's academic vision and behavioral goals regularly to all parents including parents with limited English.

Dean, a teacher, expressed frustration at how administrators had moved away from communicating the school's vision and goals at whole school faculty meetings to only communicating this information to department and CT leaders:

> In the past, we all heard our school's vision and goals at our whole school faculty meetings, but of recent, our principal mainly shares information regarding our school's vision and students' behavior goals with subject area and CT leaders, who often share different variations of the information with the team members. The principal needs to make sure that we all hear the same message at the same time at faculty meetings so that we have a clear picture of our responsibilities towards meeting the goals and vision.

Heather, another teacher, noted, "It has sometimes been difficult for me to complete some leadership task because communication of the school's vision and behavior goals has not been clear." Diana also shared her frustration at the lack of clear communication from administrators regarding the specific goals of PBIS:

> Our student population has grown and will probably continue to grow, but without clear communication of our students' behavior goals, it is difficult for teachers and other school staff to know their responsibilities towards addressing

> the goals. We need to involve all stakeholders in both developing and communicating our academic and behavioral goals and objectives.

The participants' responses indicated that not all participants were involved in developing the SIP. Analysis of the SIP and the behavior policy on the school's website, however, showed that the school had a vision to improve students' academic achievement and a behavior policy that identified the roles and responsibilities of all stakeholders. Six of the eight participants were not aware of this policy or the behavior goals.

Discrepant Cases and Nonconfirming Data

The participants shared their experiences and perspectives to provide insight into the distributed leadership practices to support the implementation of IBMYP at this school. For example, Dean noted that over the past 5 years there has been large teacher turnover but could not state approximately how many teachers have left the school and how this has influenced the schools' implementation of distributed leadership or implementation of the IBMYP. No other participant reported teacher turnover as a challenge, and analysis of the school's recent IBMYP evaluation report did not reveal a high teacher turnover rate; however, this was likely because the evaluation report was before the teachers' leaving at the end of last school year. A second discrepancy was, according to Mary, that although "over the past 5 years teachers have worked together to develop rigorous assessments that align with IBMYP objective criteria, there has been less in school PD [professional development] focused on IBMYP and less emphasis on its implementation." No other participants noted less school professional development

focused on IBMYP or its implementation. The professional development document and the collaborative team notes and agenda also did not support Mary's claim.

The next section consists of the evidence of trustworthiness of the information in this study, which supports the need for more research to explain the experiences and perspectives of administrators, teachers, the IBMYP coordinator, and support staff who practice distributed leadership and the implementation of IBMYP.

Evidence of Trustworthiness

Data analysis for this case study included triangulation of data from eight participants' responses to interview research questions, analysis of documents collected from the participants, district coordinator, and from the school's website. According to Patton (2002), accurate representation of the participants' experiences is important. To achieve trustworthiness in qualitative research, researchers analyze data based on the credibility, dependability, confirmability, and transferability (Saldana, 2011).

Credibility

To ensure the credibility of this study, I engaged in member checking and triangulation of data obtained from the participants' responses to interview questions as well as from data collected from the participants, district accountability director, and from the school's website. I sent all the participants a transcribed copy of their interview responses and incorporated all corrections and additions made by the participants to the final interview data. I used member checking to ensure that the participants had the opportunity to review my analysis of their responses to the interview questions and to clarify any misconceptions. I triangulated data from the participants' interview responses

and the data from analysis of the school documents as a way to ensure credibility and consistency. To further achieve data saturation and accuracy, I retrieved data from the school's website about the students' scores on standardized score and the school behavior policy.

Transferability

To ensure the transferability of this study, I provided a detailed and rich description of the study site, the participants, the data collection and analysis procedures and the research findings as suggested by Miles et al. (2014). The information provided according to Miles et al. makes it easier for other researchers to determine if the result may be applied to other settings. Additional measures to address transferability included reporting discrepant findings.

Dependability

To address dependability, I provided all participants their transcribed interview responses to review for accurate representation of their experiences. I provided a detailed description of the steps and procedures I followed for data collection, data storage, analysis, and interpretation of the research findings to make it easier for others interested in engaging in a similar study to replicate. I also included the interview protocol used for all participants (see Appendix A).

