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Doctor of Education in Organizational Leadership

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Dr. Nannette Glenn, Dean's
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Graduate and Professional Studies

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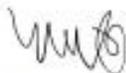
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Elementary Principals' Instructional Leadership Role in International Schools: The Challenges
and Perceptions of Student Grouping

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by

Hafida Belkacem Becker

July 2022

Dedication

First and foremost, I dedicate my dissertation my mother Becky, who passed on April 22, 2022, and sadly was not able to see me finish this journey. I love you and miss you so much! I also dedicate my work to my family, who supported me over the years while I embarked on this adventure. To my best friend and amazing husband David A. Becker, who encouraged me to keep going even in the most challenging times. To my children Ephram A. Becker and Kamilah N. Becker, in hopes that they will follow in my footsteps, and always remember that hard work pays off. I pray that you will always work hard and understand that obtaining a quality education does not come easily. To my parents Ralph A. Reed and Rebecca C. Reed, for their constant source of encouragement, believing in me, and pushing me to achieve and be the best that I can be.

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Being a lifelong learner is a common phrase in education. My educational journey has not always been stellar. As a young pupil, learning at school was hard for me, and if God had not placed certain people in my path to help me discover that obtaining a quality education is meaningful and fulfilling, I would not be where I am today.

Ralph and Becky Reed saved my life when they took me into their home, because they saw a wilting seedling not growing. The seedling was loved and cared for, but it was not receiving enough sunlight or fertilizer to grow to its full potential. Educationally, I was not thriving. Ralph and Becky believed in me, encouraged me, and challenged me. They fought for me, and I would not be where I am today without them. Thank you for saving my life! I owe you everything.

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Abstract

Globally, elementary principals have similar responsibilities and duties. Some of their obligations include clerical tasks, other managerial assignments, and instructional leadership duties. All of these jobs require attention and can be time consuming. The researcher aimed to understand the perceptions which challenge elementary principals' beliefs about student grouping strategies and the impact on reading achievement within a network of 35 schools located around the world. Principals at these schools have the challenge of creating student groups with limited numbers of students and a wide range of abilities. At most of the schools in this network, there are only enough enrolled students to develop one homeroom per age level. The purpose of this research was to explore the decision making elementary principals used for student grouping and understand more clearly and comprehensively the challenges school leaders had with grouping strategies to meet each student's needs. The intent for exploring this problem was to support the organization to move schools closer to closing the reading achievement gap for elementary students. The researcher conducted an exploratory study using generic inductive qualitative methods and solicited all of the elementary principals from the 35 schools to participate, sending a "what is" and "what should be" gap assessment survey for those who consented to participate. A short-answer gap assessment questionnaire followed to determine the practices and perceptions of each principal and if they were able to share reading data with me. The survey and questionnaire led to semistructured individual interviews to dig deeper into the thought process and beliefs of what strategies principals use for student grouping. The researcher also addressed the expectations of principals' student grouping for their teachers. Due to the Covid pandemic, there were some challenges collecting the reading data as schools went online for distance learning and did not follow the assessment protocols with fidelity.

However, there were patterns of challenges from the principals related to parental expectations and ensuring success for intensive English students.

Keywords: elementary principals, student grouping, grouping strategies, perceptions and challenges of elementary principals

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Chapter 1: Introduction

Principals, particularly at the elementary level, participate in a daunting student grouping process each year. Principals have the critical task of assigning thousands of students to hundreds of different classrooms (Bailey & Michaels, 2019). The ideal goal is for principals to “create diverse classrooms both in demographics and learning abilities while also satisfying federal requirements for students’ individualized educational plans and parent preferences” (Bailey & Michaels, 2019, p. 60).

Students receive inadequate schooling and fall behind academically when their placement is not in optimal learning environments (Morret & Machado, 2017). This situation has become starkly evident with the global challenges schools face with at-distance, blended, and in-person student learning arrangements during a global pandemic (Sebastian et al., 2018). Due to several factors, including classroom grouping, an achievement gap continues to grow in students’ reading abilities (McDowall & Schaughency, 2017). There are many different options for grouping students into classrooms; therefore, principals decide how to group students while considering parent requests for specific teachers, students’ ages, a balance between gender distribution, a diverse, multicultural environment, and special learning needs.

One measure of success that principals use to determine students’ academic readiness is how students perform in reading achievement. The goal is for students to make reading achievement growth each year, and to meet this goal, principals may rely on student grouping strategies that are not effective. Feeling the pressure for students to make yearly reading achievement growth, principals must choose student grouping strategies that will not cause harm and yield promising results (See & Gorard, 2020).

Many countries have literacy improvement policies because reading is a life skill that opens doors to access a broader curriculum range (See & Gorard, 2020). Reading achievement provides the students a set of skills applicable across other contexts (Prinsloo, 2021); it is a gateway to other subjects. Students who do not read on or above level by the time they leave elementary school have difficulty accessing the secondary curriculum, which has implications for them later in life (Wolf & Katzir-Cohen, 2001). The lack of high-quality classroom interaction due in part to student grouping within the classroom contributes to reading achievement gaps in elementary-age children (Goodwin et al., 2020).

Specifically to this study, another challenge that elementary principals at Worldwide International Schools (WIS; a pseudonym) face is that parents pay hefty tuition and expect their children to be reading on the predicted level and experiencing success. There are students with varied learning needs, abilities, and ethnic backgrounds enrolled in school. Some students are gifted, some have special education needs, some are English language learners, and others have social and emotional struggles. Ensuring that students are in the best learning and multiculturally diverse environment to promote reading and academic growth with their particular individual requirements is challenging (McGillicuddy & Devine, 2018).

For this study especially, elementary principals face the dilemma of deciding which type of student grouping to use when placing students in classrooms with the added tension of equipping students with the skills to succeed (Matthewes, 2020). With the many grouping choices, the results are often an unsuitable learning environment creating a continuous lack of appropriate instruction for students (Zweers et al., 2019).

Background

This issue is understood as a global issue that goes beyond the U.S. schooling system and affects schools around the world. WIS is an international educational organization that works with the U.S. State Department to open schools in remote areas where there is a need to educate American children. WIS opened the doors to its first school in 1971, with only four students in Yemen. Over time the organization changed, grew, and began to make an impact beyond Yemen in Europe, Asia, and Africa. Currently, there are 37 schools around the globe and one virtual campus with approximately 7,300 students. The largest school in Shenzhen, China services about 1,200 students, while the smallest school is in Pristina, Kosovo with 52 students. The grades included in the schools provide education to three-year-olds (comparable to preschool) up to secondary IV, equivalent to 12th grade in the U.S. Most schools within the organization have one principal. However, schools with more than 300 students have two principals.

The hiring goal of WIS is to employ qualified foreign hire teachers. Preference is given to foreign hires who hold education degrees from North America, while the paraprofessionals are local hires from the host country. In some countries, there is a lack of foreign teachers. In these extreme cases, the schools hire qualified teachers with education degrees from other countries in Europe, Asia, and South America. Instruction at all schools throughout the world is in English.

At WIS, there are no grade levels. At the elementary level, age levels determine student groups in homerooms, but the students can work on units of study above or below their age group depending on their needs. The students participate in music, art, physical education, and language class (French or host country languages such as Chinese, German, Italian, and so on) and the core subjects: mathematics, reading/writing, cultural studies, and science. The schools

provide an American-style international curriculum with a mastery learning educational philosophy.

At WIS, time is used as a resource to reach mastery and not as a boundary to determine when learning begins and ends. Students who are ready academically can progress to the next level units, while struggling students transition to academic content appropriate for their needs. While teachers are expected to utilize best teaching practices, the students' success is not based on how well the teacher teaches but rather on how well the students are learning. There are only two sections of each age level in most schools, making student grouping a more significant challenge because of the limited choice.

WIS has three foundational beliefs. The first is that all students can experience success in their learning; the second is that success breeds success, and the third is that it is the school's responsibility to provide the conditions for success. All three of these beliefs align with the mastery learning education philosophy, which sets WIS apart from other international schools.

“Success for all” is a catchphrase motto used at WIS. WIS does not formally utilize the structured school reform model called Success for All developed by Robert Slavin. The Success for All school reform program is designed for high-poverty, Title I schools in the United States (Cheung & Slavin, 2016) and provides software, reading materials, extensive teacher training, and professional development (Cheung & Slavin, 2016). Instead, WIS uses this catchphrase to communicate to the community that WIS educators work relentlessly to ensure every student is successful. As a private international educational organization, the WIS network does not contain any high-poverty, Title I schools in the United States or worldwide and receives no funding to implement its school reform program. An outcome-based model of education is the vision, and it is founded on a cycle that schools develop by

taking responsibilities that make every students' success possible. One crucial factor is ensuring that students are equipped with the necessary prerequisites by individualizing instructional levels and given the time to develop the skills for success or move more quickly to gain new accomplishments if they are ready.

While WIS sounds like the utopia of education, it has its share of difficulties and challenges, especially when it comes to elementary student grouping strategies. Like other educational organizations, the principals spend countless hours deciding how to group students and deliberating about the most beneficial approach to use that will promote the best learning environment for all students (Bailey & Michaels, 2019). This process is daunting and requires hours of sorting and decision making to meet the goal of creating diverse classrooms inclusive of all academic abilities, while also meeting legal requirements (Bailey & Michaels, 2019). Parents expect their children's needs to be met regardless of learning difficulties, language ability, or any other challenges (Zweers et al., 2019).

While principals at WIS continue to face this issue, students are placed in classrooms each year and continue to fall behind. Students' academic levels are affected, and a significant reading achievement gap continues to grow between the above-, average-, and below-level readers (McDowall & Schaughency, 2017).

Statement of the Problem

The context of my problem was WIS—a network of 37 international America-curriculum schools located across the world. I explored the challenges that principals at the schools face when dealing with student grouping strategies. The lack of high-quality classroom interaction, due in part to student grouping within the classroom, contributes to reading achievement gaps in elementary-age children (Goodwin et al., 2020).

Classroom groupings play a significant role in the interaction that occurs between students' personalities and ability levels. Principals at WIS have the challenge of creating student groups with limited numbers of students and a wide range of abilities. At most of these schools, there are only enough enrolled students to develop one homeroom per age level. Therefore, creating classrooms that elicit high-quality classroom interactions between students is often unavoidable. A domino effect happens when students are grouped in specific ways, and some classroom interactions prove beneficial, while others are detrimental to students' reading achievement (Matthewes, 2020).

I assumed that with the constraint of small student enrollment numbers for each age level, WIS principals have limited choices for student grouping. Matthewes (2020) suggests that when lower-ability students are placed with higher-ability students, the lower-ability students are challenged through the interactions with peers that tackle problem-solving differently and often think outside of the box. It provides the lower-achieving students with new ways of thinking. In contrast, the higher-achieving students do not benefit from the interaction with the lower-achieving students. The higher-level thinking and application of critical thinking skills are often impeded for the higher-achieving students when grouped with lower-achieving students (Matthewes, 2020).

Complex problems get solved when individual players realize their role and contributions to the problem (Stroh, 2015). My research aimed to identify the challenges principals in WIS are facing with student grouping, the contributing effects of student grouping on students' academic achievement, and their evidence-based appraisal of students' reading struggles. A microlevel needs assessment provided data to discover the challenges principals face when placing students

into classrooms and their perception of students' reading achievement and academic gaps (Kaufman & Guerra-Lopez, 2013).

Purpose of the Study

The purpose of this research was to explore the decision criteria WIS elementary principals used for student grouping and to understand more clearly and comprehensively the challenges school leaders had with grouping strategies to meet students' individual needs (Kiel et al., 2017). Exploring this problem yielded insights into how to assist principals with the challenges of creating classroom groups that provide a more optimal learning environment for students (Morret & Machado, 2017). Studying this problem supports the WIS organization in closing the reading achievement gap between the above-, average-, and below-level readers due to classroom grouping (McDowall & Schaughency, 2017). The research helped answer the significant and more critical question of what grouping strategies principals could use to positively impact students' academic reading achievement (Gentry, 2016).

Research Questions

I explored two main research questions and two subquestions. The overarching research questions were:

RQ1: What perceived challenges do WIS principals face concerning student grouping strategies?

RQ2: How do the challenges of student grouping strategies influence the principals' perception of student reading achievement at WIS?

The subquestions include the following: (a) What is the role of the principal concerning student grouping? and (b) What beliefs or guiding principles drive the principal's decisions for student grouping?

Context of the Study

The context of the study was WIS—a network of international American schools located around the globe in Africa, Caucasus, Central Asia, Europe, Central/South America, China, and Southeast Asia. Each school in the network operates under the same guiding principles of success for all, mastery learning, and an international American instruction style.

Significance of the Study

I conducted an exploratory study to understand the initiatives and programs related to student grouping within WIS and the leadership role of principals' and their perspectives in this effort.

Schools are experiencing an increase in diverse populations entering the schools, such as gifted students, special education students, students with dyslexia, English language learners, and students with social and emotional needs (Decristan et al., 2017). Some research states that for certain groups of students to be successful, they should be grouped a certain way, such as gifted students, English language learners, and struggling students, and should be grouped separately and homogeneously. Alternatively, other research states that these same groups of students should be arranged differently and mixed heterogeneously (Murphy et al., 2017). A few illustrations of student grouping research follow.