Confirmability

To ensure confirmability of this single case study, I saved all the transcribed data from the interviews and from the documents collected for this study to facilitate an audit trail by my committee chair and methodologist if needed. The data from the interview

and documents were based on the participants' experiences distributing leadership and implementing IBMYP in a public school. I maintained reflexivity by addressing my personal bias based on my experience as an IBMYP educator at another school district. I provided a detailed description of the data collection and analysis method. I also conducted a content analysis of all documents collected to understand the context. I hand coded all data from the interviews and documents several times to discern major and subthemes.

Summary

In Chapter 4, I focused on the results of this study. I described the data collection and analysis process. I also presented a detailed and transparent articulation of my experiences in coding data from both the interviews and documents collected to identify the emerging themes used to address the research questions. I provided the discrepant cases, nonconfirming data, and evidence of trustworthiness. In Chapter 5, I provide a summary and interpretation of my findings, my recommendations for school change, and an analysis of the potential impact of the study for positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this case study was to explore the experiences of administrators, teachers, support staff, and the IBMYP coordinator regarding how distributed leadership supports the implementation of the IBMYP at a public middle school in one of the U.S. Rocky Mountain states. The research questions that guided this study were as follows:

- RQ1: How are distributed leadership practice characteristics perceived by administrators, teachers, the IBMYP coordinator, and support staff at a public middle school in one of the Rocky Mountain states implementing the IBMYP?
- RQ2: What organizational structures, routines, and tools influence administrators, teachers, the coordinator, and support staff in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?
- RQ3: What training, professional development, or ongoing educational initiatives are staff aware of when implementing the IBMYP?
- RQ4: What barriers or challenges have staff encountered in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states?

The IB organization promotes distributed leadership as the ideal leadership model for implementing all of its four programs because leaders in both public and private schools are required to work with others to implement the four programs (IB, 2013). Some studies have supported the influence of distributed leadership practice in private IB

schools located in Vietnam, China, Hong Kong, and Thailand (Hallinger & Lee, 2012; Lee et al. 2012). There has, however, been no research on IB leaders' positions as they apply to distributed leadership and its effectiveness as a leadership model for the implementation of the four IB programs in public schools. Participants in this study shared their perspectives on the characteristics of distributed leadership practice and its influence in the implementation of the IBMYP in a middle school in one of the Rocky Mountain states.

The study site was a public IBMYP school that has, according to the IB leaders, used the distributed leadership model successfully to implement the IBMYP and improve student academic achievement on standardized state tests. The eight participants in this study were two administrators, three teachers, two support staff, and one IBMYP coordinator, all of whom had been at the school for at least 2 of the 7 years the school had engaged the distributed leadership model. My initial email was to all the 55 faculty members; however, 20 potential participants responded back to my initial email. I invited 20 potential participants, including administrators, teachers, support staff, and the IBMYP coordinator, to participate in this study, but only eight volunteered and indicated their willingness to participate in the interviews. All eight participants also shared documents related to their involvement in the distributed leadership effort and implementation of the IBMYP at the school. The interviews and documents collected provided insights into the participants' experiences and perspectives regarding how distributed leadership influenced the implementation of the IBMYP at this school. Seven major themes and 14 subthemes emerged from analysis of the data from the participants'

responses to the interview questions and the documents collected. I compared the themes that developed from the responses to the interview questions to what other researchers have previously reported in the literature.

Summary of Findings

Analysis of the data collected from participants' responses to interview questions and analysis of documents suggests that all the participants perceived distributed leadership had a positive influence on the implementation of IBMYP at this school The data also helped to identify organizational structures, routines, and tools that the leaders had implemented in addition to the training and professional development that leaders offered to support distributed leadership and the implementation of IBMYP at this school. All eight participants noted that involving all stakeholders, including parents and students, in addressing the school's vision of improvement in students' academic achievement made the effort successful. However, the data revealed that the participants encountered challenges to distributed leadership and the implementation of the IBMYP at this school. The challenges included having the same group of individuals serving in multiple leadership roles, not involving all stakeholders in decision making regarding students' behavior goals, navigating district level directives in addition to distributing leadership appropriately, and implementing the IBMYP in a large public school.

The data also revealed unexpected findings. One of the most important findings was that all eight participants felt that the distribution of leadership at this school largely focused on improvement of student academic achievement and not on the students' behavior. Six of the eight participants noted that students' behavior had been a challenge

because the principal had not involved all stakeholders in drafting the behavior policy and making decisions regarding students' behavior at this school. The school principal and assistant principal both acknowledged that while administrators involved all stakeholders in making decisions regarding improvement in students' academic achievement, only a few faculty members wrote the behavior policy and only administrators made decisions regarding improvement in students' behavior. Six of the eight participants felt this failure to involve others in students' behavior issues reflected a lack of understanding of the IBMYP implementation model.

Interpretation of the Findings

I structured the interpretation of the findings based on the four research questions and the resulting themes. The seven main themes (see Table 2) that emerged from the study were as follows:

- Effective distributed leadership practices of positional and informal leaders.
- Collaboration amongst faculty members.
- Positive relationships among administrators and others.
- Shared academic vision.
- Effective organizational structures, routines, and tools.
- Shared learning.
- Students' behavioral challenges.

I discuss the seven themes and 14 subthemes that emerged from the study as they apply to each research question.

Research Question 1

The first research question was the following: How are distributed leadership practice characteristics perceived by administrators, teachers, the IBMYP coordinator, and support staff at a public middle school in one of the Rocky Mountain states implementing the IBMYP? All eight participants identified effective distributed leadership practices by stakeholders who supported the implementation of the IBMYP and the school's success in addressing the vision for improvement in students' academic achievement. The participants believed that everyone should have the opportunity to serve in leadership roles at different times depending on their expertise and experiences but especially based on their willingness to share the school's vision and goals.

The results of this study align with findings from qualitative studies by Cherkowski and Brown (2013) and Vlachadi and Ferla (2013) in which administrators and teachers participating in distributed leadership noted that principals were responsible for recognizing the expertise within their school and aligning the skills and knowledge of faculty members with the goals and visions of their schools. The findings from this study also support the findings of Harris (2009), Larsen and Rieckhoff (2014), Senge et al. (2012), and Spillane and Coldron (2011), who all noted that achieving systemic change requires the involvement of multiple individuals in a school. Finally, findings from research by Torrance (2013b) and Liljenberg (2015) in which teachers reported that involvement in distributed leadership allowed them to focus on improvement in teaching and developing meaningful assessments support this current study.

From the major theme of effective distributed leadership practices of stakeholders, the subtheme of multiple roles of leaders emerged. All participants shared their experiences regarding the multiple leadership roles of stakeholders, especially teachers, to support effective distributed leadership practice in the implementation of the IBMYP and the school's academic vision. This was consistent with the findings of Lee et al. (2012) and Louis et al. (2013), who noted that in a distributed leadership model, teachers served in different leadership capabilities such as department chairs, committee chairs, and mentors in addition to their classroom roles.

Cherkowski and Brown (2013) noted that distributed leadership could be successful when the practice is purposefully structured and aligned with the shared vision and goals of a school but acknowledged that there are internal dilemmas and challenges faced by administrators and teachers engaged in distributed leadership practice. Similar to Cherkowski and Brown's findings, another subtheme relating to effective distributed leadership was the situational challenges to distributing leadership. All of the participants identified situational challenges to distributing leadership and implementing the IBMYP in a public school such as theirs. For example, the two administrators in my study noted that it was a challenge to involve everyone in a leadership role in a large public school because the teachers' schedules did not easily allow them to engage in administrative leadership roles. The findings in this study also support those in distributed leadership studies in non-IB schools by Cherkowski and Brown and by Torrance (2013a), which indicated that because teachers have substantial additional responsibilities, teacher leaders have difficulty taking on leadership tasks. The two support staff participants also

reported that the staff members who were not involved in leadership roles felt left out of decision making, while others involved in multiple leadership roles felt resentment with other staff members who were not sharing the work of decision making. Information from the organizational chart showed several faculty members assigned to multiple roles while others had no additional roles assigned to them.