In the Kuzmina and Ivanova study (2018), the authors supported heterogeneous grouping in schools. They found that students who worked with higher-achieving students began to mimic their motivation, expressive language, behaviors, and problem-solving strategies (Kuzmina & Ivanova, 2018). The evidence indicated that learning in heterogeneous classes benefitted students with low or moderate learning abilities (Kuzmina & Ivanova, 2018). The authors also suggested that studying in heterogeneously-grouped classes encouraged lower-ability students by

increasing their motivation and self-esteem, leading to improved academic achievement (Kuzmina & Ivanova, 2018).

In another study by Hienonen et al. (2018), the research supports homogenous or ability grouping over heterogeneous grouping, allowing teachers to teach students of the same level to increase achievement. Higher-level students challenge other higher-level students, and lower-level students' needs are best met at their ability levels (Hienonen et al., 2018). There were adverse effects on heterogeneous grouping mentioned in the Hienonen et al. (2018) study. The unfavorable effects were that the teachers lowered their expectations and standards to accommodate the students with lower abilities when students with lower abilities were grouped in the same classes as students with medium or high abilities (Hienonen et al., 2018). The findings showed the higher-level students were not challenged enough resulting in lower average student performance in the class (Hienonen et al., 2018).

Elementary principals within the WIS network struggled with student grouping due to the number of enrolled students per grade level. There may only be 10 to 15 students in each grade level, which causes principals to consider heterogeneous versus homogenous grouping and decide which grouping strategy would yield higher levels of reading and academic achievement.

My research may help answer the more significant and more critical question of how grouping strategies can positively influence students' reading and academic achievement (Gentry, 2016). Exploring this problem can provide principals with some data about and direction with grouping strategies to meet students' individual needs (Kiel et al., 2017).

Definition of Key Terms

English language learners. This term refers to students whose primary language is not English. Learning English is often a second or even third language, especially for students in International Schools (Garcia et al., 2019).

Gifted and talented. Students who show an exceptionally higher level of academic ability and achievement than other students their age. The gifted and talented students typically learn faster, grasp abstract concepts, and master more elevated content levels easily and quickly (Teno, 2000).

Grouping strategy. The framework is used to decide which student characteristics to utilize when deciding on which group to place students (Dieterle et al., 2015).

Heterogeneous groups. Students are grouped with other students with different ability levels (Murphy et al., 2017).

Homogeneous groups. Students are grouped with other students with similar ability levels (Murphy et al., 2017).

International American school. An American international school refers to an American school that operates in countries outside of the United States. While considered private institutions, many receive some funding from the United States Department of Education to provide an equitable education to American expatriate children as the education provided in American public schools. The American international schools follow an American Common Core curriculum and utilize American textbooks (Hill, 2015).

Mastery learning. The notion is that students reach high levels of learning when not restricted by time boundaries and provided with opportunities to offer evidence of the skills they have learned (Guskey & Anderman, 2013).

Special education. Students who require individualized instruction due to cognitive or physical disability. The range of disabilities encompasses speech, social-emotional, mental and physical functioning, medical diagnosis, or accidental temporary disabilities (Hienonen et al., 2018).

Student grouping. The placement of students in classrooms that is based on some characteristics and the assignment of this group of students to teachers (Dieterle et al., 2015).

Success for all. WIS uses this catchphrase to indicate the schools' responsibility to ensure that every student enrolled experiences success. At WIS, the phrase does not refer to the Slavin and Madden (2001) school reform model, which began as research and development in the mid-1970s and is a structured program with specific funding and strategies.

Summary

In this chapter, I have briefly introduced the notion that principals strive to meet all students' needs by ensuring no students are cast aside. The grouping decision criteria and the process are complicated because there are many student aspects to consider, such as the gifted and talented students, English language learners, and the special education needs of students. This chapter introduces the study by identifying the research problem, purpose, questions, and significance. Furthermore, I have explored the comparison of heterogeneous versus homogeneous grouping and exposed the difficulties elementary school principals face when placing students into groups.

Chapter 2: Literature Review

This research aims to explore the decision criteria elementary principals use for student grouping and understand more clearly the perceived challenges elementary principals confront with grouping strategies to meet students' individual needs (Kiel et al., 2017). Principals are held accountable for many responsibilities, and 70% report that they do not have enough time to complete all the expected administrative, managerial, and instructional tasks (Schwan, 2020). There is an expectation that principals will proficiently execute their leadership and organizational duties within the organization (Sepuru & Mohlakwana, 2020). The principals are at the core of creating and cultivating a favorable learning environment for students to learn and succeed (Sanfo, 2020). Bloom et al. (2014) claim that the principals' management practices have a more significant impact than class sizes or teacher quality. Part of school management practices and their connection to principals' instructional leadership includes creating classroom groups (Sebastian et al., 2018).

The literature for this research was located on the ACU Brown online library using One Search and Digital Commons. The approach used to find the research included the following keywords: student grouping strategies, *principal beliefs of student placement*, *student tracking*, *heterogeneous student grouping*, *homogeneous student grouping*, *within-class ability grouping*, *gifted and talented cluster groups*, *inclusion grouping strategies*, *English language learners grouping strategies*, *special education student grouping*, *mastery learning*, *elementary principals' roles*, and *challenges principal face*. Additionally, more articles and books were discovered by following the references of several articles read on student grouping and mastery learning, including the works of Guskey (2001), Hattie (2012), Bloom (1981), and Slavin (1987).

Challenges for Principals

Elementary principals face many challenges, such as time scarcity, interruptions, maintaining order and safety, paperwork, and more complex responsibilities, including instructional and managerial leadership (Lortie, 2009). Principals also face the challenge of beneficial placement for each student while balancing all students' needs by providing a rigorous curriculum and ensuring high achievement levels. Increasing pressure to improve student academic performance has emphasized the focus on principals (Schwan, 2020).

Principals are the catalysts in impacting coveted school outcomes, especially when they demonstrate proficiency in instructional leadership (Schwan, 2020). Instructional leadership includes immediate and secondary functions that support classroom teaching and student learning, and consequently it is directly associated with student classroom groupings (Schwan, 2020).

In a study about the challenges of implementing standards-based student grouping, Vogel (2012) discovered that providing small group and individual grouping arrangements for special needs students for reading and mathematics instruction was the most beneficial for student achievement. The special-needs students feel included and part of the school with these grouping methods and contribute to their success (Shogren, Gross, et al., 2015).

For second language learners, another grouping strategy has been found more useful. Providing instruction and grouping practices that expose language learning students to peers who can effectively model English language use is more beneficial. The researchers propose avoiding the small group pull-out of students with limited English proficiency and propose placing them into homogenous ability groups. As an alternative, Arias (2016) suggested utilizing heterogeneous groups by selecting struggling native English speakers and grouping them with

struggling English language learners to collaboratively work and strengthen the others' weaknesses, Positive results showed increased academic growth and achievement due to the instruction provided at the students' zone of proximal development. The concluding results were promising, revealing that all students were on a pathway to advance, with only a few small learning gaps remaining (Arias, 2016).

The impact of the student grouping on increased achievement depends on the needs of the students. It is most important to consider the student population when creating groups. For instance, special education students' needs are different from that of gifted learners, and they also differ from the requirements of English language proficient students. The homogeneous grouping has positive effects for high-ability students, but it negatively affects lower-ability students and English language learners (Sembiring et al., 2018).

For high-ability students, their needs are to be challenged and pushed by similar ability peers; the adverse effect results from slowing down their achievement to allow lower achievers to be part of the group. English language learners and lower ability students have positive effects and higher reading achievement in a heterogeneous grouping, but this type of grouping negatively impacts gifted learners (Sembiring et al., 2018). The English language and lower-ability learners that have higher-achieving peers as role models increases academic expectations. Within classroom settings, there are richer conversations with more complex vocabulary; this allows students to problem solve in different ways, have more out-of-the-box thinking experiences, and discover concepts with differing perspectives.

Another aspect to consider is the varying degree of need in each student group, especially among the exceptional education students. Students who suffer from emotional/behavioral disabilities, students with intellectual disabilities, severely handicapped students, and mild

specific learning disabled students all require differently focused instruction (Shogren, McCart, et al., 2015). Principals should also consider the teachers they assign to the other groups of students to ensure a match in personalities and increase student reading achievement.

There is no lack of student grouping options. Critical considerations for principals are the methods that most positively impact student learning needs and are manageable for teachers in an international school setting while overcoming the constraints and numerous variables. The limitations and variables elementary principals face include the number of enrolled students, time, financial and tangible resources, teacher and paraprofessional staff, facilities, and adequate training. Both heterogeneous and homogeneous student groups have positive achievement effects depending on the students' needs within the group. Even considering Slavin's extensive and vital work, principals continue to struggle precisely to focus on which student grouping strategy to use as the most effective to impact overall combined student achievement, because there are many obstacles to implementing these strategies. If money, time, and resources were readily available, principals would probably experience more significant success.

Conceptual Framework

The foundational theory of this research stems from the first work of instructional strategist and educational researcher Benjamin Bloom in the early 1960s. Bloom posits that all students can learn when provided with an ideal learning situation and a specific instructional strategy he called *mastery learning* (Guskey, 2005). Bloom (1981) stated that he was looking to identify highly favorable learning conditions rather than the mass use of mastery learning. At WIS, their mastery learning philosophy of education and "success for all" catchphrase are two foundational pillars for the organization, so why are reading achievement gaps continuing to grow at these schools?

Mastery learning is the theory that all students can learn if provided with the right mixture of ingredients. The recipe for success includes organized and structured instruction, corrective feedback with no time restraints, and individualized learning (Yang, 2017). Mastery learning is based on a cognitive-behavioral approach (Yang, 2017). Bloom believed that by providing students with favorable learning conditions, all students would learn to mastery (Guskey, 2001). The objective is to provide a learning environment conducive to high levels of learning for all students, and the question is: How do we achieve and create that particular learning environment in classrooms that consist of a variety of diverse learners?

Elementary school leaders are experiencing increasing numbers of students enrolling in school: special education students, second language learners, gifted students, and multiculturally diverse student populations (Brown III, 2016). These students have intellectual or exceptional abilities that may or may not fit the mold of a typical learner. Each student that enters the school building has individual needs. Whether the student needs instructional support or extended support to promote learning, the teachers must be prepared to provide instruction that meets every student's needs and do so within the student group's constraints. The principal is charged with creating student grouping practices to ensure all students are successful.

Furthermore, once the principal has created the groups, the teachers can provide a learning environment conducive for differentiation and success, meet parent expectations (Waheed & Shah, 2018), and apply the mastery learning practices. This is especially true in international American schools where parents have high and diverse expectations for their children's education (Waheed & Shah, 2018). The teacher must create a learning environment with appropriate student grouping that meets every student's needs to ensure their engagement and success (Vogel, 2012). Researchers who have focused on student grouping effectiveness,

such as Guskey (2001), Hattie (2012), Bloom (1981), and Slavin (1987), have associated improved student achievement with making informed decisions based on data. Analyzing data is a powerful tool to consider when creating student groups (Park & Datnow, 2017).

Grouping Strategies

What grouping process should elementary school principals use to address the needs of diverse student populations and create classes that can positively impact all students while maintaining mastery learning practices? Student grouping refers to a classroom cluster when a group of students is assigned to the same homeroom teacher for instruction (Ward, 1987). Sometimes, teachers group their students into smaller groups for teaching throughout the day or various instruction types (Ward, 1987). The research about student grouping strategies supports exploring multiple ways that elementary school principals improve student achievement. This is done by analyzing the student grouping practices leaders use in both low-performing and high-performing elementary schools to determine if the school's grouping practices impact student achievement (Suárez-Orozco, 2017).

The research presents various propositions, but there are two main types of student grouping strategies that surface regularly. One way is to assign students to classrooms randomly. Another way is to intentionally group the students heterogeneously to allow for flexible grouping in reading. There are many terms used to describe the same practices. Some research refers to between- or within-class grouping, which is the same concept as heterogenous and homogenous flexible or ability grouping. Between-class clusters refer to a practice that clusters the students throughout the school. In contrast, within-class grouping involves creating small groups within a classroom and dividing them by ability (Matthews et al., 2013).

The research considers that the most significant grouping strategy occurs when leaders create student groups by using multiple data sources. Furthermore, the groups should not be fixed but fluid and centered on providing differentiated instruction to include the numerous needs of students. The most successful small group or individualized instruction happens when the teachers frequently analyze data and create fluid student groups that meet the current needs of the students. The research emphasizes that teachers are more likely to plan differentiated within-class grouping instruction if they have the proper training and possess the essential resources (Park et al., 2019).

Furthermore, the research indicates that ability grouping and differentiated instruction should happen simultaneously and not be viewed as separate practices (Hollo & Hirn, 2015). Teachers should plan based on individual student needs and abilities. The research points out that homogeneous grouping is a preferred method of student grouping for teachers because it is easier for teachers to manage (Hollo & Hirn, 2015). Teachers find it difficult to manage differentiated classroom environments to meet the needs of all the students with specific learning needs and a variety of disabilities (Morret & Machado, 2017). To accommodate every student and provide small group instruction, the teacher divides the students into ability groups to provide targeted instruction within the classroom. The research revealed positive results when teachers focused their time on targeted instruction within small groups determined by student ability level (Ciullo et al., 2019).

Multiage grouping strategies refer to nontraditional student grouping practices that allow students of varying ages, typically within one year of one another, to be grouped in class (Kinsey, 2001). Students in multiage classrooms most likely follow a standard curriculum and move through the standards at their own pace. Since this grouping strategy is still in its early

development stage, most schools are unlikely to choose it (Kinsey, 2001). There is very little data linked to multiage classroom grouping and increased reading achievement. However, the unique contribution of multiage grouping is the capacity to address individual students' needs by providing opportunities for scaffolded learning from other age peers (Kinsey, 2001). Multiage class groupings allow for the students to learn at their own rate regardless of their age (Gorrell, 1998).

Tracking is a practice that some principals utilize in certain countries to group students. Tracking is a practice where students are grouped in homogeneous groups based on ability. One of the tracking motivations is that not all students are deemed fit to pursue an academic track (Borghans et al., 2020). Tracking enhances teaching efficiency because of the targeted instruction teachers can provide. It also influences educational pathways toward postsecondary and job opportunities. However, tracking also has adverse effects and can be harmful to lower-ability learners by discouraging academic achievement and growth. This philosophy is not aligned to the mastery philosophy in which it is believed that everyone can learn and succeed (Borghans et al., 2020).

Exploring this problem aims to support the WIS organization toward moving schools along the path to closing reading achievement gaps between the above-, average-, and below-level readers by enabling principals to construct classroom groups that support mastery learning. The research helped me answer the significant and critical question of what grouping strategies principals could use to positively influence students' reading achievement (Gentry, 2016), and the perceived challenges principals face with school management practices.

The research reviewed above focuses on the various grouping needs of students individually. However, further research should explore a process to address a combination of

diverse student needs because some students have multiple struggles with the most efficient way to achieve mastery learning. There are varying needs that may be able to be grouped to address them effectively. Parents are looking for schools that provide instructional practices that support the unique needs of their children. Student grouping is one instructional practice that is the responsibility of the campus administrator. Therefore, principals must make careful and effective student grouping decisions to meet parent expectations. It is crucial to explore better ways to integrate student grouping strategies to support principals with the challenges of best meeting their students' needs and ensuring their success.

Summary

Principals can create student groups despite the research on the different types of student grouping and the various choices. Little research has linked the best grouping strategies to meet the combined needs of all students simultaneously while applying a mastery learning philosophy. Chapter 3 presents this study's methods, research design, population, data collection, and analysis procedures.

Chapter 3: Research Method

This study explored the beliefs and perceptions of elementary principals to uncover any patterns or trends (Vogt et al., 2012) in their student grouping strategies related to students' reading achievement within their respective class groupings. This chapter includes a description of the research design and method, population and sampling procedures, instrumentation, plan for qualitative data collection and analysis, ethical considerations, assumptions and limitations of the study, and a summary.

Research Design and Method

Because the WIS network of schools is international, this study had to adopt a complex organizational nature. Vital aspects to contemplate when selecting data collection tools were the comparative costs, time, and proficiency required to develop or obtain them (Kaufman & Guerra-Lopez, 2013). For this reason, my research design was exploratory rooted within a qualitative tradition, using questionnaires and interviews for data collection (Chen, 2014). I used a generic inductive qualitative model. The samples were purposeful and allowed generalizations within my organization. My coding focused on themes and sometimes theoretical categories and I was able to stop collecting data when additional participants were not providing any more new information: There was a definite point of saturation (Hood, 2007). In addition, the generic inductive qualitative model is best suited for applied research.

I gathered deidentified reading achievement data for elementary students from each principal. All WIS-network schools use Fountas and Pinnell reading benchmark assessments to collect reading level data on five-year-old to 10-year-old students and the NWEA MAP reading results as a measure of academic progress as a universal screener, and progress monitoring tool. Teachers collect reading level data at the beginning of the school year in September, in January

at mid-year, and again at the end of May for an end-of-year assessment. Teachers administer the computerized adaptive MAP test at the beginning, middle, and end of year.

Patton asserts that one of the strengths of qualitative data analysis is looking at program units holistically (1990). This notion refers to collecting data from the individual schools within the network that comprise the organization in its entirety. Gathering data from each school signifies a unique kind of data collection, a diverse focus for analyzing data, and various levels of claims about findings and conclusions (Patton, 1990).

Population and Sampling

The intended respondent audience consisted of 37 principals from 37 international schools within the WIS network of schools. With permission granted from the research review panel of the organization, I sent out an introductory letter explaining who I am, the research, and my study's purpose (Appendix A). I utilized the preexisting regional division of the schools from the organization to gather data using demographic descriptors. The division of regions is as follows: Africa (three schools), Caucasus (three schools), Central Asia (six schools), Europe (fourteen schools), Central/South America (three schools), China (five schools), and South East Asia (three schools). There is one additional school, which is a virtual campus, but I did not include it in my research because it does not meet the criteria for my research. Students who attend the virtual school receive individualized instruction and therefore are not a part of any class grouping.

Patton offers many different purpose sampling strategies. Purposeful sampling intends to select information-rich cases whose study will explain the underlying issues behind the study (Patton, 1990). It is feasible to mix multiple purposeful sampling strategies as each method serves a different purpose (Patton, 1990). The purposeful sampling criterion I was interested in

included intensity sampling, stratified purposeful sampling, criterion sampling, and opportunistic sampling (Patton, 1990). Each of these strategies helped me collect different types of data to include in my study. Intensity sampling allowed me to gather intense personal experiences from the principals about their grouping practices and their unique school community (Patton, 1990). Stratified purposeful sampling assisted me in capturing the significant discrepancies rather than recognizing the collective foundation of each school within the network (Patton, 1990). Criterion sampling was a way to gather evidence that led to a better understanding of information-rich cases while revealing system weaknesses that lead to program improvements (Patton, 1990). Last, opportunistic sampling allowed me to remain flexible and open to taking advantage of unexpected leads during my data collection (Patton, 1990).

Instrumentations

The formative research served as a systematic method of gathering empirical information from the principals and their views of student grouping strategies (Chen, 2014). The data collection instruments included a Likert-scale, gap assessment survey, a short-answer, gap assessment questionnaire, and individual semistructured interviews. Likert-scale use is widespread in qualitative research, and most people are familiar with it, providing additional ease of use with this style of tool (Leavy, 2017). While the survey results gave numerical data, it was merely a preliminary starting point to determine which elementary principals I wanted to include in the questionnaire. A questionnaire is often used to obtain information relating to a respondent's experience, background, and knowledge about a specific topic, including beliefs, perceptions, and views (Kaufman & Guerra-Lopez, 2013). An additional advantage is that questionnaires can be provided and filled out at a respondent's convenience by a set deadline (Kaufman & Guerra-Lopez, 2013). Alone these data points are isolated, but when combined they

offer a clear picture of the problem (Kaufman & Guerra-Lopez, 2013). Results from the questionnaires helped me direct the semistructured interviews and focus them on identifying the challenges principals face with student grouping strategies at their respective schools (Leavy, 2017). I determined whether I wanted to invite the participants to continue my study and ask them for an interview based on the results. My goal was to include principals with an organized system for placing students into groups. Additionally, I interviewed principals who expected their teachers to utilize small group instruction for reading. Last, the principals must have had access to at least three years of elementary students' Fountas and Pinnell reading level achievement data.

Data Collection and Analysis

I sent out an initial "What is" and "What should be" Likert-scale survey to better understand each principal's beliefs about their grouping practices and what they believed were some of the shortcomings of these practices (Appendix B). Schein (2010) posits that to achieve a deep understanding, one must infiltrate with insiders to gain the most accurate day-to-day operating principles that guide the behaviors. A "What is" and "What should be" gap assessment survey provided access to the principals' driving actions. How the principal responded to the survey indicated to me whether or not to include them in my study. Are the principals utilizing a specific system to group students into classrooms and expecting their teachers to do the same during literacy instruction?

The WIS organization tends to move principals every two to three years to new locations; therefore, a filing system to keep student data records may or may not exist. I needed access to at least three years of Fountas and Pinnell reading achievement data from the participating principals to determine if students are reading below-, on-, or above-level at the end of each

academic year. If their survey responses yielded the desired information, I sent those qualifying participants the short-answer, gap assessment questionnaire (Appendix C).

The gap assessment questionnaire was similar to the survey but elicited more in-depth responses. The participants provided me with more details about which specific grouping strategies they utilize to form student groups at their respective schools. It also gave me information about the principals' expectations for their teachers to form groups within their instructional time. I was interested in the frequency, length, and subject areas the teachers create groups in their classrooms. Finally, the principals informed me they could share reading achievement data if they had access to at least three years of available Fountas and Pinnell reading achievement data for their elementary students. Reading achievement data was deidentified and sorted into a table by the number of students in each age level. Other boxes included the number of students who read at or above expected levels by the end of the academic year.

Each question included in the questionnaire was tailored to gain information from the principal about how they group students into classrooms, their practices, beliefs, and the challenges they faced at their schools related to student grouping. Establishing common ground requires creating a primary awareness of why people are coming together, a collective sense of direction, and understanding some of the fundamental attributes of current reality (Stroh, 2015).

Once I gathered the reading achievement data and the gap assessment questionnaire, I invited principals to participate in a virtual semistructured interview if they met the criteria. For this portion of the research, I was interested in interviewing principals who have 90%–100% of their students in at least one age level who are consistently reading at or above expected age levels by the end of the academic year. I utilized a semistructured format to conduct my

interviews. I asked preplanned questions (Appendix D) in sequential and logical order but ensured that the conversation remained organic and authentic (Saldaña & Omasta, 2017). I provided my participants with an overview of the interview protocol. I recorded the interviews using Microsoft Teams to review the transcripts multiple times (Saldaña & Omasta, 2017).

I applied the interview guidelines of Mayo, as outlined in the Saldaña text (Saldaña & Omasta, 2017). I maintained eye contact and nodded my head as my participant spoke. I listened intently and took a few notes while interviewing to focus on the answers and authentically be present during the process. I was able to ask clarifying questions when necessary. This also provided an avenue to reiterate what my participant was sharing and ensure I was accurately capturing their perspective. I summarized my participant's responses and confirmed I was clear on my respondent's points (Saldaña & Omasta, 2017).

I felt very passionate about my topic and wanted to ensure I stayed neutral and not affect my respondent's answers. Therefore, I did not argue, interrupt, or provide my opinion or stance. There was no need to build rapport or provide context with my participant for these interviews because I was interviewing colleagues (Saldaña & Omasta, 2017). The goal was to find principals within the organization who were willing to participate genuinely and offer reliable data (Shenton, 2004). The principals needed to meet the criteria for the research. I informed participants that they were welcome to withdraw at any time without explanation. I also wanted the participants to understand that the study was attempting to find trends with the challenges principals face with student grouping. My role as a researcher was independent of that of the WIS organization. The participants felt comfortable sharing without the fear of losing credibility within the organization (Shenton, 2004).

The interview questions were tailored on the answers I received from the gap assessment survey and questionnaires. Once I obtained and analyzed the gap assessment data using a discrepancy model, I built interview questions based on the questionnaire results. I used my research questions to support and guide the interviews

Some of the participants provided some evidence related to professional development and teacher training they offer for their teachers related to student grouping practices at their school. Due to the emergent nature of the study, there were other helpful data captured as a result of the interview protocol questions. For instance, I did not have specific questions included in my script that addressed professional development or teacher training. However, since the participants volunteered the information, I deemed that the information yielded some important details that directly related to the purpose of my study and the research questions I had not considered previously but felt crucial to include.

I scheduled interviews by region to accommodate the various time zones. I used Microsoft Teams, as it is already a tool the participants within WIS use to communicate and collaborate. The information gathered from the interviews guided me to unveil the organizational challenges the principals face at all the schools. I used the questionnaire data and interview data to determine my next steps. If needed, I planned to conduct follow-up interviews; however, I did not need to complete any follow-up interviews to gain more in-depth knowledge from the required participants. I looked at schoolwide elementary reading level data from each school to compare the principals' practices to the students' achievement and find connections to the research. The information I needed regarding reading levels was the number of students enrolled at each age level and the number of those students reading at or above the expected reading level at each age level at the end of the school year. I did not collect any student names or respective

reading levels. I included overall reading achievement data to define the percentage of students from each school reading on level by the end of the school year. WIS uses preset criteria for final expected reading levels by age group (Appendix C).

To simplify the many aspects of the study, such as research questions and objectives, the design of the research process, the collection of data analysis, and the expression of findings, I focused on a single-perspective research approach of principals within an international network of schools. I only collected data from principals within the WIS network of schools. I did not include other factors in my study, such as teacher efficacy, training, or years of experience. However, I combined the data collected from each instrument to include the questionnaires, interviews, and research literature to gain an across-the-board, all-inclusive outcome of the challenges elementary principals face related to student grouping.

Leading interviews was the first part of collecting data as part of the research process. The second step was to analyze the script from the interviews (Nixon, 2014). The process of analyzing interview scripts is time-consuming and requires intentional and careful reading and rereading of the text (Löfgren, 2013). Evaluators selected a method for coding the script and created codes to condense the information into connecting categories (Saldaña & Omasta, 2017).