Another major theme regarding RQ1 was collaboration amongst faculty members. The focus of RQ1 was on how administrators, teachers, the IBMYP coordinator, and support staff at this school perceive the characteristics of distributed leadership practice. All eight participants referenced the culture of collaboration when describing the characteristics of distributed leadership practice at the school. The participants noted that the regular and ongoing collaborative culture at the school made it easier for teachers to share instructional strategies to meet most of the IBMYP implementation requirements and the school's vision of improvement in student academic achievement. The teacher participants noted that one of the school's major accomplishments over the last 5 years—developing a rigorous assessment that aligned with the IBMYP objective criteria and met their state standards in different content areas—had been due to teachers working collaboratively in their grade level teams. There is considerable literature highlighting the culture of collaboration as one of the positive outcomes of the distributed leadership model and as a means for distributing instructional leadership responsibilities in schools (DeMatthews, 2014; Hulpia et al., 2011; Liljenberg , 2015; Ozdemir & Demirciog˘lu, 2014). The administrators at RMMS who participated in this study indicated that the collaborative culture at the school was an effective way to share effective leadership

strategies and to develop and promote teacher leadership. Sanzo et al. (2011) noted that collaboration allowed principals to distribute instructional and curriculum improvement strategies to improve student learning. An important finding was that the support staff reported that the collaborative culture at this school made it easier for them to share strategies with teachers to support both the academic and social-emotional needs of students. However, the school counselor reported that collaboration with teachers to support students' emotional development was not scheduled and ongoing. Findings from analysis of the documents also confirmed that regular and ongoing faculty members' collaboration was a means to share instructional strategies to support distributed leadership and the learning needs of students in a public IBMYP school.

The positive relationships among administrators and others was another major theme that emerged in response to RQ1. The participants noted that the positive school culture and the interactions among faculty members were critical to distributing leadership and implementing the IBMYP. All eight participants accredited the constant interactions amongst faculty members as vital to the improvement in the relationship between administrators and others and the success of the distribution of leadership needed to implement the IBMYP. Likewise, several of the theorists in the field of distributed leadership in IB and non-IB schools noted that the practice aspect of distributed leadership depends on the interactions that exist among leaders and followers involved in the practice in addition to identifying the right individuals involved in leadership tasks (Hallinger & Lee, 2012; Harris, 2009; Larsen & Reickhoff, 2014; Price, 2012; Spillane, 2006; Vlachadi & Ferla, 2013).

Another subtheme regarding the influence of the positive relationship among administrators and others at the school was the positive school culture. The three teacher participants shared that the positive relationship between administrators and others had made it easier for teachers to trust and buy into the instructional decisions that they made with administrators. The principal articulated that creating a culture and climate of trust at this school was an ongoing priority to make it easier for staff to embrace the distributed leadership model needed to implement the IBMYP successfully. The assistant principal, however, reported that supporting a positive culture and climate had previously been a challenge at the school, but that the effort made by the current principal has been effective. A case study by Liljenberg (2015) investigated how school managers, principals, deputy principals, and teachers in formal and informal leadership positions in three schools explained the different outcomes from distributed leadership practice. Their findings showed that involving teachers in collaboration helped to create a culture that enhanced trust in schools (Liljenberg, 2015). Teachers in my study also noted that the frequent and ongoing collaborative practices at this school helped to improve the relationships amongst teachers and administrators.

Lastly, the theme of shared academic vision emerged in relation to RQ1. Academic vision correlated with findings from a multicase study conducted by Bush and Glover, (2012) in nine non-IB schools. The findings showed that nine principals were successful in distributing leadership because they used different means to communicate a clear vision and shared the school's values and goals with faculty members (Bush & Glover, 2012). All eight participants in the current study revealed that the principal

communicated the school's academic vision regularly to all stakeholders using a newsletter, the school's website, faculty and committee meetings, school announcements, and during PTA meetings. In addition, all participants reported that the principal involved all stakeholders in making instructional decisions to meet the school's academic vision. The SIP and the newsletter provided by the principal demonstrated that the principal communicated the school's academic vision to the stakeholders.

Research Question 2

The second research question was the following: What organizational structures, routines, and tools influence administrators, teachers, the coordinator, and support staff in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states? The data from this study suggests that redesigning the school structure, routines, and the previous and current principals providing teachers and support staff with the necessary tools made it easier for leaders to distribute the leadership needed to implement the IBMYP at this school. The principal said that administrators took into consideration the school's structures before assigning staff to classes, locating classes, and distributing resources to implement the IBMYP and support the school's vision of improvement in academic in achievement. The three teacher participants reported that the structural changes and tools that administrators put into place such as PLC and block scheduling made it easier for students to ask and respond to questions about their learning and interact with their peers in the classroom.