Before I began coding, I read each script one time to determine the context and created a story in my mind to enable me to come up with a coding strategy (Saldaña & Omasta, 2017). The first coding method I used was in vivo coding. The initial process was to format the script to isolate my words from the participant's words (Löfgren, 2013). I planned to do this by hand, but discovered a program called MAXQDA that helped me to both transcribe and code my interviews digitally.

I reread the script one line at a time and put any critical text in different colors. The words and phrases in different colors represented the ideas that stood out to me (Saldaña & Omasta, 2017). Once all of the scripts had colored text in their entirety, I reread the script and analyzed the common threads. The reason I selected in vivo coding first is that Saldaña suggests that it is “a good method first to learn how to code” (Saldaña & Omasta, 2017, p. 124). Reading the script line-by-line was beneficial as it helped me scrutinize each word the participant spoke.

The second coding method I used was value coding. I formatted the script for this method by deleting my lines and keeping only the participant’s parts. I again used the MAXQDA program to write side footnotes with one of three letters: a V to represent values, an A to describe attitudes, or a B to represent beliefs. The values describe “the importance people attribute to themselves, others, things or ideas” (Saldaña & Omasta, 2017, p. 128). The attitudes refer to how people “think” and “feel” about the world around them, including the self (Saldaña & Omasta, 2017, p. 128). Beliefs include the “values,” “attitudes,” and experiences that shape a person and make them who they are (Saldaña & Omasta, 2017, p. 128)

I used the value coding method because this type of coding is generally used in qualitative studies that deal with relationships between participants. The script was about the beliefs, practices, and challenges of student grouping from an elementary principals’ perspective and who they chose to include in the student grouping process (Saldaña & Omasta, 2017).

The third and last coding method I used was emotion coding. Emotion coding is appropriate for qualitative studies, including relationships between participants (Saldaña & Omasta, 2017). These principals were connected and frequently collaborated from one school to the next. I wanted to see if any emotional practices emerged and if there were leaders and followers within the network of schools. The process for emotion coding is similar to the value

coding method. First, I deleted the interviewer's line and only kept the participant's script. I read the script line-by-line and determined an emotion based on the participant's words. I connected all the interviews and clumped the emerging themes through the coding process.

Methods of Establishing Trustworthiness

First and foremost, obtaining consent to conduct research from the organization's research review panel was beneficial as a first step to reaching out to the administrators. The letter of approval was an indicator to my participants that I followed proper procedures and guidelines to conduct research within the organization.

Next, I gathered data by following a generic format to use with all of the participants. All participants received the same information, completed the same gap assessment survey, filled out the same gap assessment questionnaire, and were asked the same interview questions. All of the data I gathered and analyzed from this exploratory research study involved a credible, transferrable, dependable, and confirmable process.

Last, I provided a transcription of each interview to the respective participant to conduct a member check to verify their responses. As part of member checking, all participants were prompted to verify the accuracy of their answers within the transcription to avoid any misinterpretations of the gathered data (Shenton, 2004).

Researcher's Role

Being a campus administrator myself, I understood my participants' duties, responsibilities, and expectations during the data collection process. I have 21 years of experience in education; 11 of those 21 years have been as a school administrator. I believe my experience and background have provided genuine insight into my questioning strategies to obtain the participant's authentic perspective for my research study.

I myself did not participate in data collection to ensure that the data were not compromised to avoid any bias or potential conflict of interest. I collected data from my respective campus from the other campus administrator in the same manner that I collected data from the other principals.

Ethical Considerations

I work for the WIS organization where I conducted my research, which magnified the diligence I had to employ when doing my research. Following the strict research guidelines was imperative and nonnegotiable, especially in dealing with “human participants” (Saldaña & Omasta, 2017, p. 192). Before conducting any research, I obtained permission from the organization’s research review panel and the IRB approval documentation necessary from Abilene Christian University to conduct my research legally and ethically. I received the required permissions and consent and respected my participants’ confidentiality and anonymity. I wanted the principals to be honest and not fear that their participation in my study might negatively impact them. I wished them to be honest and forthcoming with real, authentic, and accurate responses.

I did not group students myself. Instead, I explored the principal’s perceptions, beliefs, and challenges about how they grouped their students into classes. Participation was voluntary from any campus administrator within the WIS network. This demographic consisted of men, women, and a culturally diverse population. This group also represents a range of experience and age levels.

I utilized a survey, a questionnaire, and interviews to gather my data from the principals. I also used existing reading level data that teachers collect to determine if their students are above, on, or below reading level. I did not need any students’ names or identifying information,

merely the number of students reading above, on, or below the reading level at each age level for each participating school. A school was considered participating if their campus administrator volunteered their participation. I did not offer any compensation for participating schools. I kept all participating schools confidential.

The findings from this study have implications for both research and practice. By venturing into the underexplored and unique international schools' mindset, the study sought to develop an empirical picture of leadership practices and challenges related to student grouping within the WIS network of schools.

At WIS, the campus administrators are scattered across the world and not in close contact with one another. While there is a certain level of collaboration, most of it is done virtually and typically by region under the leadership of regional supervisors. The working environment differs from a typical school district in the United States, where administrators within WIS do not have face-to-face monthly meetings, so they do not see each other on a regular basis. Not knowing each other intimately in a professional capacity provides a protective layer when it comes to what identifiable information is available. There are many administrators within the organization who have similar years of experience, and because I did not provide specific countries or schools to indicate the participants, I believe it would be impossible for someone to identify who my participants were. The same is true for the data representing the schools. The number of students included only accounts for certain age levels and there is a significant number of enrollment increases and decreases across schools represented in this study; it would be practically impossible for someone to trace which schools were represented.

Assumptions

I assumed that the participants understood student grouping well and created their student groups based on their beliefs. Also, I considered that each participant would provide honest responses to the questionnaires and semistructured interviews. I trusted that teachers at each participating school collected reading level data with fidelity at the beginning, middle, and end of the year and provided accurate data.

Limitations

The limitations of this research are that exploratory studies provide only a sketch or a rough outline of the problem, therefore, my finding may not be helpful in decision making in a practical way (Dudovskiy, 2018). Will the results of the study be generalizable to other international school organizations? Leavy (2017) posits that external validity can extend the study's results beyond the sample. The concept of external validity is essential to generalizability. Generalizability is being able to transfer a study's sample findings to the population as a whole (Terrell, 2015). Another limitation is that I understand many other factors affecting reading achievement. Still, my research focuses on exploring principals' challenges when creating student groups that impact reading achievement.

Summary

Exploratory research entails a wide range of methods. Often, the processes can be complicated, and sometimes results can be tentative (Clarke & Davison, 2020). Still, there is a general agreement that exploratory research is an essential component of the scientific undertaking, especially when it comes to understanding society (Waheed & Shah, 2018). International schools operate in their general private community. The motivation was to collect and analyze survey data and interview responses on the various challenges school leaders in

international schools face and particular challenges related to student grouping. The surveys and interviews were intended to produce knowledge that could support leaders in making informed student grouping decisions (Nattrass, 2020). Questionnaires helped discover the principals' thoughts regarding student grouping, and they also revealed the reasoning that led them to their conclusions (Stroh, 2015).

Chapter 4: Findings

This research is an exploratory study to understand the initiatives and processes related to student grouping within WIS. While the schools operate under the guidelines and policies of the organization, it is crucial to understand how the site-based decisions compare to one another and the impact on students reading achievement scores. I sought to find the decision criteria WIS elementary principals used for student grouping and understand the principals' challenges and perceptions with grouping strategies to meet students' individual needs.

Examining this problem could help the WIS organization move schools closer to closing the reading achievement gap between the above-, average-, and below-level readers due to classroom grouping and help principals make informed decisions. The chapter is organized by first providing an overview of the participant characteristics and the study sample characteristics. It also provides a detailed data collection and analysis review.

Participant Characteristics

Participants for this study included campus administrators from eight different campuses within the WIS network of schools worldwide. One of the participants represented a smaller campus of 100 students, six represented average size campuses of approximately 200 students, and one led a larger campus of 500 students. The number of students represent elementary students 5–10 years old. Five of the schools only have one section of each age level group. Three of the schools had two sections of each age level group. Two of the schools had at least one combination class where age levels were mixed in one class due to enrollment numbers.

None of the participants were brand new administrators, and all of the participants had worked for the WIS organization for at least two years. The participants ranged in age, years of

experience in education, gender, and cultural exposure. All of the participants had served as administrators on multiple campuses worldwide.

The participants were solicited to provide detailed information about their beliefs regarding student grouping, ranging from their approach to their teachers' expectations to providing small group instruction. I asked participants to identify challenges they face concerning student grouping, any professional development dedicated to student grouping, and whether they perceive that student grouping impacted student reading achievement at their school.

Study Sample Characteristics

WIS consists of 37 schools worldwide. All schools received a solicitation email. Depending on the size of the school, there are one, two, or more administrators assigned to each school. I purposefully selected the administrators from all of the WIS schools to include varied backgrounds, experiences, and perspectives on student grouping while still maintaining the philosophy and guiding pillars of the organization.

All WIS schools follow the mastery learning model, a research-based practice with solid evidence for being effective. Students have the flexibility to learn at their own pace, and students need to master the course content before moving on. The mastery learning model eliminates the gaps in learning because if learning gaps are left unaddressed, they can lead to difficulties in the future. Time is used as a resource within the mastery learning model, not a boundary.

The participants were contacted via a solicitation email (see Appendix A). The initial solicitation communication was sent to all administrators within the 37 WIS network of schools. Informed consent was obtained from 15 participants. All 15 participants were sent the next step, which included the Likert survey, and it was completed by 15 participants (Appendix B). Not all

15 respondents met the criteria of engaging in grouping strategies at their respective campuses, so I only sent the gap assessment questionnaire (Appendix C) to the participants who completed the requirements. Of the 15 respondents, I was able to identify 12 participants who met the criteria of participating in the grouping at the school level, expecting teachers to create small groups within their classrooms. In addition, the 12 participants were able and willing to provide three years of Fountas and Pinnell reading level data and three years of Measure of Academic Progress (MAP) test data.

Next, an email was sent to the 12 participants to schedule a semistructured interview. This step proved to be the most difficult. I sent out several follow-up emails to encourage participants to schedule an interview. Still, I was not as successful as I had hoped due to Covid school closures, scheduling conflicts, other commitments, and priorities. Four interviews were rescheduled at least twice, and I was able to interview eight participants in the end. The eight participants contributed voluntarily and provided an insightful perspective and requested data.

Data Collection and Results

The “What Is” and “What Should Be” Survey

The first data collection began with the “What is” and “What should be” gap assessment survey to determine the principals’ perception of what they perceived as gaps between their current knowledge and methods and what should be (see Table 1).

For what is currently happening at their respective campuses, none of the 15 participants stated that they are *consistently* familiar with the research on student grouping strategies. Six of the 15 principals responded that they are *frequently* familiar with this research, while five stated they are *sometimes* familiar. One principal said they are *not usually* aware, and three responded that they are *rarely* familiar with the research on student grouping strategies (see Table 1).

I then surveyed the principals about what they thought should be their level of familiarity with the research on student grouping. Eight of the 15 participants replied that they should be *consistently* familiar. One stated they should be *frequently* familiar; four expressed they should be *sometimes* familiar; none answered they should *not usually* be familiar. Two said they should *rarely* be familiar with research grouping strategies (see Table 1).

Ten participants indicated that they should *consistently* have a system for grouping students in classrooms versus four who currently have a regular plan. Seven principals stated that they *frequently* have a strategy, while only three commented that they *should frequently* have a system for grouping students. Four principals revealed that they *sometimes* had a plan, while two said they *should sometimes* have a strategy. None of the participants indicated that they did *not usually* or *rarely* have a system for grouping students (see Table 1).

The next item was to determine principals' expectations for their teachers to use grouping strategies in their classrooms to provide small group instruction. For what is currently the practice, one principal answered *consistently*, 10 principals answered *frequently*, three answered *sometimes*, one answered *not usually*, and none responded *rarely, if ever*. For what should be, nine principals answered *consistently*, five principals answered *frequently*, one answered *sometimes*, and none responded *not usually* or *rarely, if ever* (see Table 1).

The next item was designed to gain the principals' perceptions to compare it to the actual reading level data and establish the parallel between what principals believe about the students' reading levels at their campus, and what the data indicate. All of the principals indicated that students in the 5-year-old to 10-year-old classes are reading at or above level by the end of the school year. For what is, one principal answered *consistently*, seven principals answered *frequently*, seven answered *sometimes*, and none answered *not usually* or *rarely, if ever*. For what

should be, six principals answered *consistently*, seven principals answered *frequently*, two answered *sometimes*, and none answered *not usually* or *rarely, if ever* (see Table 1).

Obtaining Fountas and Pinnell reading data and MAP test data was critical. The following two what is and what should be statements were to verify if the principals had access to these data. Six principals answered they *consistently* had access, two principals answered *frequently*, four answered *sometimes*, three answered *not usually*, and none answered *rarely, if ever*. For what should be, eleven principals answered *consistently*, one principal answered *frequently*, two replied *sometimes*, one answered *not usually*, and none responded *rarely, if ever* (see Table 1).

For what is indicative of having access to MAP data, 10 principals answered *consistently*, three principals answered *frequently*, one answered *sometimes*, one answered *not usually*, and zero answered *rarely, if ever*. For what should be, thirteen principals answered *consistently*, one principal answered *frequently*, one replied *sometimes*, and none answered *not usually* or *rarely, if ever* (see Table 1).