There is considerable literature that highlights the use of PLCs by schools as an organizational tool to improve instruction and for teachers' continual professional

development, as well as to increase student learning (Klar, 2012, Mackenzie & Locke, 2012; Richmond & Manore, 2010). In addition, Cherkowski and Brown (2013), Louis et al. (2013), and Sanzo et al. (2011) reported that principals used PLCs as an organizational structural tool to promote distributed leadership and to share decision making with other staff members. DeMatthews (2014) also found that six elementary school principals in West Texas used PLCs as a tool to share their schools' vision and goals and to distribute leadership roles among teachers. DeMatthews noted that the principals used PLCs to provide time and structure for teacher leaders to guide their peers in the use of effective instructional teaching strategies. Klar (2012) found that three secondary school principals used PLCs as the organizational structure for their faculty members to work collaboratively to enhance their knowledge and acquire the skills needed to increase the organizational capacity of the three schools and improve student learning.

In this study, two subthemes, regular and common collaborative planning time and improvement in student academic achievement, reflected the outcomes of the principal's redesign of the school structure and routines and providing staff with the necessary tools needed to distribute leadership and meet most of the IBMYP implementation requirements. In a mixed-method study conducted by Hallinger and Lee, (2012) in five IB schools in Thailand, Vietnam, China, and Hong-Kong, regular and ongoing collaborative planning and improvement in instruction was also found to be an outcome of having an effective organizational structure to support distributed leadership practice. Three of the eight participants in this study, however, stressed the need for

school leaders to keep working to make additional structural changes to meet all the IBMYP curriculum planning requirements, such as interdisciplinary planning.

Research Question 3

The third research question was the following: What training, professional development, or ongoing educational initiatives are staff aware of when implementing the IBMYP? Shared learning emerged as a major theme concerning this research question as school leaders noted that ongoing collaboration was one way they shared learning. The result of a multiple case study conducted by Torrance (2013b) to determine how the head teachers and their faculty at three primary schools made sense of the practice of distributed leadership showed that ongoing collaboration provided them with the means of sharing knowledge and the expertise needed to develop a learning school community. The subtheme of informal professional development emerged because six of the eight participants indicated they shared the knowledge they gained from attending formal IBMYP workshops with others during informal professional development regularly offered at the school.

Research Question 4

The fourth research question that guided this study was the following: “What barriers or challenges have staff encountered in the distributed leadership effort at a public IBMYP middle school in one of the Rocky Mountain states? The findings demonstrated there was no barrier to distributing leadership, but the major theme, student behavioral challenges emerged. Previous studies on distributed leadership in non-IB schools documented the challenges of distributing leadership (Bush & Glover, 2012;

Cherkowoski & Brown, 2013; Grenda & Hackman, 2014). In the current study, I identified the challenges of distributing leadership in an IB school. Six of the eight participants noted that administrators needed to involve all stakeholders, including parents and students, in addressing students' behavior. For example, the data showed that even though the principal had involved all stakeholders in developing and maintaining the school's vision of improvement in students' academic achievement, only a few individuals were responsible for developing the students' behavior goals and making decisions regarding their behavior. In addition, Mary, the IBMYP coordinator, indicated that the requirements of the IBMYP go beyond the school's current focus on getting students to pass the state standardized test, but because this has been the focus of the school leaders, other requirements of the IBMYP such as the addressing students' emotional needs, have ceased to be important. A lack of understanding of the school's vision and goals was also reported by J. William (2013) as a challenge when leaders distribute leadership with midlevel leaders.

Finally, irregular communication of students' behavioral goals and expectations emerged as a subtheme in response to the challenges of distributing leadership at this school. The data indicated that the students' behavior continued to be a challenge for several reasons. Nonadministrative staff believed that students' behavior was a challenge because the school leaders focused on improving students' scores on standardized tests and less on addressing their social-emotional needs. The nonadministrative staff also believed that the students' behavior was a challenge because the administrators have not involved all stakeholders in developing the school's behavior policy and making

decisions regarding students' behavior. The administrators, however, believed that the students' behavior was a challenge because they had not done a good job of regularly communicating the students' behavior goals to all stakeholders. Harris (2013) noted that the greater challenge teachers and school leaders faced in distributing leadership was determining how distributed leadership contributed to school improvement goals and student learning outcomes. Student improvement goals should focus on both positive progress toward their academic and behavior goals. The participants in this study reported that regularly communicating a shared academic and behavioral vision was critical for distributing leadership effectively because school leaders must involve stakeholders in addressing behavioral issues that affect improvement in student academic achievement.

Limitations of the Study

The small sample size of eight participants in this study may prevent generalizing the findings to another IBMYP school. Those who did not respond to the invitation to participate may have had different perspectives and experiences. In addition, because I was unable to observe the participants in their teaching, administrative, and support staff environment, I had fewer data to triangulate. To minimize bias, I used the participants' words when inquiring about the implications of their thoughts and reactions to the interview questions. During the interview, I avoided summarizing the participants' responses in my own words. I also rephrased the interview questions so the participants could answer the questions based on their personal experiences and when they did not understand the question. The use of the audio recordings allowed me to listen to the tone

of the participants' voices while I observed their body language during the interview. I ensured transferability to other settings by providing thick descriptions and describing the purposeful selection of the participants. Involving the participants in evaluating the research findings, interpretations, and recommendations from this study, also helped address the credibility of the study. Finally, during the analysis phase, I made every effort to minimize bias by challenging preexisting assumptions that I might have had due to my personal experience as an IBMYP educator.

Recommendations for Future Research

The purpose of this case study was to explore the experiences of administrators, teachers, support staff, and the IBMYP coordinator regarding how distributed leadership supports the implementation of the IBMYP at a public school in one of the U.S. Rocky Mountain states. The strengths and limitations of this study and findings from the literature review served as the basis for my recommendations for future research.

Recommendations for future research include an additional case study in a public IBMYP school that uses distributed leadership to address both student academic and behavior improvement. Another recommendation is that a future study investigate a larger group of participants including teachers who use diverse curricula and not just math and English to explore the consistency in the experiences of other teachers using the same instructional content. A multiple case study that focuses on the influence of distributed leadership practice in the implementation of an IBMYP, as well as students' academic and behavior improvement in at least two public middle schools with similar demographics, would be beneficial to other school leaders. Having data from two sources

will help compare similarities and differences between the data from the two schools. To confirm the findings, future researchers could explore the specific distributed leadership practices of administrators, teachers, support staff, the IBMYP coordinator, students, and parents who influence improvement in academic and students' behavior in a public school. This may include the role of counselors in supporting the social and emotional needs of students.

Another recommendation is that future researchers conduct a phenomenological study using multiple interviews to describe the lived experiences of administrators, teachers, support staff, and IBMYP coordinators who are involved in distributed leadership practice in a public IBMYP school. Participants from this study stressed the importance of making sure that all faculty members understand the IBMYP philosophy and program structure as it relates to different contexts.

Implications for Social Change

School and district leaders typically choose the IBMYP as an innovative curriculum framework with the tools to distribute leadership needed to implement IBMYP successfully and meet the school's vision and mission. Leaders in IBMYP schools who have difficulty improving students' academic achievement and behavior while meeting IBMYP implementation requirements might consider using the distributed leadership model as a means of involving all stakeholders.

There would be several possible outcomes if the research-based practices requested by the participants in this study were implemented. School leaders might gain insight into leadership practices to equip instructional and support staff at all levels with

strategies to distribute leadership needed to implement the IBMYP in a public school while improving students' behavior and academic achievement. As a result of knowing research-based strategies, teachers and instructional staff may gain an understanding of how to work collaboratively with administrators, parents, and students to improve the academic, social, and emotional needs of all students in a public IBMYP school. Furthermore, administrators, teachers, support staff, and other stakeholders might gain a better perspective of the challenges faced by school leaders in public IBMYP schools that hinder the distribution of leadership needed to implement the IBMYP and improve the school's vision.

Considering the implications for social change from the reflection of educators serving in different roles in schools is important for the implementation of innovative practices. With this in mind, I plan to share the results of this research with IB Americas's school leaders at a regional IB conference. The results of this study have already made a difference in the school. The school principal contacted me few months later to thank me and said that my time with them brought to their attention the lack of shared leadership concerning student behavior, and that they had started working on addressing this challenge. The results of this study may also contribute to social change by providing other public school and district leaders who adopt any of the IB programs with the distributed leadership practices needed to implement the programs in a public school setting.

Finally, improvement in the academic success of students participating in the IBMYP in these public middle schools can lead to more successful schools as well as

students who become better global citizens. The success of diverse students in a public school in acquiring the skills needed to contribute to solving local, national, and global problems contributes positively to social change.