Table 1*Gap Assessment Likert Survey: “What Is” and “What Should Be”*

Survey statement	RE	NU	S	F	C
<i>I am familiar with the research grouping strategies.</i>					
What is	3	1	5	6	0
What Should be	2	0	4	1	8
<i>I have a system for grouping students into classrooms each year.</i>					
What is	0	0	4	7	4
What Should be	0	0	2	3	10
<i>Teachers at my school use grouping strategies in their classrooms to provide small group instruction.</i>					
What is	0	1	3	10	1
What Should be	0	0	1	5	9
<i>The students in the 5-year-old to 10-year-old classes are reading at or above level by the end of the school year.</i>					
What is	0	0	7	7	1
What Should be	0	0	2	7	6
<i>I have at least three years of Fountas and Pinnell reading level data available for 5- to 10-year-old students.</i>					
What is	0	3	4	2	6
What Should be	0	1	2	1	11
<i>I have at least three years of MAP data available for 5- to 10-year-old students.</i>					
What is	0	1	1	3	10
What Should be	0	0	1	1	13

Note. The abbreviations refer to the following: RE = rarely if ever, NU = not usually, S = sometimes, F = frequently, C = consistently.

The purpose of the gap assessment survey was not to collect quantitative data. I designed it as a starting point to decide which participants I wanted to invite for an interview. I was looking for participants who had a system for grouping students and expected their teachers to form small groups. The most important was to identify which participant had access to at least three years of data. The other statements were designed to obtain some background information about the participants. For the results of the gap assessment questionnaire, I selected twelve participants who indicated *consistently* or *frequently* having a system for grouping and was willing to provide necessary data. These 12 participants were sent the gap assessment survey and questionnaire. The questions were created to find out more about the participants' experience in education, experience as an administrator, and time of services for WIS. The survey also collected information about procedures or research-based practices used for student grouping and confirmed that the participants had access to the data and were willing to share the data with me. Ten principals completed the gap assessment survey (see Table 2).

The gap assessment survey and questionnaire were sent to each participant and began by obtaining information about their overall years of experience in education. I also wanted to find out how many years the participant has worked for WIS, how many of those years they served as an administrator total, and how many years they served within WIS as an administrator. The survey and questionnaire revealed that the principals had between eight to 37 years of experience in education, with an average of 15 years. Three principals had only served as administrators within WIS, while the others had a minimum of 10 years in administration with other schools. The principal with the least amount of experience within WIS had served two years and both of those years had served as an administrator in the organization. This participant had 21 years of experience in education and 16 years of experience as an administrator. The principal with the

least number of years in education had eight years of experience, and all eight years were with WIS. This participant had three years of experience as an administrator, all with WIS (see Table 2).

Table 1

Participants' Years of Experience

Type	P1	P2	P3	P4	P5	P6	P7	P8
Education	15	15	37	28	15	8	21	30
WIS	4	13	8	11	4	8	2	16
Administration	10	7	17	8	10	3	16	8
WIS Admin.	4	7	8	8	4	3	2	8

Note. P = participant.

The next section of the gap assessment questionnaire was to establish how the principal made decisions about grouping students and if there was a specific process utilized. I also was looking for information about what evidence the principals used to make decisions about student placement.

All of the principals explained that they followed a process for student grouping. Two of the eight referred to the WIS guidelines. Six participants stated that they relied on teacher collaboration to guide their decisions. The partnership between the previous-year and the incoming-year teachers includes intensive English teachers for students whose first language is not English. Two of the eight principals mentioned that they involve the school counselor and the learning support coordinator in cases involving students with special education needs.

The criteria that principals used were unanimously similar in nature. All of the principals stated they reviewed MAP test results, Fountas and Pinnell reading assessments, and English language proficiency. Three principals commented that they conducted student interviews to gain a sense of personality and assess English language competence.

After the gap assessment survey and questionnaire, I reviewed the answers and selected 10 participants to participate in follow-up, semistructured interviews. The semistructured interviews were conducted using Microsoft Teams at a time convenient for participants' time zone. Each interview lasted approximately 30 minutes. Within a week of the interview, I provided a transcription of the interview to participants for a member check. I requested the additional data to include three years of Fountas and Pinnell reading level information for students 5–10 years old and the grade-level reading data from the MAP test for the same age groups. Two of the participants chose not to participate in the interview despite every effort on my part. I was able to conduct eight successful interviews and obtain data.

I listened to each interview multiple times. I had to pause and manually record the script. Several times, I had to rewind and start again to capture the exact words of my participants. Once I transcribed the interviews, I sent them to each participant respectively to review and carry out a member check. I sent a detailed message to each participant with each transcription, thanked them for their time, and requested the previously agreed-upon data (Appendix E).

After obtaining the member checks, I proceeded with coding. The first coding method I chose was in vivo coding. In vivo coding is a starting point and process used in qualitative research because it allows codes to reflect an emic perspective (Saldaña & Omasta, 2017). I used in vivo coding because I was researching a group of principals that work in the same organization. The codes inductively emerged from the language and terminology used by the various principals. I read each script one line at a time and color-coded vital details in different colors. The various colored words and phrases were those that emerged, were repeated in the interviews, and were significant. Once all of the scripts had colored text in their entirety, I analyzed the writings and identified the common threads. The themes included the process for

grouping, criteria principals use, challenges principals face, the perception of the impact of their decisions about student grouping on reading achievement, and the principal's expectations.

The principals described their process for grouping to me in more detail than the general overview shared in the gap assessment questionnaire. Two of the principals discussed the use of pink and blue cards. Two principals, one leading a small elementary school and another leading large elementary school, indicated "the teachers fill out colored cards with specific academic and behavioral information" (personal communication, December 16, 2021). The principal stated, "My teachers provide individual information about each student in their homeroom using pink and blue cards" (personal communication, November 8, 2021). The pink cards are for female students and the blue cards for male students. The teachers fill out one card per student and report information about study habits, assessment scores, reading level, academic performance, special education or behavior needs, and comments with recommendations for students to be placed in the same class or not. The cards are then used to divide students into various groups using a balanced approach and specific criteria.

The other six principals discussed collaborating with teachers or having teachers create preliminary class groupings at their discretion. "I let the teachers take the lead; they know the students better than I do!" (personal communication, December 14, 2021). Another principal shared that "we spend time talking about the students' levels, their performance in class if they are high, average, or low and if they receive intensive English services" (personal communication, February 7, 2022). Two participants added that they used the teacher's recommendations as a guide and used other factors to finalize the class groups.

The following emerging theme was the criteria principals used for grouping students. All of the principals unanimously described parallel measures. "We look at native versus nonnative

English speakers, gender, their academic performance (high/medium/low), class size, math formative assessments, grades, cultural background, behavior, and we accept parent requests for characteristics, but not a particular teacher preference” (personal communication, February 7, 2022). Each mentioned class size to comply with the organization’s 15 pupils-per-class cap. One principal stated, “We really look at the guidelines to ensure we stay within the boundary conditions” (personal communication, January 20, 2022). All eight participants pointed out that they use screening assessments, such as Fountas & Pinnell reading assessments, MAP scores, and teacher observations. Six participants mentioned that English proficiency is another data point they utilize. “MAP testing is very important, but you know, I ask myself, what’s best for individual students? What’s best for the group of students? What’s best for curriculum/pedagogy? What is most convenient for teacher? The sweet spot is when the solution to all four questions are in harmony” (personal communication, December 17, 2021).

Seven of the eight participants group students into heterogeneous groups, while one reported grouping students homogeneously, placing all intensive English students together in the same class. One principal stated, “we follow more of a tracking pattern and put students of same abilities together, for example, all of our IE (Intensive English) kids are in the same room” (personal communication, February 7, 2022).

Challenges concerning student grouping were another common theme. I interviewed eight principals living in eight different parts of the world; therefore, it was unexpected to discover that the number one challenge every principal highlighted was parent expectations and pressure. Principals shared that often parents have unrealistic expectations about what their child can accomplish. “The parents by far are the biggest challenge!” (personal communication, December 16, 2021). In several countries, the participants described a sense of entitlement from

parents who contest the expert opinion of the school professionals and demand their child is paired with a certain teacher or grouped in a higher group than is warranted. As one principal said, “Our American diplomatic families are very demanding, they tend to complain the most, especially when things don’t go their way” (personal communication, November 8, 2021).

Combating racism was also another concern. Some parents did not want their child paired with certain teachers because of the teacher’s cultural background or credentials. One principal from a larger elementary school said, “We have Canadian, American and local teachers, and the parents are very vocal about wanting their child in a native speaker’s class” (personal communication, December 16, 2021). Another obstacle mentioned was the distribution of balanced classes with the number of students and limitations by class size. Last, two principals discussed the struggle to adhere to school policy by balancing the logistics with teacher input.

Seven principals reported that their students have been successful overall and did not believe the challenges mentioned above negatively affected student reading achievement. They trust that the administrative decisions regarding student grouping positively affected the students’ success. One principal thought that the lack of collaboration within the administrative team created some confusion for teachers and, therefore, could affect the students’ reading achievement in the end: “The director and I do not always see eye to eye and sometimes this confuses the teachers” (personal communication, February 7, 2022).

Four respondents indicated that they provided specific and targeted professional development for teachers to address student grouping. These principals encourage and support the teachers to utilize small group instruction during reading instruction. One principal stated that this process was done voluntarily through the learning support coordinator by promoting new classroom furniture that fosters flexible seating, because it is helpful for all kids. The school

spent thousands of dollars on small group furniture; while some teachers loved it and were early adopters, others did not (personal communication, January 14, 2022). Two principals discussed the use of collaboratives where small group instruction for reading is a professional goal-setting process to target teachers who need to improve small group instruction. A collaborative refers to a time when teachers in the same department or those teaching similar age levels of students work together to share ideas and plan. This time is also used for principals to help teachers set goals and discuss teaching strategies. One participant explained, “I am always talking to teacher about student grouping, teachers move kids flexibly as they reach mastery” (personal communication, December 16, 2021). The expectation for teachers to provide small group instruction in their classrooms is set at the beginning of each school year. The support happens for the teachers who need assistance during the goal-setting, which is a natural process. Two principals noted that they do not have specific conversations with teachers about grouping students. One of the two mentioned that teachers naturally and intentionally group students as a standard strategy, especially for reading groups. The other principal bases the discussion on how the students are growing. If students are showing growth, there is no need to get involved. However, if students are not showing progress, a discussion about what needs to change happens (personal communication, November 8, 2021).

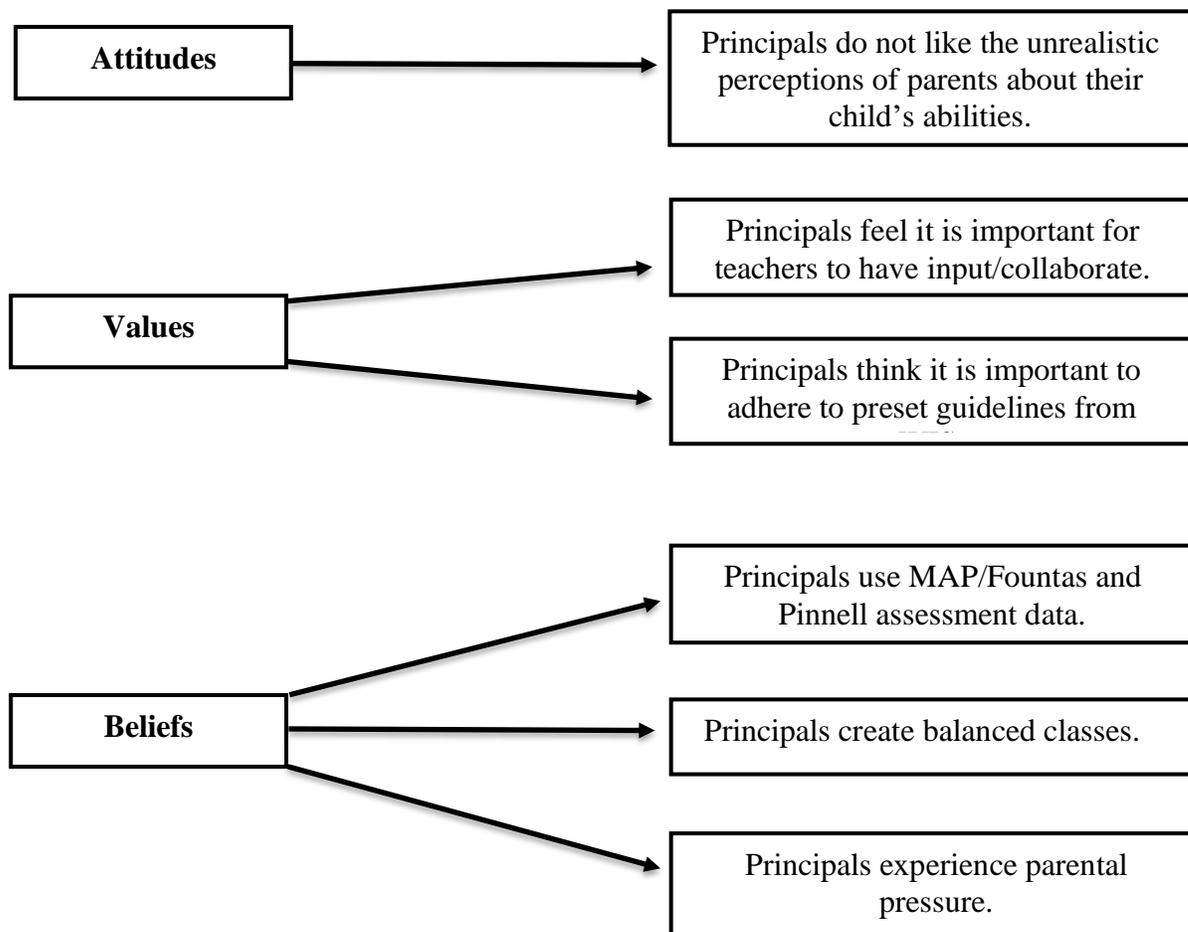
I next value coded the interviews because of their subjective nature (see Table 3). As participants expressed their values, attitudes, and beliefs, I labeled the transcripts accordingly to capture their personal experience, how they felt, and what they deemed meaningful in their role as the principal when addressing student grouping (Saldaña & Omasta, 2017).

Table 3*Number of Values Coding Per Participant*

Type	P1	P2	P3	P4	P5	P6	P7	P8
Values	7	7	5	7	2	3	1	2
Attitudes	4	4	7	4	0	6	3	4
Beliefs	1	4	2	1	9	5	5	3

Note. P = participant.

Figure 1 below summarizes the overlapping codes for the principals' attitudes, values, and beliefs concerning student grouping. Only one *attitude* was identified by all principals—the dislike they had toward unrealistic parent expectations of their child's abilities. Two *values* surfaced, including the importance of having classroom teachers involved in the collaborative process that also included learning support coordinators and intensive English teachers. Principals also stressed the significance of adhering to the preset guidelines set by the organization. The *beliefs* had the most comparable similarities. Principals used the MAP and Fountas and Pinnell test data to drive their decisions for student placement. Creating balanced classes emerged as a standard best practice. The parents' expectations, demands, and need to be heard were noted as a significant pressure placed on principals (see Figure 1).

Figure 1*Values Coding*

Emotions coding refers to a coding method where the researcher identifies any emotional practices expressed by the participants. All participants appeared to be genuinely passionate about their role as principal and their investment in ensuring students' needs are met. The principals conveyed a sincere and caring desire to ensure student success. They also voiced trust in their teachers' instructional practices and strengths. These are all the positive emotions that arose. Some negative emotions surfaced when principals discussed pressure from parents. Two principals voiced their concerns about xenophobic, racist attitudes among some parents. One of

these principals stated that parents would specifically request their child not be placed in a particular teacher's class because of the cultural background of the teacher. Another principal reported that parents sometimes requested their child not to be placed with other students from the same country. Several of the principals also mentioned that some parents had unrealistic expectations for their children, often thinking that their child was capable of doing more than their actual ability. One principal noted that parents strongly voiced their opinions and pushed to have things the way they wanted it or saw it regardless of the school's recommendations.

In summary, simultaneous coding was a beneficial way for me to categorize the exact interview transcriptions in multiple ways using in vivo, values, and emotions coding. It allowed me to use various codes that span from broad to more specific and identify patterns across the coding methods.

The next step was to analyze the Fountas and Pinnell reading level data and the MAP data for each school for students 5–10 years old. What stood out right away was the high student turnover. The students that were tested each year may or may not represent the same children. I attribute the turnover to parents' frequent transfers for their jobs. Diplomatic posts typically range from 18–24 months. Hence, all of the students who attend the school and whose parents work for the diplomatic community move away and rotate with other families who join the school community. I looked at deidentified data, so I do not know which students were tested each year, but I was able to see the discrepancy in the number of students from one grade level to the next over the three years. Gaps in the data were another prominent discrepancy. I requested the last three years of data from the principals, but many schools were offering distance learning for all or parts of the school year due to the COVID pandemic. In addition, not all of the teachers were able to assess their students.

In reviewing the MAP and Fountas and Pinnell data, I looked for trends and correlations between the students' MAP reading scores and their Fountas and Pinnell reading levels at the beginning, middle, and end of the year. I found that there were gaps in the data attributed to in-person school shutdowns: students were participating in distance learning due to the pandemic. Going to virtual learning did not happen simultaneously for every school, but all of the schools were affected at one point or another. All principals reported that the teachers had difficulty sticking to the assessment schedule because of the COVID situation. One of the teachers at one of the schools attempted to assess the students while online, and it did not prove easy; therefore, it was not recommended to proceed with this method.

While each principal had a wide range of experience in education, from 8–37 years, it was unanimously perceived that, with their current practices, the students were reading at or above level. Most principals believed that the challenges they face did not impact their reading achievement scores. Those who believed there was an impact attribute that to students who are not typical learners. The common pattern was that, if the students are reading below level, it is because they are nonnative English speakers who receive intensive English services. The other reason principals noted for students not reading on level was credited to students receiving learning support. These points are consistent with the research that English language learners and special education students need intentional grouping and instruction, which includes providing models, frequent feedback, and progress monitoring. The unfortunate circumstance of the inconsistency of the data collected for each school created an issue: it was difficult to make a clear distinction between the principals' perceptions, their challenges, and the impact of grouping strategies on students' reading achievement (see Figure 2).

Figure 2

Participant Profiles

	Years of experience in Education Number of students 5–10 years old Principals' perceptions about student reading achievement.	Estimate of student reading on level based on data shared from principals.
Participant 1	15 years of experience Number of students 5–10 yrs old: 500 2 to 3 classes per level Believes most students are on level.	According to the data I had access to, about 70% of students are reading on level.
Participant 2	15 years of experience Number of students 5–10 yrs old: 76 1 class per level, some classes combined Students who were not on level received Intensive English.	According to the data I had access to, about 87% of students are reading on level.
Participant 3	37 years of experience Number of students 5–10 yrs old: 99 1 class per level, 2 age groups had combined classes. About 65 % of students reading on level and 25% reading above level, so 10% reading below level.	According to the data I had access to, about 92% of students are reading on level.
Participant 4	28 years of experience Number of students 5–10 yrs old: 430 4 classes per age level Students were reading mostly on level or above level.	According to the data I had access to, about 85% of students are reading on level.
Participant 5	15 years of experience Number of students 5–10 yrs old: 50 Combined classes Most students were reading on level.	According to the data I had access to, about 80% of students are reading on level.

Participant 6	<p>8 years of experience Number of students 5–10 yrs old: 230 Two classes per age level The number of students reading below level was minimal and included those who were IE and/or received learning support.</p>	<p>According to the data I had access to, about 83% of students are reading on level.</p>
Participant 7	<p>21 years of experience Number of students 5–10 yrs old: 176 Students are reading on level.</p>	<p>According to the data I had access to, about 87% of students are reading on level.</p>
Participant 8	<p>30 years of experience Number of students 5–10 yrs old: 248 Students were reading on level. If they were not, it was because they were nonnative English speakers and taking IE.</p>	<p>According to the data I had access to, about 88% of students are reading on level.</p>

Note. Due to COVID pandemic, data do not reflect the same time of year or annual year for each school.

I conducted this exploratory study using the generic inductive qualitative model to gain an improved sense of the initiatives and processes related to student grouping within WIS. While all of the WIS network schools operate under the guidelines and policies of the organization, the principals have the autonomy to make site-based decisions. Overall, the principals shared some standard practices, such as creating balanced classes and utilizing assessment data to make placement decisions. There was an evident common challenge of parents' expectations and demands that principals face when creating classes. In addition, the principals did not perceive their current practices as negatively impacting students' reading achievement scores.

Chapter 5: Discussion, Conclusions, and Recommendations

A network of 37 international American curriculum schools located around the globe, known as WIS, served as the foundation for this research. The focus of the study was discovering the challenges that principals of these schools faced when dealing with student grouping strategies. Student grouping within classrooms plays a substantial role in the interaction that occurs between students' personalities and ability levels. WIS elementary schools range from 30 to 250 students on average. The larger schools may have up to 800 students. In the smaller schools, there may only be enough students enrolled to create one class per age level; therefore, WIS principals have the obstacle of placing students into groups with limited numbers of students and different learning abilities.

The beginning of this research study was to relate the challenges these principals face with student grouping and the associated impact of student grouping on students' reading achievement. This research aimed to investigate the decision criteria WIS elementary principals used for student grouping to gain a better understanding of the perceived challenges the principals had with grouping strategies to meet students' individual needs.

I opted for an exploratory research design rooted within a qualitative tradition, using a survey, a questionnaire, and interviews for data collection (Chen, 2014), because even though the schools are located around various parts of the globe, they are all part of the same organization but have their own culture and communities,

Discussion of Findings in Relation to Past Literature

The journey to tackle which grouping process elementary school principals should use to address the needs of diverse student populations was in response to a common problem I continually faced and heard my colleagues sharing. Student grouping refers to a classroom

cluster of students assigned to the same homeroom teacher for instruction (Ward, 1987). Making sure students are in a positive and fruitful learning environment sounds like it should be straightforward. However, it is quite the contrary due to the numerous factors to consider. The research about student grouping strategies encourages exploring multiple ways that elementary school principals can improve student achievement. This is accomplished by evaluating the student grouping practices used in both low-performing and high-performing elementary schools to determine if the school's grouping practices impact student achievement (Suárez-Orozco, 2017).

The research proposes two primary types of student grouping strategies that principals might consider. One approach is randomly assigning students to classrooms, also referred to as heterogeneous grouping. Another method is to intentionally group the students homogeneously to allow for similar abilities within the classroom. There are many terms used to describe the same practices. Some research refers to between- or within-class grouping, which is equivalent, respectively, to heterogenous or homogenous grouping, or flexible or ability grouping. Between-class clusters refer to a practice that clusters the students throughout the school. In contrast, within-class grouping involves creating small groups within a classroom and dividing them by ability (Matthews et al., 2013).

Six of the participants practiced heterogeneous grouping, while two placed students in homogenous groups. The research consistently argues that the most successful grouping strategy occurs when leaders create student groups using multiple data sources. The most successful small group or individualized instruction happens when the teachers frequently analyze data and create fluid student groups that meet the current needs of the students. The research emphasizes that teachers are more likely to plan differentiated within-class grouping instruction if they have

the proper training and possess the essential resources (Park et al., 2019). All of the participants in my study confirmed that using multiple data sources was an essential practice for placing students into groups. The principals relied on the teachers' input, but they also consider Fountas and Pinnell and MAP assessment data. Additionally, the principals discussed considering boy vs. girl ratios, class size, and cultural background.

Moreover, the research suggests that ability grouping and differentiated instruction should happen simultaneously and not be viewed as separate practices. Teachers should plan based on individual student needs and abilities. The research points out that homogeneous grouping is a preferred method of student grouping for teachers because it is easier for teachers to manage (Hollo & Hirn, 2015). All of the WIS principals' perceptions were that teachers provided differentiated and small group instruction within their own classrooms. Five of the principals stated that this process occurred naturally and that additional training or professional development was not needed. Three of the principals mentioned that they specifically planned professional development sessions, provided collaborative time for teachers, and set clear expectations for small group differentiated instruction within the classrooms, especially during reading instruction. Sometimes teachers find it challenging to manage differentiated classroom environments to meet the needs of all the students with specific learning needs and a variety of disabilities (Morret & Machado, 2017). To adapt learning for every student and provide small group instruction, the teacher splits the students into ability groups to provide targeted instruction within the classroom. The research has shown positive results when teachers focused their time on targeted instruction within small ability grouping strategies (Ciullo et al., 2019). The principals who provided clear expectations for their teachers believed that this notion was crucial.

Multiage grouping strategies refer to nontraditional student grouping practices that allow students of varying ages, typically within one year of one another, to be grouped together (Kinsey, 2001). Students in multiage classrooms most likely follow a standard curriculum and move through the standards at their own pace. Since this grouping strategy is still in early development, most schools are unlikely to choose it (Kinsey, 2001). There is very little data linked to multiage classroom grouping and increased reading achievement. However, the unique contribution of multiage grouping is the capacity to address individual students' needs by providing opportunities for scaffolded learning from other age peers (Kinsey, 2001). Multiage class groupings allow for the students to learn at their own rate regardless of their age (Gorrell, 1998). All of the WIS principals followed this philosophy based on the mastery learning model set by the organization. Students were generally grouped by age level, but they slid up to the next age level for reading and mathematics if they demonstrated mastery above their age. Similarly, students who had difficulty achieving success within their age-level curriculum slid down to the level below for reading and mathematics.

Tracking is a practice that some principals utilize in certain countries to group students. Tracking is a practice where students are grouped in homogeneous groups based on ability. One of the tracking motivations is that not all students are deemed fit to pursue an academic track (Borghans et al., 2020). Tracking enhances teaching efficiency because of the targeted instruction teachers can provide. It also influences educational pathways toward postsecondary and job opportunities. However, tracking also has adverse effects and can be harmful to lower-ability learners by discouraging academic achievement and growth. This philosophy is not aligned to the mastery philosophy, one where it is believed that everyone can learn and succeed (Borghans et al., 2020). Two of the participants within my exploratory research mentioned that

they use tracking as a method of grouping students at their schools. Both principals mentioned that this was a new practice at their school in which they put the learning support students in one homeroom and the intensive English students in one room.