Recommendations for Practice

My first recommendation for practice is that school leaders continue to focus on distributing leadership effectively amongst faculty members but to also work on including more individuals with different expertise to address the concerns of staff who serve in multiple leadership roles. This includes counselors who work with teachers to improve students' academic achievement on standardized tests and also tasked with addressing students' social and emotional needs. One participant in this study with previous expertise in PBIS from another school wanted to be involved in addressing improvement in students' behavior at RMMS. In addition to the current practices, I recommend school leaders involve all stakeholders in developing the school's behavior policy and understand their roles in addressing improvement in students' behavior at their schools.

Six participants stated that in addition to the ongoing informal professional development opportunities offered at the school, attendance in formal IBMYP training had helped them improve their practices and become effective leaders in a public IBMYP school. My second recommendation is that administrators provide similar opportunities for support staff to attend formal IBMYP training to support and further their roles as specialists in public IBMYP schools. School leaders should continue to rely on the expertise of faculty members who are official IBMYP educators and experienced faculty

members but not positional leaders within the school to continue providing ongoing formal training to faculty members new to the IBMYP.

My final recommendation is for administrators to involve all stakeholders, including students and parents, in reviewing the school improvement plan to determine the changes that the school needs to make to address both the academic and the social and emotional needs of students. Involving all stakeholders in developing a new school improvement plan that includes the school's academic vision and students' behavior goals might help everyone involved understand that improvement in students' behavior and academics are both important. As the school engages in continuous planning of school improvement, it will be beneficial for administrators to embed identified strategies for improvement into the daily activities of multiple individuals in both positional and nonpositional leadership roles.

Conclusion

My main reason for conducting this study was because of my role as an IBMYP coordinator in a diverse public middle school as well as my experience as an IB educator who wants to make a difference in the many schools in which I work. I also wanted to add to the literature regarding the influence of distributed leadership in implementing the IBMYP in public schools. Public IBMYP schools typically serve diverse students who might not have the opportunity to be exposed to high levels of critical thinking and a global perspective without access to innovative programs such as the IBMYP. I hope to provide public school leaders who are currently having difficulty meeting IBMYP

requirements with research-based information from a school that has been successfully implementing the IBMYP and achieved improvement in student academic achievement.

If public IBMYP schools have research-based data on how distributed leadership may influence their programs and improve students' academic achievement, they can make informed decisions on how to meet both IBMYP implementation and adequate yearly progress requirements. It is the responsibility of scholars and educators to provide public schools with research-based information to improve teaching and learning while exposing students to methods for their application of knowledge in solving community, local, national, and global problems.

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Appendix A: Interview Protocol

1. Tell me about your role and responsibility at this school.

    (a) Briefly describe your role as it relates to:

    -student learning,

    -teaching, and

    -assessment.

    How much influence do teachers and other non-administrative staff have over school policy and curriculum?

2. Please describe any experience you have had.

    To what extent are you included in the development and monitoring of the instructional program?

    (a) Please describe personal experiences you have had with this.

    (b) Describe how the school improvement plan was developed.

    (c) Give an example of your contribution.

3. Describe how your school establishes the goals of instructional collaboration.

    Please explain your contribution if at all.

4. Please explain your experience in past or emerging faculty professional development opportunities in your school that focused or will focus on IBMYP teaching and learning strategies for the classroom (Institutional or disciplinary?)

5. Please describe your personal/professional development training on IBMYP you have had.

    -please describe what you found most important.

-please describe what you found least important.

6. Please describe the relationship among administrators and other faculty members in promoting student academic achievement.

   (a) Give an example of a coaching/mentoring moments you have had with your leaders.

   (b) Give an example of a coaching mentoring moments with a colleague.

7. When you think of a culture of collaboration, please describe how you work with colleagues to learn new ways to teach, support each other, and to promote student academic achievement.

   (a) Describe ways in which you contribute or facilitate collegial support.

   (b) Tell me about others whom you interact with regularly to accomplish your job?

   -give an example of success

   -give an example of challenging situations and the results/conclusions

8. Please share your school's major accomplishments over the past 5 years.

   (a) To what do you attribute this?

   (b) Can you tell me what stands out for you?

9. Please share your school's major challenges over the past 5 years.

   (a) To what do you attribute this?

   (b) Can you tell me what stands out for you?

10. Please describe me any changes that have occurred since your school's involvement in implementation of IBMYP.

(a) Parental involvement

(b) Student involvement

11. To what extent do you believe that school leadership is the responsibility of everyone at this school?
    (a) How are the expertise of faculty members incorporated in the school's leadership practice?
    (b) Give me 2-3 examples of opportunities created for others to take on leadership roles at this school.
12. How does distributing leadership tasks to others influence the goals or vision of your school?
13. Please describe challenges or difficulties you may have experienced in your role at your school.
14. Are their situations or instances where people are not able to successfully complete leadership tasks? If so, please explain.

Closing

Is there anything else I should have asked? Is there anything else you would like to share? Do you have any questions for me? If you like, I will forward a copy of your interview transcript for your records. If I conduct follow-up studies on distributed leadership and IBMYP, may I contact you again for participation? Thank you again for participating in this study and your time.

Appendix B: List of Codes and Subsequent Themes That Emerged From Analysis of the Collected Documents

Coding of School Documents

Relevant Documents	Codes	Themes
Standardized state tests	Scores, Language Arts, mathematics, percent, achievement, average, standards, tests, below, above students	Improvement in student academic achievement
School Improvement Plan (SIP)	Achievement, gaps, close, disadvantaged, students, improvement, achievement, close, gap, parents, schools, vision, teachers, collaborative, teams, analyze data, frequently, formative, and summative assessments, identify, share, strategies, remediating, students scoring, below average standard scores, proficient math, language, arts, least, twice, quarter, PBIS, behavior, classroom, instruction, state, standards	Shared vision, improvement in student academic achievement, shared strategies, organizational structure
IBMYP units and lesson plans	Teachers collaborate, concept, inquiry, questions, learning, target, state standards, common, formative, summative, reflection, instruction, modeling, practice, design student-centered, daily lessons, plan, differentiate, extensions, resources	Teacher collaboration, shared strategies, organizational structure and tools
Meeting agendas and minutes	Collaboration, team, teachers share strategies, unit, reflection, lesson plans, design formative and summative assessments, data dialogue, share,	Teacher collaboration, share learning, shared strategies, collaborative team

	instruction, resource, strategies common, all students, scaffolds, identify, follow up, review, personal, goals, SMART	
Sample formative and summative assessments	State standards, IBMYP criteria, leveled, student, reflection, formative, unit, summative, achievement level	Student achievement level
IBMYP Policies (Academic honesty, inclusion, language, assessment, and students behavior plan)	Student responsibilities, teachers, parent, philosophy, education, librarian, support, IBMYP grading, reporting, quarter, conversion, districts, review, collaboratively, teams, IEP plans, school counseling, inclusion, instruction, learning, social and emotional, behavior, goals, involvement, student learning needs	Responsibilities of all stakeholders, Collaboration Decision making, communication, behavioral goals
Evaluation report	Teachers, students, parents, academic, achievement, vertical articulation, collaboration, teams, meetings, agendas, involvement, planning, units, lessons, classroom, instruction, professional development, horizontal, service, learner profile, state standards, environment, IBMYP training, staff, policies, learning, instruction, student-centered, resources	Responsibilities of all stakeholders, organizational structure and tools, professional development, team collaboration, shared learning, improvement in student academic achievement
School's leadership organizational chart	Principal, teachers, students, parents, committee, assistant principal, IBMYP Coordinator, support staff,	Responsibilities of all stakeholders

Faculty training documents	Professional development, workshop, in-school, district, Faculty meeting, IBMYP Workshop, types, turn, around, training, principal, assistant principal, teachers, school year	Professional development, ongoing, formal and informal training
School's professional development calendar	Teacher, topics, responsibilities, school year, teacher work day, after school, leader, department, collaborative, team, in-school, once, weekly, month, administrator, instructional, focus, student, learning, achievement, whole-school, faculty, professional development, collaborative team, needs	Informal and formal, professional development, improvement in student achievement, collaborative team, shared learning
School's master schedule	Teachers, individual planning, collaborative team planning, times	Collaborative team planning, organizational structure and tools
School's monthly newsletter	Attendance and tardy hotline, grade level news, department news, upcoming events, student, government, office hours, administrators phone numbers, school, counselors, page, club news	Communication, responsibilities of all stakeholders, decision making