The data that I collected was not conducive to providing concrete or definitive answers about how to resolve the challenges principals face with students grouping. Unfortunately, this must attributed to the COVID pandemic, which forced schools to go online at various times throughout the last three years. Some schools in the network spent an entire school year providing distance learning, while others began or ended the school year online. Others had short stints of distance learning spread throughout the school year. The data collected for each school was not equivalent for each school, therefore not as easily comparable. Being online makes it very difficult for teachers to accurately assess a student's reading level; it is already a big challenge providing instruction to five-, six-, and seven-year-old children while on the other side of a screen. For this reason, the data collected were fragmented, incomplete, and inconclusive to help me draw accurate conclusions or patterns. Besides the parent expectations and creating balanced classes, which were the leading challenges that surfaced from my participants, a new challenge has now surfaced—how can administrators create effective classroom groupings without all the data they normally relied on in their practices previously?

While the reading level data was inconclusive, I considered the responses of my participants and identified some practices that seem to be getting better results than others. The highest percentage (92%) of students reading on or above level was reported by one of the eight participants. This participant uses a card system where teachers fill out the information about the students and then split the kids collaboratively based on the information on the cards. This principal spends intentional time working with teachers regularly and discusses the student

progress throughout the year as an ongoing practice. This participant was the only one who gave an estimated percentage when asked if the challenges faced at the school impact the students' reading achievement. The estimated percentage was close at 90% when the data indicated 92%.

The other schools whose reading achievement scores averaged between 80 to 88 percent all had different grouping strategies and expectations. The data were similar from one school to the next and therefore I was not able to find any particular pattern. The school with the lowest percentage (70%) had the greatest number of 5–10-year-old students. It was also the school with a large number of students receiving intensive English services and students with learning support needs. The more students enrolled in a school, the more specialized needs will surface.

Limitations

With every study, there are limitations. One limitation is that many other factors can affect reading achievement. This became very apparent during data collection and especially during the interviews. The principals' perceptions was that student grouping only encompasses one element that impact students' reading achievement. Still, my research focused on exploring the challenges that principals face when creating student groups. Exploratory research necessitates a wide range of methods. Often, the processes can be complicated, and sometimes results can be tentative (Clarke & Davison, 2020). Still, there is a general agreement that exploratory research is an essential component of the scientific undertaking, especially when it comes to understanding society (Waheed & Shah, 2018). I chose to continue on the journey to attempt and scratch the surface of, perhaps, a bigger problem.

With exploratory research, the limitations only provide the starting point for further exploration; therefore, my findings were not as valuable for decision-making in a practical way as I anticipated (Dudovskiy, 2018). While the results provided some clarity about the standard

practices, perceptions, and beliefs of elementary principals with the organization, the study results may not be generalizable to other international school organizations. Leavy (2017) posits that external validity can extend the study's results beyond the sample. The concept of external validity is essential to generalizability. Generalizability is being able to transfer a study's sample findings to the population as a whole (Terrell, 2015). International schools operate differently than public schools because they have more flexibility and often possess more site-based decision making within their community. The motivation was to collect and analyze survey data and interview responses on the various challenges school leaders in international schools face and particular challenges related to student grouping. The surveys and interviews were intended to produce knowledge supporting leaders in making informed student grouping decisions (Nattrass, 2020). Questionnaires aided me in discovering what the principals' thoughts were regarding student grouping. They also helped to uncover the rationale that led these principals to their conclusions (Stroh, 2015).

Recommendations

Due to the gaps in the reading level data from the schools, it is difficult to determine exactly how this problem can support the WIS organization. It is challenging to move schools closer to closing the reading achievement gap between the above-, average-, and below-level readers due to classroom grouping and help principals make informed decisions. However, we can conclude that principals have specific guidelines and processes for student placement. Principals also have expectations for teachers to group students for targeted reading instruction. Last, there is a definite challenge of parental expectations of the school, and principals must navigate this task carefully. It may be a good practice to create focus groups so that principals

can collaborate and work through these challenges as a team rather than individually, especially since this was the biggest challenge mentioned by all principals.

It is recommended that accurate data be collected with fidelity to assess the impact of student grouping on reading level achievement across all schools, specifically looking at the intensive English students. It will be easier to accomplish once the Covid pandemic no longer affects the schools' ability to learn face-to-face.

Additionally, it would be beneficial to solicit more participation from the principals who chose not to participate. Another recommendation is to create an action plan in collaboration with the curriculum department to require all schools in the network to provide data and approach this topic as a strategic plan that benefits the organization as a whole.

Conclusions

When I began this journey, I knew that it would not be easy. I never anticipated that the world would come to face a global pandemic and literally affect every aspect of our lives as we know it. Conducting research and completing this study was made difficult because of Covid 19. Every participant in my study was involved in school shutdowns and went online for distance learning per government mandates. I believe that my results would have revealed more correlations between student grouping and reading level achievement if the reading level data had not been compromised. Further exploration of the problem should be investigated from the schools to determine the patterns between schools who group heterogeneously and those that group homogeneously. A closer look at the intensive English students and their reading instruction should also be evaluated.

References

- Arias, E. A. (2016). Action research on the impact of student grouping. *Procedia - Social and Behavioral Sciences*, 232, 555–560. <https://doi.org/10.1016/j.sbspro.2016.10.076>
- Bailey, M., & Michaels, D. (2019). An optimization-based DSS for student-to-teacher assignment: Classroom heterogeneity and teacher performance measures. *Decision Support Systems*, 119, 60–71. <https://doi.org/10.1016/j.dss.2019.02.006>
- Bloom, B. S. (1981). *All our children learning: A primer for parents, teachers, and other educators*. McGraw-Hill.
- Bloom, N., Lemos, R., Sadun, R., & Van Reenen, J. (2014). Does management matter in schools? *Economic Journal Royal Economic Society*, 125(584), 647–674. https://scholar.harvard.edu/files/rsadun/files/does_management_matter_in_schools.pdf
- Borghans, L., Diris, R., Smits, W., & de Vries, J. (2020). Should we sort it out later? The effect of tracking age on long-run outcomes. *Economics of Education Review*, 75, 101973. <https://doi.org/10.1016/j.econedurev.2020.101973>
- Brown III, G. (2016). Leadership's influence: A case study of an elementary principal's indirect impact on student achievement. *Education*, 137(1), 101–115. <https://eric.ed.gov/?id=EJ1112173>
- Chen, H. (2014). *Practical program evaluation: Theory-driven evaluation and the integrated evaluation perspective* (2nd edition). Sage.
- Cheung, A., & Slavin, R. (2016). Effects of success for all on reading achievement: A secondary analysis using data from the study of instructional improvement. *AERA Open*, 2(4). <https://doi.org/10.1177/2332858416674902>

- Ciullo, S., Ely, E., McKenna, J., Alves, K., & Kennedy, M. (2019). Reading instruction for students with learning disabilities in grades four and five: An observation study. *Learning Disability Quarterly*, *42*(2), 67–79. <https://doi.org/10.1177/0731948718806654>
- Clarke, R., & Davison, R. (2020). Research perspectives: Through whose eyes? the critical concept of researcher perspective. *Journal of the Association for Information Systems*, *21*(2), 483–501. <https://doi.org/10.17705/1jais.00609>
- Decristan, J., Fauth, B., Kunter, M., Büttner, G., & Klieme, E. (2017). The interplay between class heterogeneity and teaching quality in primary school. *International Journal of Educational Research*, *86*, 109–121. <https://doi.org/10.1016/j.ijer.2017.09.004>
- Dieterle, S., Guarino, C., Reckase, M., & Wooldridge, J. (2015). How do principals assign students to teachers? Finding evidence in administrative data and the implications for value added. *Journal of Policy Analysis & Management*, *34*(1), 32–58. <https://doi.org/10.1002/pam.21781>
- Dudovskiy, J. (2018). *The ultimate guide to writing a dissertation in business studies: A step-by-step assistance*. <https://research-methodology.net/product/the-ultimate-guide-to-writing-a-dissertation-in-business-studies-a-step-by-step-assistance-january-2018-edition/>
- Garcia, E., Sulik, M., & Obradović, J. (2019). Teachers' perceptions of students' executive functions: Disparities by gender, ethnicity, and ELL status. *Journal of Educational Psychology*, *111*(5), 918–931. <https://doi.org/10.1037/edu0000308>
- Gentry, M. (2016). Commentary on “does sorting students improve scores? An analysis of class composition.” *Journal of Advanced Academics*, *27*(2), 124–130. <https://doi.org/10.1177/1932202X16636174>

- Goodwin, A., Cho, S.-J., Reynolds, D., Silverman, R., & Nunn, S. (2020). Explorations of classroom talk and links to reading achievement in upper elementary classrooms. *Journal of Educational Psychology*. <https://doi.org/10.1037/edu0000462>
- Gorrell, J. (1998). *A study comparing the effect of multiage education practices versus traditional education practices on academic achievement* [Master's Thesis]. Salem-Teikyo University.
- Guskey, T. (2001). *Benjamin S. Bloom's contributions to curriculum, instruction, and school learning*. <https://eric.ed.gov/?id=ED457185>
- Guskey, T. (2005). *Formative classroom assessment and Benjamin S. Bloom: Theory, research, and implications*. 1–12. <https://eric.ed.gov/?id=ED490412>
- Guskey, T., & Anderman, E. (2013). In search of a useful definition of mastery. *Educational Leadership*, 71(4), 18–23. <https://eric.ed.gov/?id=EJ1043773>
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge/Taylor & Francis Group.
- Hienonen, N., Lintuvuori, M., Jahnukainen, M., Hotulainen, R., & Vainikainen, M.-P. (2018). The effect of class composition on cross-curricular competences – Students with special educational needs in regular classes in lower secondary education. *Learning and Instruction*, 58, 80–87. <https://doi.org/10.1016/j.learninstruc.2018.05.005>
- Hill, I. (2015). What is an “international school”? *International Schools Journal*, 35(1), 60–70.
- Hollo, A., & Hirn, R. (2015). Teacher and student behaviors in the contexts of grade-level and instructional grouping. *Preventing School Failure*, 59(1), 30–39.

- Hood, J. C. (2007). Orthodoxy vs. power: The defining traits of grounded theory. In *SAGE Handbook of Grounded Theory* (pp. 151–164). Sage Publications Ltd.
<https://doi.org/10.4135/9781848607941>
- Kaufman, R., & Guerra-Lopez, I. (2013). *Needs assessment for organizational success*. Association for Talent Development.
- Kiel, E., Syring, M., & Weiss, S. (2017). How can intercultural school development succeed? The perspective of teachers and teacher educators. *Pedagogy, Culture & Society*, 25(2), 243–261. <https://doi.org/10.1080/14681366.2016.1252421>
- Kinsey, S. (2001). Multiage grouping and academic achievement. *Eric Digests*, 1–6.
- Kuzmina, Y., & Ivanova, A. (2018). The effects of academic class composition on academic progress in elementary school for students with different levels of initial academic abilities. *Learning and Individual Differences*, 64, 43–53.
<https://doi.org/10.1016/j.lindif.2018.04.004>
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches* (2nd ed.). The Guilford Press.
- Löfgren. (2013). *Qualitative analysis of interview data: A step-by-step guide* [Video]. YouTube.
<https://www.youtube.com/watch?v=DRL4PF2u9XA&feature=youtu.be>
- Lortie, D. (2009). *School principal: Managing in public*. University of Chicago Press.
- Matthewes, S. (2020). Better together? Heterogeneous effects of tracking on student achievement. *Centre for Economic Performance*, 74. <https://eric.ed.gov/?id=ED607003>
- Matthews, M., Ritchotte, J., & McBee, M. (2013). Effects of schoolwide cluster grouping and within-class ability grouping on elementary school students' academic achievement

growth. *High Ability Studies*, 24(2), 81–97.

<https://doi.org/10.1080/13598139.2013.846251>

McDowall, P., & Schaughency, E. (2017). Elementary school parent engagement efforts:

Relations with educator perceptions and school characteristics. *Journal of Educational*

Research, 110(4), 348–365. <https://doi.org/10.1080/00220671.2015.1103687>

McGillicuddy, D., & Devine, D. (2018). “Turned off” or “ready to fly” – Ability grouping as an act of symbolic violence in primary school. *Teaching and Teacher Education*, 70, 88–99.

<https://doi.org/10.1016/j.tate.2017.11.008>

Morret, T., & Machado, C. (2017). Using whole school cluster grouping to differentiate instruction more effectively in elementary schools: A guide for administrators and teachers. *AASA Journal of Scholarship & Practice*, 14(2), 15–32.

Murphy, K., Greene, J., Firetto, C., Li, M., Lobczowski, N., Duke, R., Wei, L., & Croninger, R. (2017). Exploring the influence of homogeneous versus heterogeneous grouping on

students’ text-based discussions and comprehension. *Contemporary Educational*

Psychology, 51, 336–355. <https://doi.org/10.1016/j.cedpsych.2017.09.003>

Nattrass, N. (2020). In defence of exploratory research: A reply to critics. *South African Journal of Science*, 116, 59–94. <https://doi.org/10.17159/sajs.2020/8604>

Nixon, H. (2014). *Analyzing qualitative data: Coding 101 what do you do with all those words* [Video]. YouTube.

<https://www.youtube.com/watch?v=BnDUARfEu5I&feature=youtu.be>

Park, V., & Datnow, A. (2017). Ability grouping and differentiated instruction in an era of data-driven decision making. *American Journal of Education*, 123, 281–306.

<https://doi.org/10.1086/689930>

- Park, Y., Brownell, M., Bettini, E., & Benedict, A. (2019). Multiple dimensions of instructional effectiveness in reading: A review of classroom observation studies and implications for special education classrooms. *Exceptionality*, 27(1), 1–17.
<https://doi.org/10.1080/09362835.2017.1283628>
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Sage Publications.
- Prinsloo, M. (2021). Seeing like a state: Literacy and language standards in schools. *Linguistics and Education*, 100867. <https://doi.org/10.1016/j.linged.2020.100867>
- Saldaña, J. M., & Omasta, M. (2017). *Qualitative research: Analyzing life* (1st ed.). Sage Publications.
- Sanfo, J.-B. (2020). A three-level hierarchical linear model analysis of the effect of school principals' factors on primary school students' learning achievements in Burkina Faso. *International Journal of Educational Research*, 100, 101–531.
<https://doi.org/10.1016/j.ijer.2020.101531>
- Schein, E. (2010). *Organizational culture and leadership*. John Wiley & Sons.
- Schwan, A. (2020). Trilateral perceptions of the importance of instructional leadership behaviors. *Mid-Western Educational Researcher*, 32(2), 173–188.
- Sebastian, J., Allensworth, E., Wiedermann, W., Hochbein, C., & Cunningham, M. (2018). Principal leadership and school performance: An examination of instructional leadership and organizational management. *Leadership and Policy in Schools*, 18(4).
<https://www.tandfonline.com/doi/full/10.1080/15700763.2018.1513151>
- See, B., & Gorard, S. (2020). Effective classroom instructions for primary literacy: A critical review of the causal evidence. *International Journal of Educational Research*, 102, 101577. <https://doi.org/10.1016/j.ijer.2020.101577>

- Sembiring, L., Rukmini, D., Mujiyanto, J., & Yuliasri, I. (2018). The impact of comprehension instruction on students' reading comprehension with different ability grouping and self-efficacy. *TESOL International Journal*, *13*(4), 156–171.
- Sepuru, G., & Mohlakwana, A. (2020). The perspectives of beginner principals on their new roles in school leadership and management: A South African case study. *South African Journal of Education*, *40*(2), 1–11. <https://doi.org/10.15700/saje.v40n2a1755>
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*, 63–75.
- Shogren, K. A., Gross, J. M. S., Forber-Pratt, A. J., Francis, G. L., Satter, A. L., Blue-Banning, M., & Hill, C. (2015). The perspectives of students with and without disabilities on inclusive schools. *Research & Practice for Persons with Severe Disabilities*, *40*(4), 243–260. <https://doi.org/10.1177/1540796915583493>
- Shogren, K., McCart, A., Lyon, K., & Sailor, W. (2015). All means all. *Research & Practice for Persons with Severe Disabilities*, *40*(3), 173–191. <https://doi.org/10.1177/1540796915586191>
- Slavin, R. E. (1987). Ability grouping and student achievement in elementary schools: A best-evidence synthesis. *With Discussion*, *57*, 293–350. <https://doi.org/10.2307/1170460>
- Slavin, R., & Madden, N. (2001). *Success for all: Research and reform in elementary education*. Routledge.
- Stroh, D. (2015). *Systems thinking for social change: A practical guide to solving complex problems, avoiding unintended consequences, and achieving lasting results*. Chelsea Green.

- Suárez-Orozco, C. (2017). The diverse immigrant student experience: What does it mean for Teaching? *Educational Studies*, 53(5), 522–534.
<https://doi.org/10.1080/00131946.2017.1355796>
- Teno, K. M. (2000). Cluster grouping elementary gifted students in the regular classroom. *Gifted Child Today*, 23(1), 44.
- Terrell, S. R. (2015). *Writing a proposal for your dissertation: Guidelines and examples* (1st ed.). Guilford Press.
- Vogel, L. R. (2012). A leader's journey: The challenges of implementing standards-based student grouping. *NASSP Bulletin*, 96(4), 323–349.
- Vogt, W. P., Gardner, D. C., & Haeffele, L. M. (2012). *When to use what research design* (pp. xxi, 378). Guilford Press. <https://eric.ed.gov/?id=ED530594>
- Waheed, H., & Shah, S. (2018). Dissonance between the “international” and the conservative “national”: Challenges facing school leaders in international schools in Saudi Arabia. *Educational Administration Quarterly*. <https://doi.org/10.1177/0013161X18785864>
- Ward, B. (1987). Instructional grouping in the classroom. *School Improvement Research Series*, 2, 12. <https://eric.ed.gov/?id=ED291147>
- Wolf, M., & Katzir-Cohen, T. (2001). Reading fluency and its intervention. *Scientific Studies of Reading*, 5(3), 211–239. https://doi.org/10.1207/S1532799XSSR0503_2
- Yang, K.-H. (2017). Learning behavior and achievement analysis of a digital game-based learning approach integrating mastery learning theory and different feedback models. *Interactive Learning Environments*, 25(2), 235–248.
<https://doi.org/10.1080/10494820.2017.1286099>

Zweers, I., Bijstra, J., de Castro, B., Tick, N., van de Schoot, R., & Eckert, T. (2019). Which school for whom? Placement choices for inclusion or exclusion of dutch students with social, emotional, and behavioral difficulties in primary education. *School Psychology Review*, 48(1), 46–67. <https://doi.org/10.17105/SPR-2017-0008.V48-1>

Appendix A: Introduction Letter

Dear Colleagues,

I am currently a doctoral candidate at Abilene Christian University. I am gathering data about student grouping strategies principals utilize to place students into classrooms each year in our schools' network. Your participation in this study is strictly for data collection purposes, and all names or identifying information will be changed to preserve confidentiality.

There are three main parts of my data collection process:

1) First, you will receive a concise gap assessment survey in which you will read statements and circle a number from one through five to describe your perspective.

The rating system is as follows: one is for rarely, if ever, and five for consistently; two to four are somewhere between the two.

2) If you meet the criteria for my research, you will receive a short answer survey questionnaire to complete.

3) Lastly, if you have the available data needed for my research, I will invite you for a follow-up virtual semi-structured interview in Microsoft TEAMS.

Your participation is much needed and appreciated. You may choose to stop participating in my research at any point of the process for any reason and with no questions asked. Please let me know if you have any questions or need clarification about the process.

With sincere appreciation,

Hafida Becker

Appendix B: “What Is?” and “What Should Be?” Gap Assessment Survey

Gap Assessment: Student Grouping		
WHAT IS	1 – rarely, if ever 2 – not usually 3 – sometimes 4 – frequently 5 – consistently	WHAT SHOULD BE
1 2 3 4 5	I am familiar with the research on student grouping strategies	1 2 3 4 5
1 2 3 4 5	I have a system that I use for grouping students into classrooms each year	1 2 3 4 5
1 2 3 4 5	Teachers in my school use grouping strategies in their classrooms	1 2 3 4 5
1 2 3 4 5	The students in 5-year-old to 10-year-old classes are reading on grade level by the end of the school year	1 2 3 4 5
1 2 3 4 5	I have at least three years of Fountas and Pinnell reading level data available for 5- to 10-year-old students	1 2 3 4 5
1 2 3 4 5	I have at least three years of MAP data available for 5- to 10-year - old students	1 2 3 4 5

Appendix C: Gap Assessment Questionnaire

Q1: *Are you familiar with the research on student grouping strategies? Which strategies?*

Q2: *What system do you use for grouping students into classroom groups?*

Q3: *Do teachers in your school utilize student grouping strategies in their classrooms? Which strategies?*

Q4: *What number of students in the 5-year-old to 10-year-old classes are reading on grade level by the end of the school year?*

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Q5: *Can you provide at least three years of Fountas and Pinnell reading level data available to share with the researcher? (fill in the tables below)*

Name of School:			
Year:			
How many students are enrolled in the following age levels?		Expected Fountas & Pinnell level by the end of year	How many students are reading on/above level at the end of the school year?
# of 5-year-old students		5-year-old Text Level C	
# of 6-year-old students		6-year-old Text Level I	
# of 7-year-old students		7-year-old Text Level M	
# of 8-year-old students		8-year-old Text Level P	
# of 9-year-old students		9-year-old Text Level R	
# of 10-year-old students		10-year-old Text Level U	

Name of School:			
Year:			
How many students are enrolled in the following age levels?		Expected Fountas & Pinnell level by the end of year	How many students are reading on/above level at the end of the school year?
# of 5-year-old students		5-year-old Text Level C	
# of 6-year-old students		6-year-old Text Level I	
# of 7-year-old students		7-year-old Text Level M	
# of 8-year-old students		8-year-old Text Level P	
# of 9-year-old students		9-year-old Text Level R	
# of 10-year-old students		10-year-old Text Level U	

Name of School:			
Year:			
How many students are enrolled in the following age levels?		Expected Fountas & Pinnell level by the end of year	How many students are reading on/above level at the end of the school year?
# of 5-year-old students		5-year-old Text Level C	
# of 6-year-old students		6-year-old Text Level I	
# of 7-year-old students		7-year-old Text Level M	
# of 8-year-old students		8-year-old Text Level P	
# of 9-year-old students		9-year-old Text Level R	
# of 10-year-old students		10-year-old Text Level U	

Appendix D: Microsoft TEAMS Semistructured Interviews

The following are some follow up questions to gain more information from the principal about their perceptions and process for grouping students. I would like the semi-structured interviews to be organic and authentic. These questions will serve as a guide to lead the interview. Should additional questions arise during the interview, I will include them in my script.

Q1: Can you describe your process for grouping students? Who is involved and how do you decide where and how to place students into certain groups?

Q2: What is your role concerning student grouping?

Q3: What challenges do you face as a WIS principal concerning student grouping strategies?

Q4: How do you perceive these challenges are impacting student reading achievement at your WIS school?

Q5: What are your beliefs or guiding principles which drive decisions for student grouping?

Appendix E: Member Check and Data Request

Dear _____,

How are you? I hope you are doing well. Thank you so much for your time and help with my dissertation research. Here is the link to the interview transcription: (link here)

Please take a look and let me know if the information is accurate. *"Member checking, also known as participant or respondent validation, is a technique for exploring the credibility of results. Data or results are returned to participants to check for accuracy and resonance with their experiences"*.

As discussed, I also need your MAP and F&P Data. Below is a description of each.

MAP Reading Data - Please send me the **Grade Report** (screenshot attached) for the last 3 years (Grade K,1,2,3,4,5) - Once you create the report it takes a while before it gets generated because it is a zipped file.



Grade Report

- View detailed summary test data by grade for a selected term
- Determine grade-level priorities
- Use to inform goals and adjust instruction

Sample Grade Report

Fountas & Pinnell Reading Data - Please send me the last three years of reading data for ages 5 yo - 10 yo (If you want to provide me with raw data, I'm happy to de-identify it for you). Below is the sample of the table I will create for each year (a total of 3 tables per school). The number of students enrolled and the number of students reading on/above the expected level at the end of the school year (the criteria for on level is listed as the expected F&P level per grade level).

Thank you so much,

Please let me know if you have any questions or need clarification,

Appendix F: Research Review Panel Approval Letter

15 June 2021

Dear Hafida Becker

Thank you for submitting your research titled "How Elementary Principals in International Schools Group Students: Pursuing the Ultimate Learning Environment" to the [REDACTED] Research Review Panel for approval. We review these research proposals to ensure that they meet three basic criteria: The research either does not involve human subjects or your research will be going through a university Institutional Review Board to ensure the ethical treatment of human subjects; the research does not actively harm [REDACTED] its intellectual property or its mission; the research is well designed and will not significantly interfere with your own work or the work of your colleagues.

After reviewing your research proposal, we have determined the following:

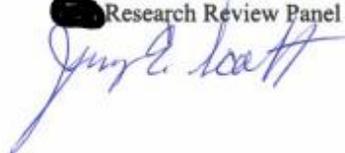
- **Human Subject:** Your research involves human subjects. Therefore, we require a notification from your university's Institutional Review Board that your research has been approved. We see that your research has already received IRB approval from Abilene Christian University, and we thank you for providing this documentation. We ask if you make any updates to your proposal that may require further approvals from your university IRB that you share these changes with us.
- **[REDACTED] and Mission:** We have determined that your research does not present a risk to [REDACTED], its intellectual property, or its mission.
- **Design:** We have determined that your research is well designed and will not significantly interfere with your own work or the work of your colleagues.

As a result, the [REDACTED] Research Review Panel has **approved** your research to be conducted using data collected from schools in the [REDACTED]

Congratulations and best of luck on your work. We encourage you to inform school administrators and [REDACTED] Headquarters when you have completed your research, and for you to share your research with the [REDACTED] community so that we may all grow from what you have learned.

Please provide this letter to schools when you make requests for data, as proof that your research has been approved by this Panel.

Sincerely,

[REDACTED] Research Review Panel


Appendix F: IRB Approval Letter

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World
Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885



June 8, 2021

Hafida Belkacem Becker
Department of Education
Abilene Christian University

Dear Hafida,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "How Elementary Principals Group Students in International School: Pursuing the Ultimate Learning Environment",

(IRB#21-066) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs