# DETERM N NG HOW TO REDUCE KINDERGARTEN RETENTIONS THROUGH TEACHER AND STUDENT SUPPORTS

A Doct oral Capst one Project

Submitted to the School of Graduate Studies and Research Depart ment of Secondary Education and Administrative Leadership

> In Partial Fulfill ment of the Requirement for the Degree of

> > Doct or of Education

Traci Kuhns

California University of Pennsyl vania

Jul y 2020

California University of PA School of Graduate Studies and Research Depart ment of Secondary Education and Administrative Leadership

We hereby approve the capstone of

Traci Kuhns

Candidate for the Degree of Doctor of Education

(Defense Date, Signed)

7/14/20

7/14/20

Inn prol

Name of Faculty Chair Position Title of Chair

Doctoral Capstone Faculty Committee Chair

Dr. Laura B. Jacob Superimtendent

Doctoral Capstone External Committee Member

## Ac knowledge ments

I would like to express my gratitude to Dr. Laura Jacob and Dr. Kevin Lordon for their guidance and support throughout this doctoral research study. I would also like to thank Mf. William Denny for his patience with all of my questions. Finally, I would like to thank my husband Steve and my children Luke and Trent for their understanding and support throughout my doctoral journey.

## Table of Contents

Abstract
Chapter 1 (Introduction)
Chapter 2 (Literature Review)
Chapter 3 (Methodology) 41
Chapter 4 (Data Analysis and Results)
Chapter 5 (Conclusions and Recommendations)
References
Appendix A
Appendi x B
Appendi x C
Appendi x D
Appendi x E
Appendix F

# List of Figures

1.	The extent to which teachers believe parent involvement determines student retentio	n
	· · · · · · · · · · · · · · · · · · ·	55
2.	The extent to which teachers believe class size determines student retention 6	56
3.	The extent to which teachers believe reading achieve ment determines student	
	retention	56
4.	The extent to which teachers believe mat he matics achievement determines student	
	retention	57
5.	The extent to which teachers believe maturity determines student retention 6	57
6.	The extent to which teachers believe behavior determines student retention 6	58
7.	The extent to which teachers believe preschool attendance determines student	
	retention	59
8.	The extent to which teachers believe family configuration determines student	
	retention	59
9.	The extent to which teachers believe social/emotional concerns determines student	
	retention	70
10.	The extent to which teachers believe instructional practices determines student	
	retention	71

11.	Kinder garten teacher	belief that	retentions should be a teacher decision	71
12.	Kinder gart en teacher	belief that	retention should be a parent decision	72
13.	Kinder gart en teacher	belief that	retention should be a team decision	73

## List of Tables

1.	A Comparison of the Top Five Positive Principal Behaviors	28
2.	ELA descriptive statistics	77
3.	Mat he matics descriptive statistics	78
4.	Descriptive statistics DI BELS data	78
5.	Frequency of referrals for students retained in kindergarten	79

#### Abstract

There are currently a high number of kinder garten retentions in a school district. Retentions can have negative short-ter mand long-ter meffects on students and increase costs to a district. The purpose of the study is to deter mine how to reduce kinder garten retentions through teacher and student supports. To understand how this can be done, this study determined the teacher perceptions that constituted a student who should be retained in kinder garten. An examination occurred of what factors helped predict which students were at-risk for kinder garten retention. This study analyzed how the information from this research can be used to reduce retentions and benefit student success in kinder garten. It deter mined how the information from this research can be used to support instruction to mini mize retention. Teachers were surveyed in this study. De mographic data and behavioral data was analyzed for the frequency of characteristics of students retained in kinder garten. Acade mic data was analyzed for measures of central tendency. Students who have poor achievement in reading are targets for retention based on the results in the study. Teachers who participated in the study indicated that reading was a criteria used to determine if a student was a candidate for retention. Achievement in the area of English Language Arts (ELA) was examined Central tendency measures showed that students were not achieving in this area. Student birthdate was noted as a factor in kinder garten retention. Teachers stated maturity was a factor when deter mining students to be retained in kinder garten

## Chapter 1

## Introduction

## Statement of the Problem

As a principal of an elementary school, I a meconcerned since there are currently a high number of kinder garten retentions in my rural district. The short-term and long-term effects of retention need to be factored into the decision-making process when considering retention for students in kinder garten. I need to be able to support teachers and parents in making an appropriate decision for the short-term and long-term benefits of the child. This decision can then be an informed decision based on research. Is there a better way to predict if a student is at-risk for kinder garten retention? This is a question that arises every year with students who are not progressing in kinder garten as expected

#### Purpose of the Study

The purpose of this study is to determine why there are such a high number of retentions in the school district. The factors that are causing the high number of retentions is another objective of this study. Finally, additional supports that can be put into place to ensure kindergarten success for all students attending an elementary school in the district will be identified

This study will exa mine the history of kinder garten along with various perspectives on the topic of kinder garten retention. Kinder garten retention effects will be researched and predictors of kinder garten retention will be observed to see if de mographics and other factors can help determine who may be at-risk for kinder garten

retention Finally, ways to help support student success in kinder garten will be examined I believe looking at all of these areas may help to decipher why there are so many kinder garten retentions in this district. It also may help to identify areas that The district needs better support so that students are being successful in kinder garten rather than being retained

#### Justification of the Study

Students come to kindergarten with varying levels of knowledge and ability. They come from different backgrounds and their exposure to the world can vary greatly. The teachers in the district work to cover state standards and make sure the kindergarten students have the skills to move to grade one and have success. When teachers do not feel the students are ready, they retain the students and have the mrepeat the kindergarten curriculum. Teachers' perspective on kindergarten retention needs to be considered. What data and characteristics do the kindergarten teachers scrutinize when considering retention for a student? The parents and administrators also have perspectives on what factors should go into deciding if a student should be retained. These perspectives are examined in this study.

Currently there are four elementary schools in the district. The district is rural and 251 square miles in area. It has 65% of students identified as economically disadvantaged and 22% of students receiving special education services. There are a total of fifteen kinder garten teachers across the four elementary schools. One has five teachers; one has four teachers; and two have three teachers. In a typical year more than the equivalent of one kinder garten classroom is retained in the district. This includes all of the kinder garten retentions across the four elementary schools in the district. Looking

at the effects of kinder garten interns of long-term out comes needs to be done due to the high number of kinder garten retentions across the fifteen classrooms. Another area for consideration is how the district can better identify at-risk students early. This will enable supports to be put into place so that students are more likely to be ready to move onto grade one without being retained

## Financial Factors

Retaining students adds an additional year of education costs to each student. The number of personnel also increases with high numbers of students being retained. When specific grades have a high number of retentions in a single year, it causes the district administration to rethink staffing and sometimes there is a need to cut in other areas to support the increased number of students in that particular grade. The students being retained require an additional year of transportation and services which add costs to the district. If a child is later diagnosed with a learning disability, that is an additional cost with the added year of schooling that the district needs to provide. Is there a more fiscally responsible way to use the money that would be needed to retain a student? Can kinder garten students can be better supported so the retention is not necessary? Aso is there an impact on the students' future out comes that may affect the financial success of the student? If so, how will that play in the economics of the community with the high number of retentions that are currently occurring each year? All of these thoughts came into play as I developed the idea for this study. These thoughts then led to the research questions that were created as presented in the following section to identify better ways to support kinder garten success for the students in the district.

#### **Research Questions**

Gaining a better understanding of the commonalities of the students who are being retained will be done through the following research questions:

- What are teacher perceptions of what constitutes a student who should be retained in kinder garten?
- Looking at students who have been retained in kinder garten in this setting, what factors could help predict that they were at-risk for retention?
- Ho w can the infor mation from this research be used to reduce retentions and benefit student success in kindergarten?
- How can the information from this research be used to support instruction to minimize retention?

## Assumptions

This study assumes that teachers will have a sense of their perceptions of what constitutes a retention for a kinder garten student. It is assumed that each building has kept accurate data on the students. There is also an assumption that achievement testing has been done by trained staff and was completed as was recommended in the training the teachers had received.

## Chapter 2

## Literature Review

#### Kindergarten Retention

### H story

#### General information on kindergarten

Friedrich Froebel was best known as an educator and the originator of kindergarten Froebel's specific position on kindergarten provided a functional model for an immigrant society in the late 1800's in the United States (Baader, 2004). Baader (2004) said that Frobel's view unlike his German counterpart Pestal ozzi, recognized that families alone could not integrate their children with various languages and backgrounds into society. The rapid rise of kindergarten was because of the need for children to build social cooperation and was seen as a way of "making citizens" (Baader, 2004).

During the late 1800's and early 1900's religion played a significant role in the lives of the people in the United States. Having a large immigrant population, religious views varied therefore, religion played a role in the beliefs of how kinder garten should be taught. Early during the twentieth century there was a period of debate between conservative and liberal kinder garten programs (Prochner, 2011). Due to these different ways of thinking there were an array of kinder garten materials created to appeal to the varying beliefs of individuals (Prochner, 2011). In the United States, kinder garten began as a play-based enrichment program (Perry, 2010). During the late ninet century,

Milton Bradley, the famous game pioneer, designed a line of kinder garten materials that included alphabet blocks which were ai med at the home market as well as the kinder garten classroom based on the ideas of kinder garten (Prochner, 2011).

In the second half of the Twentieth Century, the United States began rethinking education once the Soviet Union had launched Sputnik, the world's first satellite (Roos, 2019). Roos (2019) discussed how students were pushed in the areas of mathematics and science but the emphasis in those areas was short lived. United States President Reagan again pushed the concept of more home work and stronger academics with the release of "A Nation at Rsk" (Roos, 2019). This document expressed concern about the learning of the children at the time compared to the educational progress being made in countries such as Japan and South Korea (A Nation at Risk, 1983).

In the late t wentieth century society has moved from out comes-based education to utilizing high stakes testing in order to quantify how schools and students are performing in education. Standardized assessment testing in this manner has developed as a result of "No Child Left Behind" (2002) which promised that all students will be proficient in reading and mathematics by 2014 (Fitzgerald, 2015). Schools and students were highly scrutinized by testing performance, and modifications were made on how the data is interpreted. The latest Act signed by United States President Obama, The Every Student Succeeds Act (2015), maintains positive expectations in terms of growth expectations (Every Student Succeeds Act, 2015). Performance remains a factor injudging students, which also affects how educators view kinder garten performance and kinder garten retention. There is pressure on teachers and administrators to make sure students are performing at grade level as early as possible.

#### Pennsylvani a kindergarten regulations

There are many regulations regarding kindergarten in the state of Pennsyl vania. Since 1895, the Pennsyl vania School Code required children to register for school by the compulsory age of eight (Rivera, 2019). Act 16 of 2019 (2019), a mended the public code to make the compulsory age for school nowsix years old According to the Pennsyl vania Secretary of Education Pedro Rivera (2019), lowering the age is supported by research and will benefit child development through high-quality education programs and will support interventions for student needs and ensure deficits are remediated early. In Pennsyl vania, decisions regarding early entrance into kindergarten are left to the Local Educational Agency (LEA) (Acceleration Institute, n d). Districts may set the specific eligibility date for kindergarten entrance and if they would like to have early entrance for students, they are able to set the requirements that will qualify students for early entrance into kindergarten.

According to the Pennsylvania Department of Health(n d), when entering kinder garten students are required by the state to have the following vaccines:

- 4 doses of tetanus, di pht heri a and acellul ar pertussis (1 dose after the 4th birthday)
- 4 doses of polio (at least one after the 4th birthday and 6 months after the last dose)
- 2 doses of measles, mumps and rubella (MMR)
- 3 doses of hepatitis B
- 2 doses of varicella (or proof of i mmunity)

Students must have these vaccines unless they have a medical or religious/philosophical exemption; students who do not have either must have a red/white medical card with a plan and the next designated dose within the first five days of school (PA Depart ment of Health, n d).

According to the learning center Aa to Zz (2019), Pennsyl vania requires the following documents to prove eligibility for registering for kindergarten:

- Proof of the child's age such as a birth certificate or a passport
- I mmunizations records or a medical or religious/philosophical exemption
- Proof of residency such as a driver's license, utility bill, mort gage statement or rent receipt.
- A parent registration statement that attests to your child's eligibility for school
- Ho me Language Survey this is for one to explain the language predominantly spoken in the home

In Pennsylvania, parents can enroll their childin a public school kinder garten, private school kinder garten, or a kinder garten that is center-based and approved by the state.

## Emergence of kindergarten retention

Kinder garten is the first time some students step into a school, though some children have had prior preschool experience before they begin their educational journey. Unlike the play-based model of kinder garten used in the late nineteenth and early twentieth centuries, kinder garten has become much more academic-based rather than

play-based, especially with the implementation of the Common Core standards. Common Core standards require students to have a greater depth of understanding than prior to the implementation of the Common Core (Mongeau, 2014). In some states the rigor has increased in such a way that items taught in second grade prior to Common Core are now taught in kindergarten (Meador, 2019). The increase in rigor and the effect of high stakes testing has made kindergarten retention a topic of much debate and consideration. Teachers and schools are held more accountable to ensure students meet tested expectations. This has created a new perspective on ensuring students are acade mically ready to meet the expectations of first grade.

## Perspectives on kindergarten retention

## Ad ministrator views

The views of administrators and their perspectives on kindergarten retention have been reviewed on several occasions. There are numerous school factors regarding retentions that administrators share with teachers. Kindergarten students need to be able to interact with others to ensure kindergarten success is a recurring concept that Alan (2008) noted Range, Holt, Pijanowski, & Young (2012), identified that administrators and teachers felt students who were retained in kindergarten had a positive self-concept and that this dissipated as students reached later grades.

## Teacher decisions

Research studies exa mined teachers' views on kinder garten retention and teacher perspectives on the decision to retain children for an additional year in kinder garten.

There are many reasons teachers may consider retention for a child Teachers report that having retention available prevents future failure, motivates students to attend and increases parent motivations (Range et al., 2012). Overall teachers viewretention in primary grades as effective (Range et al., 2012). In a study by Bergin, Osburn, and Cryan (1996), child independence proved to be a factor inteacher retention decisions. Neither age nor gender were stated as significant in determining retention (Bergin, 1996). Another study done by Peel (1997) indicated that children not ready for first grade were often the youngest in their class and also identified i mmaturity as a significant reason for kinder garten retention. A study by Wernke (2017) suggested that not only chronol ogical age, but also gender, socioeconomic status, and preschool experiences i mpact school readiness. There are inconsistencies, however, with how teachers report beliefs and measures and what they do in their actual practice (Neuhart-Prichart, 2001).

Teacher beliefs affect the decision on whether a child should be retained Teachers have to realize that some students will be retained later in their schooling if the students are not retained now (Hong & Yu, 2008). Teachers rate the success of students lowin the second year of kindergarten which is indicative of retention not being a good way to support long term student success (Mendez, Kim, Ferron & Woods, 2015). Kindergarten teachers tend to have a less favorable view of retained students (Mendez et al., 2015). Teachers also note more problem behaviors with retained students than with regularly progressing students (Anatasiou, Papachristou, & Diakidoy, 2017). Overall, the research lends itself to the idea that teachers and principals have similar thought patterns interms of their views on kindergarten retention

#### Parent views

When it comes to retention and kindergarten readiness, parents may have views that match or differ those of teachers and/or administrators. West (1993) identified that parents with less education believe sitting still, counting knowing the al phabet, and using pencils/paint brushes were essential skills for kindergarten readiness. These skills are more concrete for parents unlike social maturity and temperament (West, 1993). Parents of preschoolers also agreed with kindergarten teachers that children need to be able to verbalize their wants and thoughts, and be enthusiastic in approaching new ideas and activities (West, 1993). Preschool parents believe that these skills are necessary for kindergarten success (West, 1993).

Parents with struggling students often believe that they may retain the child now in kinder garten rather than waiting when it see ns the child could have the possibility of being retained in the future (Wnsler, et al., 2014). Parents and teachers report that students retained early showlower ratings in social-emotional and school competencies as compared to their promoted peers (Anatasiou et al., 2017). Parents, as well as teachers, are the main determinants of kinder garten retention and both, when asked, say it was beneficial for their child (Anatasiou et al., 2017).

## Effects of kindergarten retention

#### Soci al-e moti onal

The social-emotional effects of kindergarten retention have been the topic of much research Children who have been retained tend to score lower on ratings by teachers and parents in approaches to learning, self-control, and interpersonal skills (Hong & Raudenbush, 2005). Students are often "rated higher on emotional and

behavioral problems" (Hong & Raudenbush, 2005). Hong & Yu (2008) completed a study in which students retained in kindergarten exhibited that there was no har modene to social-emotional development. It also revealed retention increased self-confidence in acade mics and reduced problem behaviors. "Early kindergarten retention seems to be associated with lower overall psychosocial adjustment in the short and long term" (Anastasiou et al., 2017). It should be noted that in the study by Hong & Yu (2008), students retained in kindergarten did not seem to be alienated from their peer group or develop negative feelings about themselves. New kindergarten students were unlikely to create negative opinions of retained students in the kindergarten environment (Hong & Yu, 2008). It is important to keep in mind that students promoted to first grade also have feelings of anxiety, shame because of failure, and more internalized behavior problems than peers who had been retained (Hong & Yu, 2008).

#### Ac ade mi c

The objective of retention overall is typically to ensure the academic success of students over the course of their education and make certain that they do not fall behind. The effects of kindergarten retention on the academic achievement has been examined in prior research. Hattie (1999) states that "the effect is a mong the very lowest of many possible innovations and it can be vivid y noted that retention is over whel mingly disastrous across many educational interventions at enhancing academic achievement." There are negative academic effects to retention at all ages including kindergarten (Hattie, 1999). Children who have been retained have continuously showed lower achievement in literacy, mathematics, and general knowledge scores on all types of assessments (Hong & Raudenbush, 2005). Hattie (2009), states retention has a negative

effect on acade nic achi eve ment in reading and mathematics, along with affecting grade point average. There is evidence that promoted children learn more in reading and math than if they would have been retained, therefore leaving retainees further behind (Hong & Yu, 2007). Kindergarten students who were retained never show achi evement higher than if they would have been promoted instead (Hong & Yu, 2007). Hong & Yu (2008) clai mthat retention increases the student interest in all subjects, especially reading. Children who were promoted to first grade rather than retained later showed the benefits that followed did not hold up in subsequent years (Hong & Yu, 2007). It see ms that allowing children to mature through retention did not improve reading and mathematics scores over the elementary years and these children would have had the ability to learn first grade material if promoted rather than retained. (Hong & Yu, 2007) "Those who continue to retain pupils at grade level do so despite cumilative research evidence showing that the potential for negative effects consistently out weighs positive out comes" (Hattie, 1999).

## **Ot** her effects

There are other effects for retained students other than social-emotional and acade mic effects. Retention greatly increases the drop out risk in high school for students who were retained as compared to students who were promoted (Hughes, West, K m & Bauer, 2018). That contributes to how high school graduates make more money, a national average of \$8,000 more annually, and are less likely to be periodically une mpl oyed, on assistance, or in prison (Hughes et al., 2018). Interestingly, those retained early and those promoted have the same likelihood of obtaining a GED (General Education Development Certificate) (Hughes et al., 2018). In a study done by Mendez et

al. (2015), kindergarten students who are retained had the poorest long-term out comes regardless of their socioeconomic status. Therefore, according to the literature, kindergarten retention can have long ter meffects when it comes to graduating high school, overall income, and the ability to maintain stability in several areas of life. The long ter meffects need to be a consideration when a decision to retain a kindergarten student is being made by parents, teachers, and administrators.

#### De mographics and other Factors Related to Kindergarten Retention

## Gender

Ki nder garten teachers perceive a relationship between kinder garten readiness and gender (Wernke, 2017). This perceived relationship coincides with several studies in which males tend to be retained more than females. Progressing student groups tend to be relatively equal in gender, but in a study done by Mendez (2015), the retained student group is inclined to have more boys. When taking into account ethnicity, gender, free lunch status, and ELL status, only gender and free lunch status were predictors of retention (Wnsler et al., 2014). The gender effect in regards to retention disappears when the child has attended preschool (Wnsler et al., 2014). The literature brings about the idea that males who do not attend preschool are at-risk, especially if they are economically disadvant aged.

### Et hni city

The research regarding ethnicity and its relation to kinder garten retention and school success has had varying results in studies. Ethnicity is too broad a marker to

predict individual effects on retention due to socioeconomic differences within an ethnic group, and in addition acculturation plays a role in student success (Cosden & Z mmer, 1991). In a study done by Hughes et al. (2018), minority girls, particularly black girls, have a higher likelihood of dropping out of high school if they have been retained in the elementary grades. In general, students from minority groups are more likely to be retained (Mendez et al., 2015). Justice et al. (2017) said that white students are more likely to be ready for kinder garten. Kinder garten readiness ensures students will be more prepared to enter first grade.

#### Fa mil y i nco me

There are several studies that indicate that lowfamily income puts students more at risk for retention. Students who receive free and reduced-price lunches were more likely to be rated as not socially or behaviorally ready for school (Bettencourt, Gross, Ho, & Perrin, 2017). Some parents consider a delayed start for their children, thinking it will give the man advantage as they proceed through school. Lowincome students rarely have a delayed start due to the financial constraints of parents needing a place for their children to be while they are working (Wnsler et al., 2014). Thus, if there is an advantage to late entry for kindergarten, then lowincome students would be less likely to have that advantage. Students from high income families are more likely to be ready for kindergarten (Justice et al., 2017). This may be in part because social-behavior readiness skills are essentially developed before entering kindergarten and they are for med primarily in the context of the family (Bettencourt et al., 2017). "Children who begin life in poverty already face structural disadvantages like lack of access to resources or structural racis mthat increase their risk exposure to violence, abuse, and neglect" (Hnojosa, MS, Hnojosa, R, Bright, M, & Nguyen, J., 2019, p 405). The deficits created by lowfamily income therefore increase the likelihood of a child not being ready for kinder garten and the student ultimately being retained in kinder garten

#### Ac a de mi c

#### Reading achievement

Achi eve ment has been a focus in prior research for deter mining factors that are related to, or predictors of kindergarten retention. A major reason students are held in kindergarten is due to difficulty in reading (Dwyer & Rul e 1997). Poor early reading skills are a significant predictor of retention, and children who perform poorly on the earliest assessments available are expected to be retained more frequently (Cannon & Lipsconb, nd). Hong & Raudenbush (2005) stated that retained students usually had no computer and fewer books to read outside of school than promoted students. Therefore, a lack of resources may play a role in success in kindergarten. The current literature points out that deficits in early reading skills can be a predictor of retention since reading skills are often a focus when teachers, principals, and parents are considering retention for a child

#### Mat he matics achieve ment

Overall achievement is often a consideration when deciding if a child should be retained in kinder garten. Retained children appear to under performt heir peers in reading and mathematics (Hong & Yu, 2007). Children whose end of year grades were poor are retained in kinder garten (Winsler et al., 2014). At hough math is a consideration, as

stated above, reading is a major reason students are retained in kindergarten (Dwyer & Rule, 1997). According to Claessens and Engel (2013), advanced mathematical skills are predictors for success acade mically for all students. This leads one to conclude that although mathematics is a consideration, it is only deliberated in retention when there are other factors such as low reading achievement or behavioral concerns, in spite of mathematical skills being a strong predictor of student success.

#### Teacher instructional practice

The classroom practice and instructional methods used by teachers have an effect on the success of the students in their classrooms. According to Allan (2008), students need to be able to follow rules and routines in the classroom Students need to be able to show interest in learning new concepts and become involved in trying new activities (Alan, 2008). Teachers need professional development to ensure they are using the best practices and engaging students in learning. They need to be able to provide socialbehavioral skills instruction to help students who are having difficulties in those areas (Bettencourt et al., 2017). Student needs require support through best instructional practices and student engagement in cognitive and social-emotional learning.

There are kinder garten classrooms that in practice are not designed to meet the varying needs of the students. NAEYC (n d) gives the following warning signs when it comes to the kinder garten classrooms:

• Teachers provide whole group instruction most of the time. Children remain in their seats with little interaction with one another.

- Worksheets, workbooks, and flashcards are used. Students are expected to learn abstract ideas such as adding without the use of manipulatives.
- Teachers use stickers and treats as rewards for students to get work done. Explicit words are not used by teachers to describe a job well done. They only use words such as nice or good job
- Teachers only use assessment in some areas, at the end of projects or the school year, and do not use assess ments to adjust instruction to fit student learning.
- Family contact is minimal and only happens when there is a problem

The classroom practices of teachers have a negative effect on student retention outcomes if high quality instructional practices are not used in the classroom. Teachers need to use for mative assessments to adjust instruction and to support skill deficits in many areas so students can have the chance to be successful in the kinder garten classroom.

#### St udent-centered

#### Be havi or al

There are many student-centered factors that have been examined in past research to better understand school readiness and predictors of kindergarten retention. The future expectations of students are shaped by the responses they receive through their behavior from peers, teachers and administrators (Cosden & Z mmer, 1991). Some of the skills students learn in kindergarten are related to social nor ms. "In practice, many children are retained in kindergarten primarily for behavioral reasons" (Hong & Yu, 2007). Students need to manage anger safely and appropriately (Alan, 2008). Some students are retained based on behavior issues. When students have behavior issues and are unable to manage

their anger, they become disruptive to the classroom It is expected that students who are retained will reach a developmentally appropriate stage for first grade by learning and practicing appropriate behavior over the course of the retention year (Hong & Yu, 2007). It is predicted that students who are retained for behavioral reasons will improve their behaviors during that additional year in kindergarten. From this literature, behavior plays a part in the decisions of parents, teachers and administrators to retain students.

#### Soci al-e moti onal

The cognitive and social development of a child at the beginning and end of the kinder garten year are major factors in the decision to retain a child (Hong & Raudenbush, 2005). Students who are at-risk in their social-emotional development are at a disadvantage early (Denha met al., 2014). Several studies identify boys as being more likely to be at-risk due to social-emotional issues. In one study by Bettencourt et al. (2017), students considered to be typically not socially behaviorally ready were male, African-American, poor, chronically absent, and did not attend school. Hong & Yu (2007) stated that "in theory cognitive growth and social-emotional development are interrelated" Therefore, the research leads to social-emotional aspects of students being a factor in student success in kindergarten. These social-emotional aspects affect the acade mic achieve ment of the child and also the social aspects that play a role in the development of relationships with their peers and their teacher.

## Mat urity

Maturity is an area which is often discussed when considering kinder garten retention. In one study, retention in kinder garten is the only age at which teachers and

principals viewed retention as a benefit for immature students (Range et al., 2012). New and experienced teachers perceive there is a relationship bet ween chronological age and kinder gart en readiness (Wernke, 2017). Being chronologically one year younger in kinder gart en than the other students has a negative impact on student success (Dwyer & Rul e 1997). Astudent's age at kinder gart en has a measurable effect on literacy and language arts achieve ment early in their schooling, but these differences disappear by the time they reach the eighth grade (Perry, 2010). There are certain skills that students need in kinder gart en that may relate to maturity. Kinder gart en students need to be able to listen, ask questions to get information, and also use language to meet their needs (Alan, 2008). The research identifies that younger kinder gart en students are more likely to be retained (Peel, 1997).

## Family configuration

Fa nily configuration and the dyna nic of the fa nily has an inpact on student success in kinder garten and throughout their schooling. Children who had parents that invested in their education and had better fa nily functioning had higher levels of attainment (Robertson & Reynolds, 2010). The most disadvant aged fa nily profile consisted of fa nilies with low human capital and low fa nily functioning especially when there was child abuse or neglect (Robertson & Reynolds, 2010). Children who fall int othis category are often concerned with getting their basic needs met and are not being supported to achi eve acade ni cally. "Children whose mothers had lower education levels were more likely to be classified as global risk" (Justice et al., 2017). Mothers are often the caregi vers to the fa nily and when they have a low educational attainment, they often do not have the capacity to support the acade nic needs of their children in their

schooling Students who came fromfamilies with single parents and more siblings were more likely to be retained (Hong & Raudenbush, 2005). Single parents in these situations are often limited with the time they devote to support each child with their academic needs. In a study done by H nojosa et al. (2019), the strongest predictor of grade retention was parental incarceration. The findings in the study by Robertson & Reynolds (2010) indicate that the education of children is affected by the resources available and family functioning thus can improve the likelihood of a child's success in school if the family is functioning in a positive manner. The research leads us to believe that family configuration, mother's educational level, and functioning of the family unit plays a significant role in school success. Students with high functioning supportive families are more successful than students who do not have a high functioning family unit (Robertson & Reynolds, 2010).

#### Ot her factors

#### Parent i nvol ve ment

The amount of parent involvement varies from school to school and from family to family. Teachers need to have the ability to deal with parents who are not involved due to financial constraints or family stressors and devise alternate ways to reach out to these families to support the success of their students (Ray & Smith, 2010). From the research, retained students often come from economically disadvantaged homes where parents may not be able to participate in their child's education due to economic factors. Economically disadvantaged students may not have access to extracurricular activities. Retained students are also less likely to participate in extracurricular activities (Hong &

Raudenbush, 2005). As previously stated, education is affected by family functioning (Robertson & Reynolds, 2010). Therefore, parental involvement in a child's education will affect school success.

## *ass size*

The discussion around class size and the effect that small class size has on student success is very prevalent, especially when looking at kindergarten retention. Fiscal factors in districts often help to dictate class size. When there are fewer students in the class, teachers are more easily able to individualize instruction and meet the specific needs of the students in the classroom. Teachers and principals view class size as an intervention for preventing retention (Range et al., 2012). The positive effects of class size decrease as the grade level increases (Shin & Chung, 2009). Overall student achieve ment in small classes is better than student achieve ment in classes that are larger (Shin & Chung, 2009). Therefore, the research lends to the idea that smaller kindergarten class sizes can give more opportunities for supporting a broad range of levels and skill deficits of kindergarten students. It gives the teacher the ability to individualize more consistently for students in need of specific interventions for their skill deficits and therefore increasing their likelihood of success in school.

## Preschool attendance

Anot her area to consider is whether or not a child has attended preschool. Both ne w and experienced teachers feel that there is a benefit when students have attended preschool (Wernke, 2017). Parents and teachers view preschool as preparatory for the expectations of kinder garten rather than it having intrinsic value (Hatcher, Nuner, &

Paulsel, 2012). Preschool also i mpacts student personal and social skills development (Alan, 2008). Students who attend preschool already have an understanding of the social skills needed to function with their peers and with their teacher. Even when other factors come into play with predicting kindergarten success, children with better pre-K were more likely to meet kindergarten success (Justice et al., 2017). According to the literature, preschool can help with school readiness not only in the areas of academics, but also by preparing them socially, emotionally, and behaviorally for kindergarten expectations.

Although preschool gives an initial advantage to students in kindergarten, after first grade the initial advantage dissipates (Ansari, 2018). Children who enter kindergarten without a background from the preschool experiences may accelerate and catch up to their peers, and in contrast, those who enter with a strong skill set from preschool may make fewer gains than their peers without preschool and with a less developed skill set (Ansari, 2008). Therefore, the research shows that preschool can give students an initial advantage, yet the disadvantage of not attending preschool can be overcome. Students who did not attend preschool can have the ability to learn quickly once exposed to the curriculum. Achievement of students will adjust due to ability as they proceed through their years of schooling.

## Supporting Kindergarten Success

## St ude nt

Supporting kinder garten success for students is necessary to avoid any chance that a student may be retained. Early identification helps to prepare for effective intervention

for kinder garten students (Dwyer & Rule, 1997). Most students have little or no risk of ever being retained (Hong & Raudenbush, 2005). Denham, Bassett, Zinser, & Wyatt (2014), said knowing a student's emotional behavior (both positive and negative), social problem solving ability, and social-emotional behaviors is important. Screenings can help a teacher plan to support instruction and interaction which can lead to early school success (Denham, et al., 2014).

There are often disruptions to the learning environment by students lacking social and personal skills. Bettencourt et al. (2017) addresses providing social-behavioral skills instruction to students having difficulty to support student success. This instruction may be done through intervention or through classroom lessons. Students need to be able to followrules and routines in the learning environment, and also be able to show interest in learning new concepts and trying new activities (Allan, 2008). Therefore, intervention and skill building using free play and organized games can help build positive relationships, and relationship building impacts academics in subsequent grades (Ray & Smith 2010). There are many reasons that students in kinder garten may need interventions to be successful. These reasons may be academic, behavioral, or sociale motional. Interventions can be i mplemented as easily in first grade as they can be in kinder garten, it reduces the cost of the additional year of schooling, and avoids the e motional and social costs of retention (Peel, 1997). Thus starting interventions in kinder gart en and continuing the mint o first grade is beneficial. In addition, less independent children may be more challenging to a teacher, but it is not an adequate reason for retention (Bergin 1996). In these circumstances, Bergin (1996) says a better strategy is changing the environment to fit the child to support student success.

Ki nder gart en i deally needs to support both the cognitive and social development of children (Ray & Snith, 2010). If npointing the deficits of students early can lead to effective intervention (Dwyer, 1997). The research lends to supporting both cognitive and social development through interventions. Skill building will help support students to be successful in kindergarten. Wt hout these necessary skills, students will have difficulty finding success during their time in school. Identifying students who are most at-risk is i mportant. If students are male, non-Hspanic, lowincome, have not attended a care center, and were young entering kinder garten, then they had a greater likelihood of being at-risk (Hong & Raudenbush, 2005). Identifying risk and weaknesses, then continuously monitoring to make adjust ments to support those skill deficits will provide opport unity for kinder garten success.

#### **Teacher**

The success of students in kindergarten is directly impacted by teachers. Teachers feel allot of guilt if they cannot teach well since they have the responsibility of the students' well-being and education in their hands on a daily basis (Cheng, 2013). It is i mortant to note that teachers' beliefs in student abilities lead to student performance consistent with teacher expectations (Goldstein, East wood, & Behuniak, 2014). Therefore, it is very important that teachers have the tools to support struggling students in all skill deficits. This will help teachers have the confidence to know they can help their students in multiple areas and the expectations for the students can then be positive. The positive outlook will increase expectations and support student success.

Allan (2008) stated that there is a lack of professional development for teachers in the areas of social and personal skills development. Certain emotional assessment tools can be used by teachers and "the preliminary findings can show complex relationships bet ween preschoolers' social emotional learning and early school success" (Denham et al., 2014). Thus, teachers who receive professional development on tools that calibrate social and personal learning deficits is significant so teachers can support that skill for student success. This professional development can help to identify at-risk students early and support the m more explicitly. Supporting students this way can lead to kindergarten success for at-risk students.

Teachers can also establish some routines and relationships within their own classrooms to support student success. Other concepts that were consensus concepts were providing consistency in the classroom individualizing instruction, seeking assistance from parents, and using classroom routines to promote social and personal learning (Alan, 2008). Ensuring that teachers have the professional development in these areas and are implementing the m with fidelity, can help support kindergarten success for the students that they serve.

According to NAEYC (n.d) in *What does a high-quality kindergarten look like?*, the following are areas that teachers can focus on to help their students learn best:

• Creating a community of learners where students feel they belong and can help one another and share i deas.

- Supporting development and learning by having a variety of learning spaces, providing interesting activities, and encouraging children to think deeply.
- Planning curricular learning experiences where the interests of the children are explored and create goals with families based on curricular experiences.
- Listening to, encouraging, and respecting families. Also sharing information about student learning with the families.

These are all supportive classroom practices that promote learning involve families, and build relationships for students in the school setting. The current literature supports these practices for teachers so that they can help their students achieve and be successful in kinder garten. This in turn will help reduce the likelihood that the student will be retained.

Principals also can support teachers in a variety of ways. Richards (2007) compiled a list of the top five behaviors effective principals use to encourage their teachers and compared the top five from the teachers and principal perspectives (Table 1):

## Table 1

A Comparison of the Top Five Positive Principal Behaviors (Richards, 2007)					
	Teacher Ranking Order		Pri nci pal Ranki ng Order		
1.	Respects and values teachers as professionals	1.	Encourages teachers to improve in areas of teaching practice and		
2.	Supports teachers in matters		professional development.		
	of student discipline.	2.	Holds consistent, high standards for all		
3.	Has an open-door policy.		me mbers of the school family.		
4.	Is fair, honest, and trust wort hy.	3.	Respects and values teachers as professionals.		
5.	Supports teachers with	4.	Is fair, honest, and trust wort hy.		
	par ent s.	5.	Has an open-door policy.		

Creating a collaborative and positive environment between the adults in the school will ensure that teachers feel supported as they adjust their efforts in creating an environment to ensure kinder garten success for their students.

## Parents

Parents play a significant part in supporting students in kinder gart en so that they can be successful. When children are starting kinder gart en, this can be a time of apprehension for parents. Parents may miss the eager anticipation of the kinder gart en experience by having an overall anxiety regarding what will occur as their children proceed into kinder gart en (Hat cher 2012). There are two components when considering kinder gart en success and parents; how parents can be supported to help their children and how the parents the msel ves can make a positive effect in the kinder gart en success for their children. It is necessary to support parents and parenting skills early for kinder gart en students (Bettencourt et al., 2017). Teachers and administrators need to

participate and communicate with parents regarding personal and social skills, giving individual instruction when necessary (Alan, 2008). When it comes to retention, parents and administrators often judge kinder garten student success by grades, rule following, and relations with peers and the kinder garten teacher (Owens, et al., 2015). Gui ding parents on howto support their children is an important concept in building a foundation for student success in kinder garten

Often children who are going to be retained have parents who are less committed to parenting responsibilities and have lower expectations for their children at the beginning of the kinder garten year (Hong & Raudenbush, 2005). Finding ways to increase the expectation of the parents for their children could make a difference in the success of the child throughout their schooling. Schools need to find ways to educate parents early on the benefits of supporting their children as they enter kinder garten Ways to support parents and families through the school and community can aid in i mproving parenting responsibilities and bettering the chances for school success.

# Ad ministrator

Principals play a role in the kinder gart en success. They can support teachers and they can also support families. One common key aspect of the importance of the principal in kinder gart en success is the need for the mto provide guidance and direction to all parties involved. In a study by Alan (2008), concepts emerged for administrative support when students have social and personal skill deficits. These concepts included providing guidance and direction, serve as a bridge bet ween school and home, and the principals provides school-wide behavior expectations (Alan, 2008). Principals need to

be accessible to teachers and families, and the guidance counselor needs to be available to work with students who have personal and social skill deficits (Alan, 2008). The literature suggests that principals need to communicate with all parties, support and help those involved, and navigate through concerns to ensure students have the best possible chance of success.

Principals need to be empathetic to promote teacher performance (Cheng, 2013). When addressing teachers, rewards and punishments may not have any benefit since kinder garten teachers relate most closely with empathy and care (Cheng, 2013). The research lends to the idea that principals providing support and a caring environment provides the best opport unity to have kinder garten success for the students that they serve.

According to Helsel and Krasnoff (2015), the following are ways in which principals can help to support transition into kindergarten:

- Ki nder gart en transitioning should involve families and communities.
- Professional development should have opportunities to focus specifically to teaching young children
- Curricul u m and instruction should be aligned to the standards.
- Student's data should be analyzed, used to make adjust ment or interventions, and shared with teachers and with families.
- Students need to attend school regularly and families should call when the child will be absent.

• Principals need to ensure that there is a building of a wareness when it comes to transitioning programs.

These i deas are helpful in supporting the transition into kinder garten for the new kinder garten students. They can help principals support the success of the kinder garten students that attend their building.

#### Supporting Instructional Practice

## Screenings

Ki ndergarten registration is a natural place to gain insight on kindergarten students. Screening methods to identify at-risk students early, helps student success in kindergarten (Mendez et al., 2015). Parents need to give information on functioning and behaviors (Owens et al., 2015). Screenings obtain information prior to kindergarten to support kindergarten success and should be comprehensive, multi-format, multi-step and linked to service delivery (Owens et al., 2015). Early screenings give staff time to assess needs and make decisions regarding monitoring and intervention (Owens et al., 2015). There are challenges in using screening with young children and it is difficult to identify risk at atime when variations in developmental behavior is normal (Owens et al., 2015). Frame works are used to strengthen needs assess ments to more effectively target and tailor services, and are also used to target and reeval uate populations on a regular basis (Robertson & Reynolds, 2010). Effective planning and use of the data from the screenings make a difference in the success of a kindergarten student who is starting with one or more skill deficits. Areas for screening need to be in social-emotional and cognitive areas. Most predictors of kindergarten retention are pretreat ment measures in social-emotional out comes and cognitive areas (Hong & Yu, 2008). Having information from screenings helpidentify students at risk of retention and support is then provided in their skill deficits. Low scores in language, cognitive, and fine not or assessment, as well as more behaviors and social issues, are helpful in identifying children who may be at-risk for retention (Wnsler et al., 2014). In the study done by Wnsler et al. (2014), child language and social skills are key targets in identifying those with the most likelihood of retention since parents and teachers consider these when final retention decisions are made. There needs to be policies in place so students enter kindergarten with an easy transition (Ray & Smith, 2010). The literature reflects that screenings are needed to ensure supports are in place so that transitions are smooth into kindergarten and throughout the kindergarten year. This will give students the best possible chance at kindergarten success.

The Pennsylvania Office of Child Development and Early Learning (n d) suggests assessing a child's domains of learning through the following:

- 1. Approaches of learning through play
- 2. Language and literacy
- 3. Cognitive Development
- 4. Health, wellness, and physical development
- 5. Social and emotional development

This should be done through screenings, diagnostic assessments as needed, for mative assessments and summative assessments and the information can then be used to make informed decisions.

### **()** assroo m practi ce

d assroom practice varies not only from district to district, but also bet ween classrooms within the same building Differences in classroom and district policies have an impact on early experiences in school (Cosden & Zimmer, 1991). It is important to support teacher classroom practice through professional development to ensure teachers have best practices in place. Students who have personal and social skill needs are often disruptive in the classroom and there is often a lack of opportunity for professional development in these areas to support classroom teacher practice (Allan, 2008). Social development involves interacting with peers constructively (Ray & Smith, 2010). Ray and Smith (2010) also point out that communication skills and conflict resolution are developed along with building a community of mutual understanding. Teachers need to be able to incorporate all of these practices into their classroom and consistent classroom practice i mplemented with fidelity will help to support students. Providing professional development is one way to make this happen.

Acade mically there are many classroom practices that can be used with fidelity to support kinder garten success. Repeated practice of me mory skills, strategies for learning acade mics of mathematics, language arts, and science can help students attain these concepts and strategies more efficiently and builds fluency (Ray & Smith, 2010). A predictor of kinder garten success as defined by Ray and Smith (2010) is fluency in all

acade mic areas in kindergarten Therefore, building fluency in reading and mathematics skills could be key in supporting students in kindergarten and eliminating the possibility of retention

Teacher also can support students through classroom practice by developing student interests and trying new activities (Alan, 2008). Alan (2008) suggests i mple menting instruction in conjunction with the regular curriculum to support social strategies. Engaging students in their learning while incorporating academic and social skill building can support student success in the kindergarten classroom

## Additional supports

"Top-performing systems have well-developed, highly coherent and very demanding instructional systems that incorporate student performance standards, curriculum, assessments and instructional methods" (NSL, 2018, para 2). It is important that the school itself is also functioning with a system in place that supports high performance teachers and teaching, high quality aligned instruction, and high quality organization and management (About NSL, 2019). Making sure all of the systems in the school are functioning together helps to increase student achievement and creates high performance schools (About NSL, 2019). Principals need to make sure all systems are working together. When systems are working together, supports are more readily available and teachers understand how to access those supports for their students. This will improve achievement not only in kindergarten, but across the grades in the school.

Other supports may also need to be considered to ensure instructional practices are implemented to support student success. Districts may focus on class size reduction

to ensure that kinder garten classrooms are a manageable size and teachers have the ability to support all student needs on an individual level. Administrators need to engage in data-driven decision making to use accumulated information to support student deficits (Harvey, & Chle, 2018). Bettencourt et al. (2017) suggest three sustainable strategies that can be used to support students and families:

- During the earliest years, parents need to be supported and the school needs to help to strengthen parenting skills.
- Educators of students with emotional and behavioral challenges need professional development on mental health topics and consultations from mental health professionals.
- 3. All students need to be provided experiences that will strengthen their social-behavioral skills.

Social-behavioral skills also could be delivered through a school-wide positive behavior support frame work (SWPBS) to ensure all students are provided consistent expectations for behavior (Scott, Gagnon, & Nelson, 2008). SWPBS is a tiered delivery model that provides modeled behaviors with tiered supports (Scott et al., 2008). Screenings are done to ensure that all students who need support can get the behavior support that they may require (Scott et al., 2008). Hong and Raudenbush (2005) stated that retained students tend to receive lower scores in self-control and are rated higher on e motional and behavior problems. The future expectations of the child are shaped by the responses of the child's peers, teachers, and administrators (Cosden & Z mmer). Therefore a programsuch as a school-wide positive behavior support program would help to support kindergarten students early in the area of behavior. It would also tier

support for students who struggle with demonstrating appropriate behaviors in the school setting Kern and Manz (2004) explain the tiers as follows:

- The first tier is focused on prevention, is applied school-wide by all staff in all settings.
- The second tier is for at-risk students who could be at-risk for behavior issues.
- The third tier, the final tier, is for intensive support of students who have ongoing behavior problems.

Overall SWBPS has become a very promising approach to support students (Kern & Manz, 2004). Using this system for students who are at-risk in the kinder garten setting would be beneficial intargeting students and supporting students who would other wise have behavioral or social-emotional issues which would inhibit their learning and decrease their likelihood of being successful in kinder garten.

Programs such as these can be expensive for districts (Bettencourt et al., 2017). Although they can be expensive, the literature contributes to the idea that managing student behavior can be a significant factor in kinder garten retention. It is likely that school wide behavior support systems will guide schools to adopt effective instruction strategies to support student behavior skills (Kern & Manz, 2004). The cost of students repeating a year is very costly to a district and also could have negative effects for the student in the future. Therefore, it makes sense that the upfront cost would be much less than the long ter mcost not only fiscally to the district, but in multiple ways to the student.

## Conclusion

Kinder garten retention is a topic of debate by all stakeholders. The idea at the inception of kinder garten was that it would be play-based and nowit has become an acade mic endeavor just as grades one through twelve are in the educational system. Testing accountability and the implementation of the Common Core have brought attention to the achievement of students and their readiness to move to first grade. This has led to a deeper examination of kinder garten retention and better ways for supporting student skill deficits.

Ad ministrators, parents, and teachers are inconsistent with their perspectives on kinder garten retention and kinder garten readiness skills. Parents and teachers feel that students retained early benefit from the retention (Anatasiou, 2017). There are several skill sets that these three groups feel are important for kinder garten success. Parents tend to focus on concrete skills such as knowing the literacy skills, numeracy skills, sitting still, and holding a pencil/paint brush (West, 1993). At hough those skill sets are so metimes included, teachers and administrators would emphasize "demonstrating the ability to learn from experiences", "seeking help when the student needs it", and "being able to interact appropriately" (Alan, 2008).

When considering kindergarten retention, there are many concerns that come into play. Teachers noted more problem behaviors with retained students (Anatasiou 2017). Kindergarten students who were retained never show achievement higher than if they would have been promoted rather than retained (Hong & Yu, 2007) Retention increased self-confidence in academics and reduced problem behaviors (Hong & Yu, 2008). Retention greatly increases the drop out risk in high school for students who were

retained in comparison to students who were promoted (Hughes et al., 2018). The literature also reveals that students who are retained in kindergarten may do better during the retention years and possibly for the next few but eventually they will lose the gains that had initially occurred through the kindergarten retention (Hong & Yu, 2007). There is no real benefit for kindergarten retention in relation to the information provided from the literature.

The literature instead suggest that supports need to be put into place for acade nic, social-e motional, and behavioral skill sets. Early identification help determine appropriate interventions for kinder garten students (Dwyer & Rule, 1997). Teachers can put appropriate instruction in place when students are screened for acade mics. The same is true for social-e motional skills. When students are screened teachers can plan instruction in the area of social-e motional learning to support the kinder garten students in their classroom (Denha m et al., 2014). Behavior supports can be put into place with a frame work such as SWBPS where it would tier support for students who struggle with de monstrating appropriate behaviors in the school setting (Kern & Manz, 2004).

There are several specific recurring factors that could put a student at-risk A strong factor in determining at-risk students was poverty. Winsler et al. (2014) noted the strong role family income plays in student performance. Boys tend to be retained more often with the gender effect disappearing if the student attended preschool (Winsler et al., 2014). Students who are at-risk in their social-emotional development are at a disadvantage early. (Denha met al., 2014). The literature also reveals that children with mothers with lower educational attainment, children of single parent families, and families with low levels of functioning (abuse, neglect, etc.), are children who will be atrisk

The literature expresses that supporting kinder garten success through screening and interventions is very important to support student success in kinder garten and throughout their years in school. Administrators need to make sure all of the systems in the school are functioning together which helps to increase student achievement and create a high performance school (About NSL, 2019). By doing this, supports can be put into place and easily accessible. Teacher can be given professional development. This should include professional development and mental health consultations for the kinder garten teachers who can work with children on social-emotional and behavioral issues (Bettencourt, 2017). Administrators need to support teachers with care and concern

Finally, teachers and administrators need to support parents. Parents need to be supported early with parenting skills (Bettencourt, 2017). Parents of retained students have lower expectations and are less committed to their parenting responsibilities. (Hong & Raudenbush, 2005). The literature presents the idea that teachers and administrators need to communicate with parents, even if there is a need to be creative in how they communicate. This will ensure parents are informed of the students' progress and are being supported with what ever help they may need.

The literature researched directs us to the idea that at-risk students need supported through interventions. These interventions need to be social-emotional, behavioral, and acade mic. Screenings need to be done early, looking for at-risk students, and keeping in

mind key identifiers such as lowincome. Kinder garten retention has minimal to no value, rather it often has negative consequences for the child retained.

# **Research Questions**

Currently there are a high number of kinder garten retentions in a rural district. The purpose of this study is to investigate four research questions. First, what are the criteria used by teachers to determine a student should be retained in kindergarten? Second, looking at students who have been retained in kinder garten in this setting what factors predict that they were at-risk for retention? Third, how can the information from this research be used to reduce retentions and benefit student success in kinder garten? Finally, how can the information from this research be used to support instruction to minimize retention?

### Chapter 3

## Met hodol ogy

# Introduction

The title of the study, deter mining how to reduce kinder garten retentions through teacher and student supports, will be discussed. The purpose of the study is to determine why there is a high number of retentions, what factors are causing a high number of retentions, and identifying additional supports that can be put into place to ensure kinder garten success for all students attending an elementary school in the district. The setting where the research took place will be described, along with details on the participants. The research plan and how it relates to the literature will be reviewed. A description of the research plan will be discussed along with any fiscal implications. Finally, the research design, the methods used, and a description of the data collection will be explained

# **Purpose**

There are currently a high number of kindergarten retentions in a school district. The purpose of this study is to determine why there is a high number of retentions, what factors are causing a high number of retentions, and identifying additional supports that can be put into place to ensure kindergarten success for all students attending an elementary school in the district. Determining commonalities of the students being retained in kindergarten and why the retentions are felt to be warranted by the teachers

were examined Identifying areas of teacher and student support that would reduce the number of students being retained were identified. The study looked at the criteria being used to retain students in kindergarten. The factors that were common a mong students who were retained were investigated through the de mographic, behavioral, and achievement data for each kindergarten student retained during the 2018-19 school year. A determination of whether these factors contribute to the likelihood that these students were retained can give insight to how to better support the students and teachers in those areas to reduce the number of kindergarten retentions in the school district. The reasons that teachers felt students should be retained in kindergarten were identified by surveying the teachers. Additional supports that could be put into place that can help reduce the number of kindergarten retentions and teacher-centered supports in areas that need additional attention were identified so professional development can be targeted to better support kindergarten students.

With the increase of the acade mic rigor in kindergarten, kindergarten retention has become more prevalent (Mongeau, 2014). Common Core standards require a greater depth of understanding than what was taught prior to the implementation of the Common Core (Mongeau, 2014). Teachers and schools are held more accountable due to high stakes testing and this accountability has created a new perspective on what makes a student completing kindergarten ready to meet the expectations of first grade. Therefore, it is important to find commonalities a mong those kindergarten students who are retained to determine if interventions can be put into place to reduce the number of kindergarten retentions.

Retention can lead to increased dropout rates (Hughes, West, K m & Bauer, 2018). One study determined that students retained in kindergarten had the poorest longtermout comes regardless of their socioeconomic status (Mendez, 2015). The long-term effects of kindergarten retention need to be considered. Screenings can help a teacher plan to support instruction and interaction which can lead to school success (Denham, et al., 2014). Screening should be comprehensive, multi-format, multi-step, and linked to service delivery (Owens et al., 2015). Winsler et al. (2014) states screening information can help identify students who are at-risk through low cognitive, language, and fine mot or assessments, as well as kindergarten students with behavioral and social issues. Understanding specific information on the students being retained in the district may also give administrators and teachers focus on what screeners would be beneficial to the kindergarten students in the district so that students can have better supports prior to retention.

The goal of this study was to develop ways to reduce the number of kinder garten retentions in the district. Kinder garten i deally needs to support the cognitive, behavioral, and social development of children (Ray & Smith, 2010). Supporting students in these areas will help to reduce the number of kinder garten retentions that occur in the school district each year. Teachers also need professional development to support the needs of the students in their classrooms.

## Setti ng/ parti ci pants

The school district has approxi mately 4, 167 students in grades Kindergarten through twelve. The number of students has declined over the past decade. Enroll ment was approxi mately 5, 300 students a decade ago (Grabtree, Rohrbaugh, and Associates,

2011). The district encompasses approximately 251 square miles. The district population is roughly 36,500 residents. The staff consists of about 325 teachers, 222 support personnel, and twenty-three administrators. There is a high school, middle school, four elementary schools, and the district also has its own career and technical center. The district runs its own K-12 cyber school in addition to the brick and mortar buildings. The high school houses grades nine through twelve. The career and technical center consists of students in grades nine and ten part-time and it houses a comprehensive program which provides a full-time experience for students in grades eleven and twelve. The middle school services grades six through eight. The elementary schools contain grades kindergarten through five. There is no district-funded Pre-Kindergarten available for students. There is Head Start, PreK Counts, and several private preschools located inside the district borders. Some of the Head Start classrooms and PreK Counts classrooms rent space in district buildings.

The four elementary schools in the district vary in size. During the 2018-2019 school year, the largest elementary school housed approximately 588 students. The second largest served about 517 students. The two smaller served approximately 412 and 348 students. Prior to the 2017-18 school year, the district had eight elementary schools. Due to decreasing enrollment, four of the elementary schools merged into the four current elementary school buildings. The district continues decline in enroll ment numbers each school year which is a trend that is expected to continue.

N net y-four percent of the district population identify as white. Sixty-five percent of the district population identify as qualifying for free and reduced meals. The elementary buildings range from fifty-seven percent identifying as economically

disadvantaged at the lowest end of the range to seventy-eight percent identifying as economically disadvantaged at the upper end of the range. Twenty-two percent of the district students are identified as special education and three percent are identified as eligible for gifted services. There are a total of eight students who identify as English Language Learners in the entire district.

The Head Start programs and the Pre K counts programs within the district work with the district to prepare the students they serve to be ready for kinder garten. The district shares the kinder garten curriculum with these programs. Head Start students are brought to the buildings they will be attending to tour the kinder garten classrooms. These students participate in an activity and see what the building is like so that they are familiar with the setting. This is designed to help ease the mthrough the transition to kinder garten.

Occasionally there is an event where primary students from a building and the Head Start students will attend together. These are held in a district building and done to help make sure the programs are working together. The Head Start coordinator will contact the building principal and use an area at the school, such as the gymnasium Head Start students are bussed to the program and some of all of the primary students at the school attend. This helps create an easier transition for students as they enter kinder garten. The district also provides a Kinder camp for all kinder garten registrants prior to the start of each school year to help with student transition to kindergarten Students and parents spend the day doing activities with the teachers, learning how communication occurs between the school and home, and learning the day-to-day functions such as how to proceed through the cafeteria line to get breakfast or lunch

Parents are provided a copy of the curriculum the students will be learning each nine weeks. Students are taken on a bus ride so that they know what it will be like to ride on a bus before the first day of school. They are taught what the expectations? of behavior are when riding and how to stay safe on the bus.

There is preschool agency coordination in the district for students with disabilities. This is done in several ways. First, the district coordinates with agencies that serve preschool children who have disabilities. The district ensures physical access and programaccess to these students. Next, the district works with preschools to coordinate programs operated directly by the LEA and also by other community agencies under contract with the LEA. The district works with the Intermediate Unit through the ChildFind process to ensure easy transition for students who were being provided early intervention services.

Fifteen kinder gart en teachers were invited to participate in this study. N ne agreed to participate in the survey. There are currently fifteen kinder gart en classrooms in the district. The district has a total of four elementary buildings. Two of the buildings have three kinder gart en classrooms, one has four kinder gart en classrooms, and the last building has five kinder gart en classrooms. All kinder gart en classrooms are taught by femal e teachers with varying years of experience. The teachers are all considered highly qualified by the Pennsyl vania Depart ment of Education. According to PSEA (2016), in the article *The Every Student Succeeds Act: "Hghly Qualified Teacher" Requirements*, to be highly qualified in the state of Pennsyl vania, teachers must:

- Hold at least a bachelor's degree;
- Hold a valid Pennsyl vania teaching certificate

• Demonstrate subject matter competency for the core content area they teach.

All fifteen kinder garten teachers were sent the survey. Nine of the kinder garten teachers responded to the survey.

There were forty-t wo students who were retained in kindergarten during the 2018-2019 school year. Each of the four buildings had students who were retained in kindergarten during the 2018-2019 school year. Multiple students were retained in each of the buildings and the students were not all from the same classroom in any of the buildings.

Kinder garten teachers were given information regarding their participation in the study before completing the survey. The kinder garten teachers gave consent to use the information upon completion of the survey as stated in the information (Appendix A). The school board approved the research being done in the district (Appendix B). The superintendent (Appendix Q) and the principals (Appendix D) all gave consent for the student information to be used in the study. No students or parents were directly interviewed to garner the information contained within this research study.

# Research Han

The rigor in some states has increased so that concepts taught in grade two prior to the Common Core standards are now taught in kinder garten (Meador, 2019). This has created a new perspective on what makes a student ready for grade one. Hattie (1999) stated that retention is one of most disastrous interventions at enhancing acade mic achievement. The literature suggests that supports need to be put into place for acade mic, social-emotional, and behavioral skill sets. There are several specific factors that could put a student at-risk for kinder garten retention. Winsler et al. (2014) noted that there is a

strong relationship bet ween family income and student performance. Retained student groups are inclined to have more boys (Mendez, 2015). Students are often "rated higher on emotional and behavioral problems" (Hong & Raudenbush, 2005). Retained students also underperform their peers in reading and mathematics (Hong & Yu, 2007). Some students come into kindergarten that had attended preschool. At hough preschool gives an initial advantage, that advantage dissipates after grade one (Ansari 2018). Taking into consideration the above points from the literature review the research study was designed to pinpoint if there are any specific commonalities a mong the students who are being retained in kindergarten

According to the literature, teachers report having retention available prevents future failure, motivates students, and motivates parents (Range et al., 2012). Teachers rate the success of students lowin the second year of kindergarten, which is indicative of retention not being a good way to support student long-ter msuccess (Mendez et al., 2015). Thus, surveying the teachers in this study is crucial in understanding what criteria they use to recommend a student for kindergarten retention

Looking at the reasons teachers recommend retention can provide insight to why students are being retained and what interventions can be used to support these students. Once specific problemareas are identified, the areas that need to be screened or screened earlier can be decided. Early screening gives staff time to assess needs and make decisions regarding monitoring and intervention (Owens et al., 2015). According to the literature, low scores in language, cognitive fine motor assessment, as well as behavior and social issues are helpful in identifying students who are at-risk for retention (Wnl ser et al., 2014). It was important during this research that acade mic, social-emotional, and

behavioral factors, as well as de mographic information, were looked at so commonalties a mong retained students could be determined. These commonalties can then be addressed to reduce the number of kindergarten retentions in the district.

Using the research from the literature review, common at-risk factors were noted a mong the kinder garten students that were retained during the 2018-2019 school year. Identifying these factors gave the opportunity to target additional areas where supports need to be put into place to help ensure that more students are successful in kinder garten and the number of kinder garten retentions in the district can be reduced. Supports may be acade mic, social-emotional, or behavioral. Supports for teachers may be put into place so that they can better address the acade mic, social-emotional, or behavioral needs of these students.

Through data examination, understanding the decision-making process of teachers when recommending retention was investigated. Understanding whether the decisionmaking process in the district was consistent across all of the elementary buildings and consistent with all of the kinder garten teachers needed determined. Identifying common factors that the kinder garten teachers were using to decide if a student should be recommended for retention needed to be examined. Are there common demographics, behavioral concerns, and achievement concerns that teachers prioritized as reasons for a student to be determined as a candidate for kindergarten retention? The reasons that teachers identified as factors in the decision-making process for retaining kindergarten students needed to be understood. Understanding consistency a mong teacher decision making would help to target supports that need to be put into place for students. This also would help identify areas of professional development that would be beneficial for

49

all kinder gart en teachers in the district. If consistency is lacking, then a focus may need to be more teacher specific interms of professional development. Inconsistency would also signify that administration needs to work on specifying more clearly what factors should be considered when determining a student has successfully completed kinder gart en

Once common factors are identified a mong the students who are retained, supports need put into place to help ensure more students are successful in kindergarten and the number of kindergarten retentions can be reduced in the district. Schools need to have systems that incorporate student performance, curriculum, assessments, and instructional methods (NISL, 2018). When looking at the common factors that identify students for kindergarten retention, these systems can be used or modified to support the kindergarten students to be successful. Looking at the common factors that teachers use in determining that a student is a candidate for retention is also a way to determine what supports may be important to have for students. Determining teacher criteria also will give ideas to better support teachers in helping students in the areas identified. These criteria may also be a way to provide professional development for the teachers and staff in understanding the effects of retention and the important factors that need to be considered before retention is considered for a student.

According to current figures provided by the business office, it costs approximately \$10,845 dollars to educate a regular education student in the district. It costs approximately \$23,801 to educate a special education student. When students are retained in kindergarten there is an additional year of costs for each student over the

course of their education of the equivalent of that year. This study looked at the potential savings to the district with a reduction in the number of retentions.

In addition to potential savings in financial terms, the literature lends to the idea that retention has a short-term and long-term negative impact on students. As stated before, Hattie (1999) said that retention is one of the most disastrous interventions for academic achievement. Therefore, the costs of supporting students through screenings and interventions was looked at during this study. The study examined both the savings interms of dollars and the fiscal investment that can reduce the number of students being retained. Successful students will make a positive impact to the community through academic success and a better qualified workforce.

# Research Design, Methods, and Data Collection

A mixed net hods approach was used in this study. It took into consideration qualitative data and quantitative data. There are several items that were examined during this study. Demographic data of the students was analyzed. Achievement data was examined for each student. The behavior data of each kindergarten student who was retained was also identified during this study. The perspectives of kindergarten teachers were determined through analyzing qualitative and quantitative survey data. Kindergarten retention was considered from the teacher perspective. Teachers were surveyed on the following topics: parent involvement, class size, reading achievement, math achievement, maturity, behavior, preschool attendance, family configuration, social/emotional concerns, and instructional practices. Teachers were also asked whet her retention should be a teacher, parent or team decision. Teachers gave their perspectives on supports that might reduce kindergarten retention, and supports that can be put into

place to better support kinder garten teachers and staff. Kinder garten teachers gave infor mation regarding their thoughts on communication with the parents of a student who is a candidate for kinder garten retention. Chi-square tests and ANOVA were used to examine Likert scale data. Open-ended questions were coded and then examined.

De mographics of students who have been retained during the 2018-19 school year were analyzed through a quantitative approach. The factors chosen to be investigated were based on the information gathered from the literature review process. Gender, ethnicity, economically disadvantaged status, age, family configuration, and special education status were all areas data will be analyzed for commonalities. Preschool attendance is another factor that was examined in this study. Frequency of characteristics were examined. This along with using chi-square tests, t-tests and ANOVA were used to analyze categorical information on students that were retained in kindergarten during the 2018-2019 school year.

Commonalities in achievement a mong students who were retained during the 2018-2019 school year were analyzed Report card grades in ELA (English Language Arts) and mathematics were examined In addition, D BELS scores were evaluated from the beginning of the year (BOY), the middle of the year (MOY), and the end of the year (EOY). Kindergarten screening scores for the students that were retained will also be examined. Tests of central tendency were done to look at the grade and achievement data for the students who were retained in kindergarten. Special education status for retained kindergarten students was examined, including specific categorical information.

Behavioral data was looked at for the students who were retained during the 2018-19 school year. An analysis of how behavior may be a factor in kinder garten

retention was done. Data documented in the student information system was analyzed Behaviors that occurred were placed into categories. The number of incidents that occurred for each of the students who were retained in kindergarten was determined to see if behavior was a factor in the decision to retain the student. Frequency was looked at to examine how often there were behavior referrals for each student retained in kindergarten. In addition, the frequency of the type of behavior issue was also examined

Once the IRB gave approval for the research study (Appendix F), collection of data began Demographic data was collected throughout the months of December, January and February. Also collected during this time were ELA and mathematics grades, kinder garten screening data, prior preschool experience information, and D BELS scores. All of this data was pre-existing data available on the students who were retained in kinder garten during the 2018-19 school year. Data was collected as available for each student. The teacher survey was sent out in Google Forms in mid-January and teachers were given one week to participate in the survey. Are minder was sent out a few days prior to the close of the survey. Once the survey timeline closed, access was also discontinued to the teachers. Data was organized into a spreadsheet as it was collected on students. Teacher survey data was entered into a spreadsheet in March to be analyzed Data analysis occurred during the nonth of March and April.

According to the literature, administrators need to use data-driven decision making to use accumulated information to support student deficits (Harvey & Ohle, 2018). Information was looked at to determine the factors that are producing the high number of kindergarten retentions in the school district. Students retained in kindergarten during the 2018-19 school year were identified. Student data was collected

from several sources. These sources included the student information system, achievement data collection tools, teacher retention forms, and other available student records. The kinder garten student data was de mographic, behavioral, and academic. Kinder garten teachers were surveyed on the criteria they use to determine if a child should be retained in kinder garten. The kinder garten teachers that were surveyed are the current 2019-20 kinder garten teachers in the school district.

The four elementary school principals provided a list of the students from each of their elementary buildings that were retained during the 2018-19 school year. Those kinder gart en students were then placed onto a master list. The kinder gart en students were coded to ensure all of their data remained anony mous. Additional information was then gathered about each kinder gart en student. The information gathered included achievement data, behavioral data, and de mographic data.

Acade mic achievement data was collected on each student who had been retained in kinder garten D BELS testing scores were available for the retained kinder garten students. Beginning of the year (BOY), middle of the year (MOY) and end of the year (EOY) benchmarking data was provided for each student (if available). The data was then placed into a spreadsheet in preparation to determine any trends in the data. Grade information for ELA and mathematics was procured from the student information system N ne week grades and final grades for each subject were gathered. In addition to DI BELS benchmarking scores, report card grades, and kinder garten screening scores that were available were collected and placed into a spreadsheet to determine if there were any notable trends for the students that were retained in kinder garten at the end of 2018-19 school year.

A kinder garten screening takes place at kinder garten registration each year in the district. The kinder garten screening tool for the 2018-19 students had a total of 59 points and consisted of assessing the following areas:

- First name writing students needed to demonstrate their ability to write their first name (1point).
- Colors Students were to point to the correct color (9 points).
- Number recognition Students were to say the number when the person doing the screening pointed to it (10 points).
- Basic math skills students had to identify the box with a certain number of objects, the greatest number, and count the objects in a box (6 points).
- Shapes Students had to point to the shape said by the assessor (4 points).
- Capital/lower case al phabet recognition Students had to say the letter when it was pointed to by the assessor (18 points).
- Phone mic a wareness (blending and rhyming) Word were said broken into phone mic segments and students pointed to the correct picture of the word (6 points). Students then repeated three words which were said as they looked at a picture of each. They had to identify which two of the three were rhyming words (5 points).

The total number of points correct were counted for each student assessed and placed into a spreadsheet.

Be ginning of the year  $\square$  BELS data was compared to the kinder garten screening data to see if there was any correlation between the two sets of data. Another comparison was made between the end of the year  $\square$  BELS scores and the fourth nine weeks ELA

grades. Both of these were done to see if there was any significant relationship bet ween the sets of data.

DI BELS scores were also looked at to see if there was appropriate growth in the students in ELA throughout the kinder garten school year in which the students were retained. Trends in ELA and mathematics grades throughout the year were also looked at to see if there were trends in student performance. These analyses were done to see if a pattern could be established to recognize students who may need supported earlier in the kinder garten year. This in turn would provide students support in their areas of weakness and potentially help to deter the need for retention at the end of the kinder garten year.

Behavioral data was also gathered on each student. Discipline infractions for each retained kinder garten student was pulled from the student information system Each infraction was placed into a category depending on the nature of the infraction These categories were bus behavior, inappropriate behavior, insubordination, fighting physical aggression/contact, inappropriate language, and other. The type of discipline infractions were examined along with the number of discipline infractions for each student retained in kinder garten during the year in which a determination for retention was made.

De mographic data was also collected for the students who were retained in kindergarten during the 2018-19 school year. Data was collected from the student infor mation system and placed into a spreadsheet. The following de mographic indicators were collected for each student:

- Gender (mal e/fe mal e)
- Date of birth
- Special education status

- Specific Learning Disability
- Intellectual Disability
- Other Health I mpair ment
- Speech
- Economically disadvant aged status
- Race/ Ethnicity

The data for each of these areas were recorded as they were available for each retained kinder garten student.

There are factors that put students at risk for retention Analysis of de mographic information can provide information that may pinpoint a specific group that is at-risk in the district. According to the literature, when taking into account, ethnicity, gender, economically disadvantaged, and English Language Learner status, only gender and free lunch status were predictors of retention (Wnsler et al., 2014). According to Justice et al. (2017), white students are more likely to be ready for kinder garten. With these examples in mind, it is important to look at the demographic information in this study to see if there are demographic patterns with the students who are being retained in kinder garten in the district. It also may identify professional development that is needed for the teachers and staff relating to the specific demographic indicator(s) to ensure that students are learning in the way that is best for their gender, ethnicity, economic status, or any other identifying factor that might be impacting their learning

A survey was given to the current kinder garten teachers in the school district. The survey was done with complete anonymity. The survey was sent through Google For ms and data was collected. There were fifteen kinder garten teachers and nine of those

kinder gart en teachers chose to complete the survey. The survey asked both quantitative and qualitative questions. The first two sections of the survey used Likert scales and were quantitative in nature. The first section had ten questions that participants ans wered. The participants were asked to respond to three questions in the second sections of the survey. The last section used open ended questions, therefore were qualitative. There were three questions in the third section of the survey. The responses to the open ended questions were coded. The survey responses were anonymous. Participants gave their consent to the survey when they submitted their responses as outlined in the cover letter explaining the study being conducted.

The survey was developed to determine what factors kindergarten teachers believe they should consider when deciding if a student is a candidate for kindergarten retention. The first section of the survey was set up with a Likert scale. The choices on the Likert scale were "highly significant, some what significant, slightly significant, and not significant". The kindergarten teachers were given ten items to rate as to what extent factors determine student retention. The items they rated were "parent involvement. class size, reading achievement, math achievement, maturity, behavior, preschool attendance, family configuration, social/emotional concerns, and instructional practices". All of these items were reviewed when looking at the literature. A quantitative analysis was used for this section of the survey.

The second section of the survey consisted of three statements. Each of these statements was in a Likert for mat. The choices were "al ways, so metimes, occasionally, and never". The three statements were:

• Retaining a student should be a teacher decision

- Retaining a student should be a parent decision
- Retaining a student should be a team decision

A quantitative analysis was also used for the data collected from this section of the teacher survey. Teacher, parent, and administrator perspectives on retention were examined during the review of literature for this study.

The third section of the survey contained open ended questions. There were three questions asked in this section. These questions were qualitative. The questions were as follows:

- What supports are necessary to reduce the possibility of a child being retained?
- What supports for teachers/staff can be put into place to reduce the possibility of a child being retained?
- Describe the communication that should occur with a parent of a student who is a candidate for retention?

These responses were coded based on the responses from the kinder garten teachers who chose to participate in the survey as part of this study. A qualitative analysis was used to look at the data from this section of the survey completed by the kinder garten teacher participants. When reviewing literature for this study, various acade mic, behavioral, and social-emotional supports were examined

#### Validity

Construct validity was used in this study. Asurvey of teachers showed the believed teacher criteria used for determining a student who should be recommended for kindergarten retention. The questions were designed based on relevant existing knowledge on kindergarten retention. Face and content validity were also used in this

study. The survey appears to gather the information on what factors caused students to be retained in kindergarten and what criteria they are using for the retention. This is the criteria for face validity. For content validity, the study addresses the reasons for kindergarten retention looking at demographic, behavioral, and acade nic concerns. The study takes into account acade nic progress throughout the year and teacher perspectives on the criteria they use for determining if a student is a candidate for kindergarten retention. Additional demographic, behavioral and acade nic data on the students who were retained were examined. Once the commonalities a mong students were determined and the reasons teachers defined as a student who should be retained in kindergarten, then areas for student and teacher supports could be determined to reduce the number of kindergarten retentions in the school district.

Data was carefully collected to ensure it was accurate and from reliable sources. All data analysis was reviewed for accuracy. Reporting of the information occurred based on the results of the analysis of the data.

In this study, triangulation of data was done for the reasons of student retention. Met hodol ogical triangulation was used by gathering data and documentation, survey information and through the research from the literature review Multiple sources of data were used These sources included information from the student information system teacher survey information, kindergarten entrance examinformation, DI BELS testing information, and information provided through student records. Teachers were surveyed on their views of what the criteria were for the retention of a kindergarten student. Teachers were asked questions to understand their reasons for the retention of kindergarten students. Grades were examined to see trends in achievement.

Kinder garten D BELS scores were considered too, when evaluating achievement of the kinder garten students. Kinder garten entrance exams scores were examined along with whet her the students had attended a PreK program Behavioral data was also gathered from the student information system

Peer debriefing was done by consulting with the Capstone Faculty Committee Advisor and the Capstone External Committee Advisor. Peer debriefing occurred with cohort peers on a regular basis. Peer debriefing helped to reflect on the data collection process, analysis of the data, and interpretation of the data that resulted from the study. The COVI D 19 pande mic reduced the amount of consultation and debriefing beginning in March 2020 due to the social distancing and additional work demands by those involved.

Care was taken to ensure the research data collected was accurate and consistent. Using the student information system gave accurate final grades, exact registration information and demographics provided by the parents during the registration process. All behavioral records were contained within the student information system. The same student database is used throughout the district. All registration information is inputted through the registration office. The report cards were generated from the student information system. Di BELS scores are recorded by the trained Title I staff who gave the benchmarking tests to each of the kindergarten students.

The goal of this research is to find a way to reduce the number of kinder garten retentions in the school district. The techniques used in this study were done with a systematic approach Most, if not all, information collected would be available in all school districts. Using the same techniques, this research study could be used in another

comparable district with a similar issue with kindergarten retention. The method used for collecting survey data would easily be used in the same way with results reflective of the district in which the study is being done.

If a district with a same or different demographic did the study, the same techniques could be used. Based on the literature, the results may be different due to the reasons teachers are retaining or the demographic makeup of the student population. This would result in different supports required to be put into place to address the needs of the at-risk students. Professional development needs may also be unique to the district based on the results of the study and the specific needs of their kindergarten teachers and staff.

Understanding the setting of the study, what the study is trying to gather information on, and the participants who were used in the study, contributed to the dependability. Therefore, detailed research was done on the setting of the district. Information was gathered on the demographics of the student participants. The kinder garten teachers in the setting being studied were used to gather survey information to provide setting perspective on the students who were retained in kinder garten in the school district. Detail was provided on how the study was done and also how the data was gathered, which will contribute to the reliability of the study determining why there are a high number of kinder garten retentions in the school district and what supports can be put into place to support the staff and students to reduce the number of kinder garten retentions.

Data collected was from the various sources in the study. Data was double checked for accounting errors. Procedures for data collection were consistent with the plan outlined for the Internal Review Board as they were approved. Although I ama

62

principal in one of the elementary buildings, all of the data used had been inputted by other parties. The only exception to that is the behavioral data inputted from the elementary building I serve. Data from students who were retained was used in this study. Teachers that were asked to participate in the survey where assigned to the classrooms in the district. There is sampling bias in this study due to the study surveying a specific set of teachers in a single school district. There is also the possibility of response bias in this study if the teachers tried to ans wer the questions in a way that they thought they are expected to ans wer rather than identifying their true beliefs through their ans wers.

The research in this study will inprove educational practice. First, it will improve practice in the district by identifying factors that are causing students to be retained in kindergarten. It will look at de mographic, behavioral, and social emotional factors. It will examine the teacher perspective on what criteria determines a kindergarten student should be recommended for retention. The research will help gain understanding of what supports need to be put into place to reduce the large number of kindergarten retentions in the districts. The study will help to pinpoint the professional development that is needed to be provided to teachers and staff that is based in best practice to better support students to reduce the number of kindergarten retentions. The research will contribute to the overall literature by contributing to the overall data on the causes of kindergarten retention in certain settings. It will also contribute to the overall literature by providing a valid study using methods that may support the same research in other districts experiencing a high number of kindergarten retentions.

#### Chapter 4: Data Analysis and Results

# Introduction

Data was collected in the following areas for this research study; student de mographics, behavior, acade mic, and teacher criteria used for kindergarten retention Teacher survey results were examined. Other results were analyzed based multiple sources concerning de mographic, behavioral, and acade mic data. De mographic data was collected to see the frequency of characteristics among student who were retained in kindergarten. Frequency of behavior referrals to the office were collected and the types of behaviors that occurred were identified. Academic data was gathered and examined for measures of central tendency. The next step was to analyze the data that has been collected

The research questions considered during this study were:

- What are the criteria used by the teacher to determine a student who should be retained in kinder garten?
- Looking at students who have been retained in kinder garten in this setting, what factors predict that they were at-risk for retention?
- Ho w can the infor mation from this research be used to reduce retentions and benefit student success in kinder garten?
- Ho w can the infor mation from this research be used to support instruction to minimize retention?

During the data analysis for this study, statistical methods were used to analyze the data available to gain insight to the research questions. Then a determination of why there is a high number of retentions, what factors are causing a high number of retentions, and identifying additional supports that can be put into place to ensure kindergarten success for all students attending an elementary school in the district.

# Results

Kinder garten teachers were given a survey containing twelve Likert scale questions and three open ended questions. Effeen teachers were sent the survey. Nine teachers agreed to participate in the survey. The first nine questions asked the extent to which certain factors determine student retention. The first factor was parent involvement (Figure 1). 77.8% of the teachers felt parent involvement was a "highly significant" factor in determining student retention. 22.2% stated that parent involvement was "some what significant" in determining student retention.

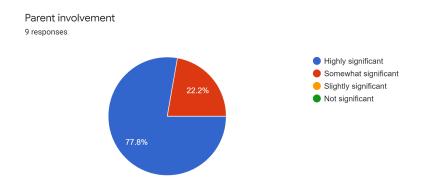


Figure 1. The extent to which teachers believe parent involvement determines student retention

The extent to which the kinder garten teachers believed class size was a determinant of kinder garten retention was examined next (Figure 2). 66.7% of teachers

felt that class size was "highly significant". 33.3% believed it was "somewhat significant".

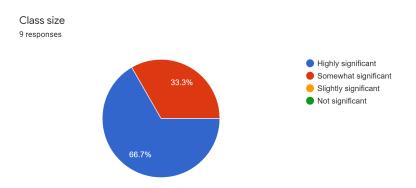


Figure 2. The extent to which teachers believe class size determines student retention

Reading achievement (Figure 3) was the next factor that kinder garten teachers were asked All of the kinder garten teachers stated that reading achievement was "highly significant" in determining if a student was a candidate for kinder garten retention Math achievement was also a factor that teachers were surveyed on as a determinant for kinder garten retention (Figure 4). 55.6% believed that math achievement was a "highly significant" factor in determining kinder garten retention, while 44.4% felt it was "some what significant".

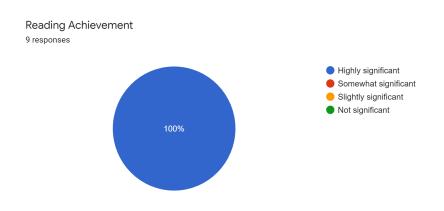


Figure 3. The extent to which teachers believe reading achievement determines student retention

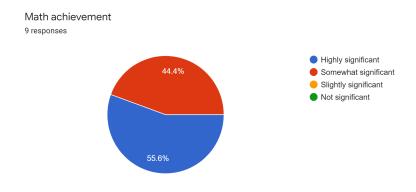


Figure 4. The extent to which teachers believe math achievement determines student retention

Maturity was another factor kinder garten teachers were surveyed to determine if they felt it was a factor in the decision for kinder garten retention (Figure 5). A "highly significant" response was given by 88.9% of the kinder garten teachers. 11.1% chose "so me what significant" for maturity being a determining factor of kinder garten retention

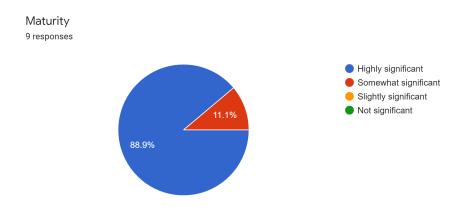


Figure 5. The extent to which teachers believe maturity determines student retention

Kinder garten teachers were asked to consider if behavior was a criterion used to determine if a student is a candidate for kinder garten retention (Figure 6). 44.4 % stated

that behavior is a "highly significant" criteria when considering a student for kinder garten retention. 22.2% believed that it was "some what significant". 11.1% considered it to be "slightly significant". 22.2% stated it was "not significant" as a determinant for kinder garten retention

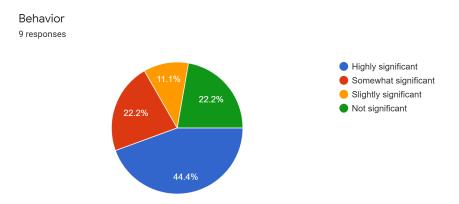


Figure 6. The extent to which teachers believe behavior determines student retention

Next, kinder garten teachers were asked if preschool attendance was a deterninant for kinder garten retention (Figure 7). 44.4% of kinder garten teachers ans wered that preschool attendance was "highly significant" in determining if a student would be a candidate for kinder garten retention 33.3% said preschool attendance was a "some what significant factor" determining kinder garten retention 22.2% felt preschool attendance was "not significant" in determining if a student would be retained in kinder garten

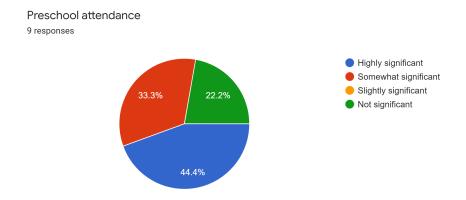


Figure 7. The extent to which teachers believe preschool determines student retention

Teachers were asked to what extent family configuration can determine kinder garten retention (Figure 8). Teachers that replied "highly significant" contained 22.2% of the teachers who participated in the study. 55.6% said that family configuration was "some what significant" in determining kindergarten retention "Not significant" was the response by 22.2% of the kinder garten teachers who participated in the study.

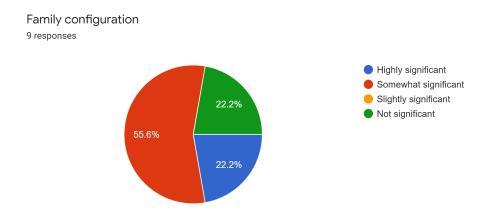


Figure 8 The extent to which teachers believe family configuration determines student retention

The next ite mt hat the kinder gart en teachers considered was social/e motional concerns (Figure 9). 33.3 % of the kinder gart en teachers who participated stated that social/e motional concerns were "highly significant" in determining a candidate for kinder gart en retention "Some what significant" was the response from 44.4 % of the kinder gart en teachers and 22.2 % stated that social/e motional concerns were "slightly significant".

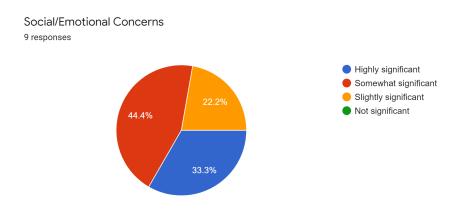


Figure 9. The extent to which teachers believe social/emotional concerns determine student retention

Figure 10 shows responses from the participants regarding instructional practices. 44.4% of the kinder garten teachers who participated in the study responded that instructional practices were "highly significant". "So me what significant" was the response from 44.4% of the kinder garten teachers who responded 11.1% responded that instructional practices were "slightly significant".

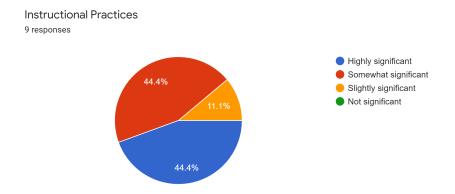


Figure 10. The extent to which teachers believe instructional practices determine student retention

The next three questions in the survey asked whether the teacher, parent or team should make the decision on whether a student should be retained. As shown in Figure 11, 22.2% of the kinder garten teachers who responded chose "al ways" when asked should retaining a student be a teacher decision 55.6% responded "sometimes" and 22.2% responded "occasionally."

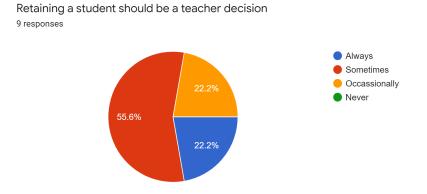


Figure 11. Kinder garten teacher belief that retention should be a teacher decision

When the kinder garten teachers were asked if retention should be a parent decision (Figure 12). 11.1 % stated that it is "al ways a parent decision." "So metimes" was the response from 33.3% of the teachers who responded and "occasionally" was the choice by 44.4% of the kinder garten teachers. Of the kinder garten teachers surveyed 11.1% ans wered "never".

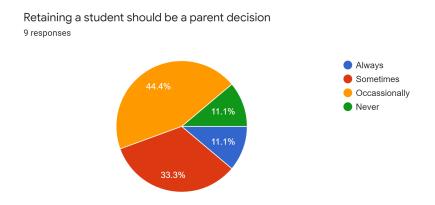


Figure 12. Kindergarten teacher belief that retention should be a parent decision

Kinder garten teachers who participated in the survey were asked if retaining a kinder garten student should be a team decision (Figure 12). 77.8% responded that it should "al ways" be a team decision 22.2% chose "sometimes" as their response when ans wering the survey.

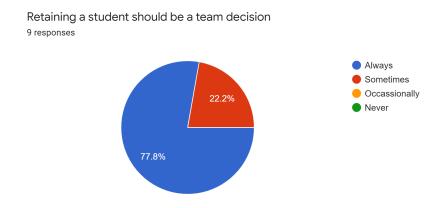


Figure 13. Kinder garten teacher belief that retention should be a team decision

Finally, teachers were given three open-ended response questions. Teachers were able to type their responses. Feedback from the teachers is included with each question posed

# What supports are necessary to reduce the possibility of a child being retained?

Teacher feedback for this question consisted of several items. Title I / reading support was addressed by three of the teachers. Parental involvement was noted by four of the teachers who participated in the survey. Pre K/EI was mentioned by two of the kinder garten teachers. Starting date based on birthdate, transitional kinder garten, time, and class size were all noted by teachers who participated in this survey.

What supports for teachers/staff can be put into place to reduce the possibility of a child being retained?

Four staff members responded that more Title I time and smaller class size/more staff would be a support for teachers/staff to reduce the possibility of a child being

retained in kinder garten Two teachers stated that more collaboration and more professional development would support teachers/staff and reduce the possibility of a child being retained in kinder garten Other responses by individual teachers included more resources, a classroom aide in each kinder garten classroom. Pre K, special education support, and counselor support.

Describe the communication that should occur with a parent of a student who is a candidate for retention.

The last open-ended response where teachers described how communication should occur with a parent for a student who is a candidate for retention, four teachers stated that notification should occur throughout the year. Two teachers stated that parent conferences should occur. One teacher stated that report cards were a for mof communication that should occur throughout the year with parents.

Several de mographic factors of the retained kindergarten students were examined in this study. Gender, ethnicity, economically disadvantaged status, age, special education status, and preschool attendance were examined for the students that were retained in kindergarten. De mographic data was looked at for frequency to see if there were common de mographic factors a mong the students who were retained in kindergarten during the 2018-19 school year.

When looking at the frequency for each factor, forty of the forty-t wo students retained in kinder garten identified as economically disadvant aged. That is 95.2% of the students who were retained in kinder garten. Forty-one of the forty-t wo students identified as white, which is 97.6% of the survey population. One student, or 2.4%

identified as black. Fourteen (33.3%) students identified as female and twenty-eight (66.7%) as male. Special education status was also examined in this study. When looking at frequency, twenty-two students or 52.4% of students were not identified as needing special education services. Three students (7.1%) were identified as having a "specific learning disability". Four students (9.5%) were identified as "intellectually disabled". Four students (9.5%) were identified as "other health impairment". Nine students (21.4%) were identified as needing "speech" services.

Birthdate was examined during this study. Of the students who were retained, three (7.1%) were born on or before November 30, 2012. Seven (16.7%) of the retained students were born in December, January, or February. Thirteen (31.0%) students were born in March, April, or May. There were nineteen (45.2%) students born in June, July, and August.

Preschool attendance was another characteristic that was analyzed for the students that were retained in kindergarten during the 2018-19 school year. Thirty-Five of the forty-t wo students had provided what type of school experience they had prior to entering kindergarten Sixteen (38.1%) of students attended a Headstart program One student (2.4%) attended a Pre K Counts program Three students (7.1%) attended another type of preschool program prior to entering kindergarten The number of kindergarten students who were retained during the 2018-19 school year and did not receive any for mal schooling prior to kindergarten was fifteen (35.7%).

Sevent een of the forty-t wo students took the kindergarten entrance examprior to entering kindergarten. The minimum score was 17% and the maximum score was 63% The mean value scored by the 17 students who took the test was 37.4%

English Language Arts (ELA) report card grades, (Table 2) were examined for each of the four nine weeks and the final grades were also examined Thirty-eight of the forty-t wo students had report card grades in ELA during the first nine weeks. Forty had ELA report cards grads for the second nine weeks. Forty-one of the forty-two students had third fourth and final nine weeks nine-week report card grades in ELA for the 2018-19 school year. During the first nine weeks, students who were retained averaged 61.3 % for the nine weeks. The standard deviation for the first nine weeks was 15.29048. The mean for the second nine weeks was 57.5% with a standard deviation of 17.97570. The mean for the third nine weeks was 49.4% with a standard deviation of 16.37994. During the fourth nine weeks' students retained in kindergarten during the 2018-19 school year averaged 53.1% in ELA on their report card with a standard deviation of 17.59147. The final mean on the report card in ELA for the retained students was 55.0% The standard deviation for the final ELA report card grade was 14.81882 a mong the students who were retained in kindergarten during the 2018-19 school year.

# Table 2

ELA I	Descri	ptive	St at is	ti cs
-------	--------	-------	----------	-------

	<u>N</u> De vi ati	<u>M ni mum</u> on	Maxi mum	Mean	St d
ELA 1st 9 weeks grade	38	26.00	92.00	61. 3421	15. 29048
ELA 2nd 9 weeks grade	40	8.00	90.00	57.4500	17.97570
ELA 3rd 9 weeks grade	41	3.00	92.00	49. 4390	16.37994
ELA 4th 9 weeks grade	41	. 00	96.00	53. 1220	17. 59147
ELA Final Grace	41	9.00	93.00	55.0488	14.81882
Valid N(list wise)	38				

Mat he matics report card grades (Table 3) were examined for each of the four nine weeks and the final grades were also examined. Forty-one of the forty-t wo students had report card grades in mathematics during each of the nine week periods and forty-one of the forty-t wo had a final grade in mathematics for the final report card. During the first nine weeks, students who were retained averaged 61.1% for the nine weeks. There was a standard deviation of 24.32611. The mean for the second nine weeks was a 59.0% There was a standard deviation for the second nine weeks of 21.93394. The mean for the third nine weeks was 50.1% and the standard deviation was 24.74189. During the fourth nine-weeks students retained in kinder garten during the 2018-19 school year averaged 59.2% in mathematics on their report card with a standard deviation of 21.99376. The final mean on the report card in mathematics for the retained students was 58.6% The standard deviation for the final mathematics for the retained students was 58.6% The

Mathematics Descriptive Statistics

# Table 3

Ν	Mini mum	Maxi mum

Math 1st 9 weeks grade	41	. 00	97.00	61. 1220	24. 32611
Math 2nd 9 weeks grade	41	. 00	94.00	59. 0488	21. 93394
Math 3rd 9 weeks grade	41	. 00	95.00	50. 1951	24. 74189
Math 4th 9 weeks grade	41	16.00	100.00	59. 2195	21.99376
Math Final Grade	41	10.00	93.00	58. 6098	19. 69629
Valid N(list wise)	41				

Dyna mic indicators of basic early literacy skills (DI BELS) testing scores (Table 4) were examined during this study. Twenty-six students had scores for the beginning of the year (BOY) and end of the year (EOY). Twenty-seven students had scores for the middle of the year (MOY). The mean beginning of the year score was 4.1, middle of the year 59.2, and end of the year 69.5.

# Table 4

# Descriptive statistics DI BELS data

	<u>N</u>	M ni mum	Maxi mum	Mean	Std. Deviation
BOY DI BELS Score	26	.00	33.00	4. 1154	7. 54362
MOY DI BELS Score	27	. 00	144.00	59. 2222	40. 29443
EOY DI BELS Scores	26	. 00	126.00	69.4615	35. 83878
Valid N(list wise)	25				

Std. Deviation

Mean

Another factor examined in this study was behavior. Behavior records were examined on forty-t wo students. Table 5 will show the number of referrals for the students who were retained in kindergarten during the 2018-19 school year. Twenty-six students were not referred to the office for behavior. One student was referred 18 times.

#### Table 5

Frequency of referrals for students retained in kindergarten							
Number of referrals	0	1-4	5-8	9-12	13-18		
# of student referred	26	9	4	2	1		

There were a total of eight y-five a mong the students retained in kindergarten. Thirtyseven of the referrals were for bus behavior, twenty-two were categorized as inappropriate behavior, eighteen were for physical aggression, two were inappropriate language, one was insubordination and five were categorized as other.

Triangulation of data was done in this study. The reasons teachers identified as factors for retaining students were examined. Demographic information on students retained in kindergarten for the 2018-19 school year was also gathered and examined. Acade mic data on students was investigated. Report card grades and bench marking data from D BELS testing were all reviewed. Behavioral referral data was also reviewed for the students that were retained in kindergarten during the 2018-19 school year. Schooling prior to kindergarten was identified. Literature reviewinformation was examined and considered when looking at the results of the survey and the demographic information for the students that had been retained. Prior research results and the current

study data were considered to see if the study had common identifiers for retention. The study results and the teacher surveys were also examined to see if the reasons teachers identified as factors in students' retention were consistent with the students who were retained in kinder garten during the 2018-19 school year.

# Discussi on

1. What are the criteria used by the teacher to determine a student who should be retained in kindergarten?

According to the survey data collected from the teachers in the district who participated in the study, reading achievement was a criterion that they unani mously agreed was "highly significant" as a criterion when considering a student for kinder garten retention Maturity was another criteria that teachers who participated in the study felt strongly about. 88.9% of the teachers chose "highly significant" when looking at maturity as a criterion for kinder garten retention 11.1% stated it was "some what significant". Mathematics achievement was also looked at by many of the teachers, but the responses were not as strong a criterion as reading achievement. 55.6% chose "highly significant", while 54.4% chose "some what significant".

Teachers also responded relatively strongly to the survey data for parent involvement and class size and being a criterion that contributes to a student being considered for kindergarten retention 66.7% of teachers stated class size was "highly significant" and 33.3% of teachers responded with "some what significant" when looking at class size as a factor in kindergarten retention. Teachers responded with "highly

significant" 77.8% of the time when asked about parent involvement being a factor in kinder garten retention 22.2% responded with "some what significant".

# 2. Looking at students who have been retained in kindergarten in this setting, what factors predict that they were at-risk for retention?

According to the kindergarten teachers who participated in the study, 100% of the mfelt reading achievement as a criteria was" highly significant" when considering whether a student should be retained in kindergarten. The mean final grade in ELA, which includes reading and all language arts material, for students who were retained in kindergarten during the 2018-19 school year was 55.0488. According to Dwyer and Rul e (1997), a major reason students are held in kindergarten is due to difficulty in reading Poor early reading skills are a significant predictor of retention, and children who perfor mpoorly on the earliest assessments available are expected to be retained more frequently (Cannon & Lipscomb, n d).

When considering mathematics achievement, 55.6% of kindergarten teachers stated that math achievement was a "highly significant" factor in determining kindergarten retention, while 44.4% felt it was "some what significant". The mean final grade in mathematics for students retained in kindergarten during the 2018-19 school years was 58.6098% with a standard deviation of 19.69629. At hough mathematics achievement is a consideration, reading is a major reason students are retained in kindergarten (Dwyer & Rule, 1997).

88.9% of kinder garten teachers who participated in the study felt maturity was "highly significant" as a factor considered for kinder garten retention. According to the

literature, a student's age at kinder garten has a measurable effect on literacy and language arts achievement early in their schooling, but these differences disappear by the time they reach the eight h grade (Perry, 2010). Of the 42 students retained, thirteen were born in March, April or May, and nineteen were born in June, July, or August. Therefore, a total for thirty-t wo of the forty-t wo students retained in kinder garten were born March or later.

3. How can the information from this research be used to reduce retentions and benefit student success in kindergarten?

According to the literature, screening early can help determine which students may be at-risk for kindergarten retention. Taking into consideration the criteria teachers consider when determining if a student is a candidate for kindergarten retention, students can be identified based on de mographic data. They also can be identified based on achievement throughout the year.

In this study 95.2% of the students identified as economically disadvantaged Since the elementary buildings range from 57% to 78% identifying as economically disadvantaged, the percentage of 95.2% has statistical significance as a characteristic for students who will be considered for retention in kinder garten. Thirty-two of the fortytwo students also have a birthdate that occurs on or after March 1, 2013. This also is statistically significant since it 76.2% of the students who were retained in kinder garten

Understanding the criteria teachers use to identify the students in kinder garten can also give direction on student and teacher supports that need to be put into place to support those areas. 100% of the teachers stated that reading achievement was "highly significant" when determining if a student is a candidate for retention. Teachers also

noted that maturity was a factor in their decision-making process for deciding if a student was a candidate for retention. Continuously identifying students who are struggling acade mically in the area of reading and also those that the teachers identify as immature for kindergarten will provide opportunity to target support to those students to improve in their areas of need

# 4. How can the information from this research be used to support instruction to minimize retention?

Kinder gart en teachers focused highly on reading achievement as a criterion to determine if a child should be retained in kinder garten. Teachers stated that maturity was a significant factor in determining if a child was a candidate for kinder garten retention. Teachers used mathematics achievement as a criterion for kinder gart en retention, although it was not determined to be as significant of a criterion as reading achievement.

The literature discusses how reading achievement is a reason students are retained in kinder garten. This was supported by the teacher survey responses that 100% of the teachers who participated in this study felt reading achievement was a "highly significant" criteria in determining if a student was a candidate for kinder garten retention Perry (2010) stated that the age of a student in kinder garten has a measurable effect on literacy and language arts achievement and that these differences disappear by the time the students reach eight h grade. Teachers felt maturity was a significant criterion for kinder garten retention. This was supported by the ages of the students that were retained in kinder garten during the 2018-19 school year. Screening methods to identify at-risk students early, helps student success in kinder garten (Mendez et al., 2015). In the study

done by Wnsler et al. (2014), childlanguage and social skills are key targets in identifying those with the most likelihood of retention since parents and teachers consider these when final retention decisions are made. Therefore, screening students early in language and social skills, can help identify students who are weak in those areas. Identifying students with early birthdays who may struggle is an additional criterion to be exa mined when looking at the students who have been screened. Supporting both students and teachers in areas identified as factors for the students being retained in kinder garten are necessary for reducing the number of retentions in the school district.

# Summary/Transition

Understanding what criteria teachers are using to identify students for kinder garten retention is important in understanding howto reduce the number of kinder garten retention in the school district. Identifying specific information on these students is also helpful. Applying prior research to support these students and teachers will be necessary to reduce the number of retentions in the school district.

Students who have poor achievement in reading are targets for retention based on the results in the study in the area of English Language Arts and also by the survey infor mation provided by the teachers who participated in the study. Student birthdate was noted as a factor in kindergarten retention since thirty-t wo of the forty-two students had a birthdate of March 1 or later in the school year. Teachers noted that maturity was a factor looked at by 88.9% of teachers as "highly significant" while the other 11.1% stated it was "so me what significant". This leads to the need to address the areas of reading achievement and maturity based on the findings from prior research

# Chapter 5 Conclusions and Recommendations

# Introduction

This study was designed to determine how to reduce kinder garten retention through teacher and student supports. It is important to understand the criteria teachers use to determine if a child is a candidate for kinder garten retention so supports can be put in place to reduce the number of kinder garten retentions. Identifying specific information, including demographic information, is helpful to determine which students are more likely to be a candidate for kinder garten retention. Applying prior research to support these students, teachers and families will help to reduce the number of kinder garten retentions and increase the success of these students throughout their time in the school district.

This chapter addresses the conclusions from the study including the effectiveness of the results and if the results support the conclusions. Applications of what was learned from the study will be discussed and improvements to the district to reduce the number of kinder garten retentions. Fiscal implications will be addressed based on the results of the study and how those implications may impact the district over time.

Fut ure planning will be discussed based on the results of this study. The planning will be based on how the results of this study can be used to reduce the number of kinder garten retentions in the district. Since this study occurred during the 2020 COVI D-19 Pande mic, additional considerations will be identified so adaptations for future

planning based on the results will be considered and the number of kinder garten retentions in the district will be reduced.

# Conclusion

The purpose of the study is to reduce the number of kinder garten retentions by determining supports that can be put into place for students and teachers. There are common factors a mong students who were retained in kinder garten in the district. In this study these common factors were identified and they will be used to target students who are at-risk for kinder garten retention. Screening these students in the identified demographic and achievement areas will reduce the number of kinder garten retentions in the district. Identified demographic areas were students who identified as economically disadvant aged and students who were born after March 1st prior to starting kinder garten Teachers stated that reading was "highly significant" when determining if a student should be considered for kinder garten retention. Student who were retained had reading achievement below expected levels.

As a result of the study and supported by prior research, one way to reduce the number of kindergarten retentions is through targeted professional development for kindergarten teachers. Kindergarten teachers need to be made a ware of the factors that the students have in common who are retained in the district. Kindergarten teachers need to be presented with information from prior research on how these factors affect the learning of the students in their classrooms. De mographics factors need to be understood including how kindergarten students are affected by identifying as economically disadvantaged. The effects of student age at the time they enter kindergarten will be an area where teachers receive professional development so the teachers can understand how

age affects patterns in reading development (Perry, 2010). Teachers will be provided training in supporting early reading skills and in understanding reading development of students. Teachers will also need to understand prior research on the short-termand long-termeffects of retention

Kinder garten teachers surveyed stated that reading was a "highly significant" factor when determining if a student was a candidate for retention. Reading grades in kinder garten are composed of all components of English Language Arts (ELA). The final ELA grades for students who were retained in kinder garten support that reading achievement was a factor as stated by the kinder garten teachers. The mean final grade in ELA was 55.0488. Mean, also known as average, is a measure of central tendency deter mined by adding all scores together and dividing by the total number of scores available. Students are considered having a passing grade when the mean is a 60. Therefore, students who were retained are scoring on average al most five percentage points below what the district has determined as a passing grade. Beginning of the year Dynamic Indicators of Basic Early Literacy Skills (D BELS) scores for the retained students had a mean of 4.1154. For the end of the year II BELS scores for the 2018-19 school year, the mean was 69.4615. In prior research, Dwyer and Rule (1997) stated a maj or reason students are held in kinder garten is due to difficulty in reading. Poor early reading skills are a significant predictor of retention, and children who perfor mpoorly on the earliest assessments available are expected to be retained more frequently (Cannon & Lipsconb, nd). Therefore, identifying students who are testing poorly at the beginning of the year in **D** BELS and putting specific supports in place for those who have low ELA grades, will decrease the number of kinder garten retentions in the district.

Targeting students early and based on specific skill deficits will be necessary to support student success and to reduce the number of kindergarten retentions in the district.

Consideration of student prerequisite skills needs to be examined along with the skills that they enter kinder garten with to determine if there has been significant growth with the student throughout the school year. The mean DI BELS score for retained students was 4.1154 at the beginning of the year. The mean **D** BELS score at the end of the year was 69.4615. This shows that there was growth in the reading skills of some or all of the students who were retained. This study determined that baseline information on student skill levels when entering kinder garten will provide areas to target for remediation Students who are monitored while receiving the targeted instruction and show growth, are students who will have the ability to achieve over time. Students who start with reading skill deficits unlike their peers will need targeted instruction for multiple years and should continue to grow It may require multiple years for these students to build the skills they need to succeed at grade level, but with targeted skill building they will not need to be retained in kindergarten. Students who are not growing even with target ed reading instruction will need additional assistance, intervention and/or diagnosis as to understand their difficulty in growing their skills in reading. This may include special education supports, behavior modifications and physician assistance. Therefore, students who show growth may need multiple years to reach grade level and retaining these students at the kinder garten level will not be beneficial to these students. Based on prior research, the effects of retention over time will lead to negative outcomes for the retained students.

This study also considered de mographics that were common a nong the students who were considered for kindergarten retention. Forty of the forty-t wo students who were retained in kindergarten identified as economically disadvantaged. That is ninetyfive percent of students who were retained in kindergarten that identified as economically disadvantaged. This is a significant percentage since in the elementary buildings the a mount of students identifying as economically disadvantaged ranges from fifty-seven percent to seventy-five percent. "Children who begin life in poverty already face structural disadvantages like lack of access to resources or structural racis mthat increase their risk exposure to violence, abuse, and neglect" (Hnojosa, M S, Hnojosa, R, Bright, M, & Nguyen, J., 2019, p. 405). Students who receive free and reduced-price lunches were more likely to be rated as not socially or behaviorally ready for school (Bettencourt, Gross, Hb, & Perrin, 2017). Therefore, it will be inperative to i mme diately deter mine students in the district who identify as economically disadvantaged that are entering kindergarten.

Student birthdate was noted as a factor in kindergarten retention since thirty-two of the forty-two students who were retained had a birthdate of March 1st or later in the school year. Students who had a birthday after March 1st and turned five between March 1st and the start of kindergarten were a common factor a mong the students who were retained in kindergarten during the 2018-19 school year. It was noted by teachers that maturity was a factor by 88.9% of teachers stating it as "highly significant", while the other 11.1% stated it was "some what significant". Astudent's age at kindergarten has a measurable effect on literacy and language arts achievement early in their schooling but these differences disappear by the time they reach the eighth grade (Perry, 2010).

Kinder garten students need to be able to listen, ask questions to get information, and also use language to meet their needs (Alan, 2008). The research identifies that younger kinder garten students are more likely to be retained (Peel, 1997). The reading skills of these students and the grades in ELA therefore may be impacted by student maturity since thirty-two of the forty-two students did not turn five until after March 1st prior to starting kinder garten. Therefore, students may not have had skills that would help the m be successful in reading. According to Hong and Yu (2007), allowing children to mature through retention did not improve reading and mathematics scores over the element ary years and these children have the ability to learn first grade material if promoted rather than retained. Thus, the kinder garten students who are considered for retention will likely improve in the skills they need to be successful learners and have the ability to grow in their reading skills as they move through subsequent grade levels.

Screening students as they enter kindergarten is important to know the prerequisite skills they have as they enter school. Bench marking these students throughout the year is important in monitoring their growth and adjusting instruction as they attain skills and can work towards new skills. It is necessary to do additional screening in multiple areas for students who are not growing in their reading skills during the school year. Determining why they are not achieving is essential to understand how we can help the kindergarten student be successful in kindergarten the first time. Initial screenings need to include acade mic information, along with behavioral data and information from parents regarding medical concerns, social/e motional concerns, and trauma that has occurred prior to entering kindergarten. As prior literature has addressed, acade mic success can be affected by non-cognitive factors. The school staff needs to be

a ware of what other concerns may inhibit the child's learning, monitor progress, and work with parents early to help the msupport their children so that they can be successful in kinder garten and throughout their additional years in school.

Applying prior research to support at-risk kinder garten students and kinder garten teachers will be necessary to reduce the number of retentions in the school district. It is i nportant that the district has a high functioning syste min place that supports high perfor mance teachers and teaching high quality aligned instructional systems, and high quality or ganization and management (About NSL, 2019). Components of a high functioning syste mincluding sustaining and educating teachers, aligned curriculum, and strong leadership need to work har moniously to support student learning. Screening students to identify risk factors is necessary to make an informed decision on supports that will be put into place for these students. These supports need to be based in best practice. Making sure systems are functioning together helps increase student achievement and creates high performance schools (About NSL, 2019). Identifying student needs as they enter kinder garten and having options in place to address acade mic, social-emptional, and behavioral concerns is necessary to support acade mic success and reduce the number of kinder garten retentions in the district.

This study supports addressing reading skill deficits will reduce the number of kinder garten retentions in the district. Demographic data needs to be looked at due to most of the students who were retained identified as economically disadvantaged and turned five March 1st or later prior to the start of kinder garten. Screening students effectively will target student needs and reduce the number for kinder garten retentions in the school district. The study is supported in these areas through prior research since

reading is often a factor in kindergarten retention. A major reason students are retained in kinder garten is reading (Dwyer and Rule, 1997). Students who identify as economically disadvantaged are retained more frequently in this study. Students from high income families are more likely to be ready for kinder garten according to the prior research (Justice et al., 2017). Kinder garten teachers often state maturity as a factor in their decision to retain students and this was also a factor in this study. Prior research states that a student's age at kinder garten has a measurable effect on literacy and language arts achieve ment early in their schooling, but those disappear by the time they reach the eight h grade. This study supports screenings to be used to identify students who are at risk Mendez et al. (2015), states screening methods to identify at-risk students early, helps student success in kindergarten. Therefore, the findings related to why students are being retained in kindergarten as they relate to this study align with the prior research as stated in the literature review Using screenings to identify at-risk students will result in the reduction of the number of kinder garten retentions in the district if supports are put into place for these students.

This study provided information on the criteria that teachers in the school district use to determine if a student will be retained in kinder garten. Teachers noted criteria used, specifically reading achievement and maturity, in determining if a student should be considered for retention in kinder garten. The study pinpointed de mographics that were common a mong students who were retained in kinder garten. Students were often identified as economically disadvant aged. Students also had birthdays where they turned five prior to kinder garten on March 1st or later. Prior literature stated that screening students early and providing supports in deficit areas will help support students to be

successful in kinder garten. Therefore, the teacher criteria used to deter mine kinder garten students who are considered for kinder garten retention, along with common de mographics, can help focus the screening that will be most beneficial for the district to use to identify students in need of additional supports and to reduce the number of retentions that the district has at the kinder garten level.

This study was completed during the 2019-20 school year. During the 2019-20 school year the COVI D 19 virus occurred and instruction was delivered online for the remainder of the school year after March 13, 2020. The study itself was unaffected since the information gathered was from the kinder garten students during the 2018-19 school year and these students had been retained at the end of the 2018-19 school year. All teacher surveys were completed prior to the impact of COVI D 19 during the 2019-20 school year, it most likely would be significantly different in the results due to the COVI D 19 pandemic.

In determining the criteria that teachers are using for considering a student for kinder garten retention, targeted supports will be put into place to support teachers, students and parents. Knowing teachers focus on reading as a significant factor in determining a student for kinder garten retention, it is important to ensure that all teachers are given professional development in the best practices they should be using in teaching reading to their kinder garten students. Teachers need to also have professional development in ways to support struggling readers at the kinder garten level and those that come in with fewer prerequisite skills. Teachers need to have professional development and learn best practices so they can differentiate for the diverse learners that enter kinder garten in the school district. Teachers need professional development in

supporting students who are struggling readers across the curriculum Applying best practices across the curriculum to support student reading and differentiating for student skill deficits in all subjects will provide opportunity for students to develop their reading skills at a quicker pace and reach grade level expectations more rapidly.

Kinder garten students will be screened when registering to deter mine skill levels in reading. This screening will determine who is behind at the start of kinder garten and what prerequisite skills they do not have as they enter the kinder garten classroom. The screening needs to give specific information on various skills the students have prior to starting kinder garten. The results will be thoroughly looked and a plan put into place to support the deficit areas these students have as they enter kinder garten These supports will address the students' deficits directly, and also provide best practices to teachers so they can teach the concepts with fidelity. Parents need to thoroughly understand the results and what skills their children need to develop to be successful at the kinder garten level. Students will be bench marked throughout the year so adjust ments can be made to their instruction Students who need intense support will be identified Title I teachers, or other teachers identified to provide support, will monitor these students continuously and will adjust instruction continuously until students are able to benchmark with grade level appropriate skills. Classroomteachers will differentiate in all content to support growth in reading for the students who are identified as struggling in reading. Honing student reading skills across the curriculum will give students more skills to reach grade level expectations more quickly. Teachers need professional development to understand skills that are cross curricular that will provide an opportunity for the students to i mprove.

De mographics of incoming students will be considered in addition to the screening tool. Students who score lower on the screening tool and have de mographic factors that are common a mong retained students, will be immediately monitored more closely since multiple factors put the mat risk for kindergarten retention. Title I teachers, or teachers identified to provide support, will target these students. These teachers providing support will do a diagnostic to understand skills that need to be developed. Teachers providing support will give this information to the classroom teachers. Teachers will contact the parents of the student and provide support to the parents to guide the min helping their children with the skills they need to be successful in kindergarten. Teachers providing support and kindergarten teachers will work with the parents on a regularly scheduled basis to plan for continued targeted support for the student to be successful in kindergarten.

Due to the COM D 19 pande nic, alterations to the plan may be necessary. Kinder garten registration for this year was completed prior to the closures of schools. Most students entering kinder garten registered at that time. Initial screenings were done using the available screening tool for most of the students who will be entering kinder garten. There are students who signed a waiver to start kinder garten early and students who registered for kinder garten after the initial kinder garten registration date. Development of a virtual screening and one that can be done using social distancing will need to be put in place due to the occurrence of COVI D 19. How the screening will be administered, will depend on the stipulations provided by the Pennsyl vania. Depart ment of Education (PDE) and the Center for Disease Control (CDC) on how learning will look as we proceed into the 2020-21 school year. When planning for the future based on the

results of this study and the possible ramifications of COVI D 19, the screening will be significant to have completed prior to the beginning of school especially if we return to school using a virtual learning or hybrid model.

Also, when considering planning for a tool to bench mark students with the potential for online learning due to the pande mic, the district will need to be develop a way to monitor progress of targeted students throughout the school year. The tool will need to be administered based on health and safety guidelines required by the PDE

During the 2018-19 school year, forty-t wo students were retained in kindergarten On average in the district a regular education student costs approximately \$10,844.64 to educate each year. Aspecial education student in the district costs approximately \$23, 801. 18 to educate. Twenty of the forty-t wo students retained in kindergarten during the 2018-19 school year had been designated special education Twenty-two regular education students being retained costs the district approximately \$238,582.08 for an extra year of education Twenty special education students cost the district approxi mately \$476,023.60. This is a total cost of approxi mately \$714,605.68 to have these forty-t wo students retained in kinder garten and educated for an additional year. A large number of retentions occurring each year has a significant impact on the district financially over time. Abetter use of the money would be to put more screening in place, additional supports for students and families, and professional development for teachers. Professional development for this study will need to focus on the effects of retention, economically disadvantaged students, supporting struggling readers, and the development of children by age over time.

96

Reducing retentions by fifty percent would save the district approximately \$357, 302. 84. Over the course of ten years that would be \$3, 573, 028. 40. This amount is based on half the total amount stated above of \$714, 605. 68 for the 2018-19 student de mographics of those retained and the costs at this time on average to retain a regular education student or a special education student. Additional costs on average will increase each year based on the increase of the general cost of services. If the district invests in reducing the number of kindergarten retentions based on this study, the long-termsavings i mplications would be significant.

# Recommendations

Based on this study and prior research, the following recommendations will reduce the number of kindergarten retentions in the school district. First, students who identify as economically disadvant aged need to be identified upon registration. Students with birthdates March 1<sup>st</sup> or later also need to be identified upon registration. These groups of students need to be monitored closely.

Screenings in early reading skills need to be given at the time of registration. This needs to include language and literacy screening. Also screening for approaches to learning through play. Students need to be screened not only to understand where they have skill deficits, but also ways in which they have already developed to approach learning newthings. These screenings need to not only be given, but the results need to be examined with fidelity and a plan for each student for mally written.

Bench marking in DI BELS needs to be done regularly throughout the school year. Students who are not making progress need to be supported to improve in their reading

skill deficits. A diagnostic test can be given to students who are not scoring at grade level on the bench mark to help identify the skills that need work.

Professional development need to occur for teachers to help support student success in kindergarten. Teachers need to be trained in interpreting benchmarking data and understanding student acade mic growth. Teachers need to learn multiple ways of supporting students in reading. The methods need to be based on the information on what children are being retained and what deficits or skills students have when they are entering kindergarten. Teachers need to be trained on understanding the effects of poverty on student learning. Teachers need to be trained on the effects of poverty on the ability of the parents to support the children in the home. Professional development on the effects of retention also needs to occur.

#### What Could Have Been Done Differently in the Study

Reading skills deficits that were common with the students retained in kinder garten could have been looked at more closely. The length of time the teachers have been teaching and the length of time they have been teaching at the kinder garten level is also something that could have been researched. Previous topics for professional development for the kinder garten teachers and whether that professional development i mpacts retention based on prior literature and i mplemented with fidelity could have been examined. Also a parent survey on parent perspective as to why they agreed to retention for their child in kinder garten could have been conducted

#### Fut ure Directions for Research

A screening tool will be put into place that specifically focuses on criteria the kinder gart en teachers use to deter mine if a student should be retained in kinder gart en

98

Specifically, reading skills and maturity were determined to be significant factors the teachers in the district used to determine if a student would be retained in kindergarten A thorough investigation needs to be done to determine what prerequisite skills incoming students have in reading and how the students are currently supported when they do not have the prerequisite skills. A determination will be made on how to support these students consistently. Professional development on teaching these skills with fidelity will also occur. Benchmarking and frequent monitoring of student progress will be done and adjust ments made as students attain the skills.

Student de mographics will be looked at upon registration to see factors that will put the mat a greater risk for kindergarten retention. Students who will turn five March 1st or later prior to the start of kindergarten will have an increased likelihood of being retained in kindergarten according to the results of the study. Students who identify as economically disadvantaged will also have an increased likelihood of being retained in kindergarten. Providing these students additional supports in the classroom will be necessary to ensure they are successful in kindergarten. Working with the parents of these students will be done to provide the parents the skills to support their child so that they can be successful in kindergarten. Gving teachers professional development on child development and on best practices for instruction for young students, will help teachers to better support the learning styles of their students and will reduce the number of kindergarten retentions in the district.

The impact of COVI D 19 has shown that it is imperative to provide parents with the skills they need to support their children to be successful. As students enter the kinder garten setting, basic technology skills, such as navigating a Learning Management

System and using computer technology, will be necessary. It is necessary to build strong lines of communication bet ween home and school. Parents need to be educated on techniques to support students with their home work. In case of additional need to provide education online, parents will need provided avenues to get support so their child can learn the material as they would in a brick and mortar classroom

There are several topics that need closer examination and may generate a new round of research questions. The grades for these students were based in ELA Teachers felt reading achievement was a "highly significant" criteria used to deter mine if a student should be retained in the kinder garten Since the ELA grade encompasses a broader category of information, are there common skills that these students are struggling with that can be addressed to help support their success in the kinder garten setting and give the mthe skills to be promoted to grade one? In addition, maturity was a criterion that teachers used to decide if a student was a candidate for kinder garten retention. Many of the students had their fifth birthday on or after March 1st before they started kinder garten A closer examination would be helpful to look at specific skills lacking in maturity as deter mined by the teachers and the general development of children at that age. What additional professional development can be used to develop skills for teachers to support these students? How does age at kinder garten correlate to the skills that are taught in reading? How does the age at kinder garten correlate to how the reading skills are taught by the teacher? A deeper look at reading skills and teacher instruction for students in kinder garten would be helpful to understand if the instruction is appropriate for the maturity level of the students.

#### Summary/ Concluding statement

The criteria teachers use to determine if a student is a candidate for retention is important to understand. This information can help focus support for students, families and staff in areas that teachers feel are important when determining if a student is a candidate for retention. In this study, reading achievement and maturity were areas teachers felt were "highly significant" when determining if a student was a candidate for kindergarten retention. According to Dwyer & Rule (1997), a major reason students are held in kinder garten is difficulty in reading. Astudent's age in kinder garten has a measurable effect on literacy and language arts achievement early in school, but these differences disappear by the time they reach eighth grade (Perry, 2010). Students in the district who were retained had lower scores in reading. A so thirty-two out of the fortyt wo had birthdays where they turned five March 1st or later, prior to entering kinder garten. Therefore, it is important to understand who the younger students are in the kinder garten. It is necessary to screen students for skills needed to be ready to read in kinder garten and to monitor these students throughout the school year and offer support for the skills with which they are struggling. Offering professional development for teachers to better support students in reading is necessary. Professional development also needs to be offered in better supporting younger students and how they learn so that they can be successful in kinder garten Teachers need to understand that maturity factors based on birthdate will fade as students age and continue through school. Therefore, the negative effects of retention are not necessary for students to endure if they can catch up as they continue through school. Teachers need to understand the long term effects of retention and also the development of students over time.

Screening students early for skill deficits in reading will help to focus support to these students in their areas of need. Understanding the demographics of students who have a greater risk for being a candidate for retention can also provide an opport unity to predict who may be a candidate for kinder garten retention and who may need to be monitored to ensure they are making progress through the kinder garten year. Screening students in acade mics as well as behavioral and demographic factors will help determine students who have deficits. It will give focus to students who are lacking skills in these areas. Screening students will provide a baseline for those that may need extra support to be successful during their kinder garten year and therefore reduce the number of kinder garten retention in the school district. This in turn will save money for the district. It will also reduce the likelihood of the negative effects that retention can cause for students both now and in the long term

Ki nder garten retention has negative effects for students. Understanding who is being retained in the district is necessary so supports can be put in place to help these students in their areas of concern In this district, students are held often due to reading achievement and maturity. Professional development needs to be focused for staff. This professional develop ment needs to provide staff the knowledge of the effects retention has on students. The professional development needs to support staff understanding of student development over the course of their time in school. The professional development also needs to give the teachers skills to instruct students at their level of maturity in ways that are age appropriate. Screening students early on for skill deficits is also inportant to target students who may need additional reading support to be successful in kindergarten. All of these techniques will help reduce the number of

retentions in kinder garten and provide better overall outcomes for the students in the

district.

### References

A Nation At Risk (1983). Retrieved from https://www2. ed gov/ pubs/ Nat At Risk/risk ht ml

Aa to Zz. (2019). How to register my child for kinder garten in PA Retrieved from https://www.aatozz.com/register-child-kinder garten-pa/

About NSL (2019, January 17). NSL Retrieved from http://www.nisl.org/our-vision/

- Accel eration Institute. (nd.) State policies in Pennsylvania. Retrieved from http://www.accelerationinstitute.org/Resources/Policy/By\_State/Show\_Policy.asp x?StateI D=45
- Acker man, D, & Barnett, S (2005). Prepared for kinder garten: What does "readiness" mean? *NEER* Retrieved from http://nieer.org/wpcontent/uploads/2017/02/report 5. pdf

Act 16 of 2019. (2019). PSBA Retrieved from https:// www.psba.org/

Allan, M (2008). *Qualitative study of kindergarten school readiness and personal and* social development (Doctoral dissertation, Virginia Polytechnic Institute and State University). Retrieved from

- https://vtechworks.libvt.edu/bitstream/handle/10919/28985/MAllanETDpdf?sequence=
- Ansari, A (2018). The persistence of preschool effects from early childhood through adol escence. *Journal of Educati onal Psychology*, *110*(7), 952–973. https://doi.org/10.1037/edu0000255
- Anastasiou, A I., Papachristou, E M, & Diakidoy, I.- A N (2017). Parents' and teachers' views on the psychosocial adjustment of students with and without a history of early grade retention. *Educational Psychology in Practice*, 33(3), 294– 307.

http://dx.doi.org/10.1080/02667363.2017.1306490

- Baader, M S (2004). Froebel and the rise of educational theory in the United States. *Studies in Philosophy and Education, 23*(5), 427–444. http://dx.doi.org/10.1007/s11217-004-4453-0
- Barnum, M (2019, January 24). Kinder garten is getting more academic and the kids are all right. *Chal kbeat*. Retrieved from https://www.chal kbeat.org/posts/us/2019/01/24/advanced-academic-contentkinder garten-study/
- Bergin, D A, Osburn, V. L, & Gryan, J. R (1996). Influence of child independence, gender, and birthdate on kindergarten teachers' recommendations for retention

Journal of Research in Childhood Education, 10, 152–159. https://doi.org/10.1080/02568549609594898

- Bettencourt, A F., Gross, D, Ho, G, & Perrin, N (2018). The costly consequences of not being socially and behaviorally ready to learn by kinder garten in Baltimore city. Journal of Urban Health: Bulletin of the New York Academy of Medicine, 95(1), 36–50. https://doi.org/10.1007/s11524-017-0214-6
- Cannon, J., & Lipsconb, S (n d). Early grade retention and student success. *Public Policy Institute of California Ppic.org* Retrieved from https://www.ppic.org/content/pubs/report/R\_311JCR pdf
- Cheng, J. (2013). The effect of kinder garten principals' leadership behaviors on teacher work performance. Social Behavior & Personality: An International Journal, 41(2), 251–262. https://doi.org/10.2224/sbp.2013.41.2251
- Claessens, A, & Engel, M (2013). Howi mportant is where you start? Early mathematics knowledge and later school success. *Teachers College Record* Retrieved from https://www.tcrecord.org/Content.asp?ContentId=16980
- Cos den, M, & Zi mmer, J. (1991). Age of entry, holding out and kinder garten retention: differences as a function of gender and ethnicity. Retrieved from https://eric.ed.gov/?id=ED338340

- Crabtree, Rohrbaugh, and Associates (2011). Updated district wide feasibility study: Connellsville Area School District. Connellsville, PA
- Denham, S. A., Bassett, H. H., Zinsser, K., & Wyatt, T. M (2014). How preschool ers' social-emotional learning predicts their early school success: Developing theory-promoting, competency-based assessments. *Infant & Child Development, 23*(4), 426–454. https://doi.org/10.1002/icd.1840
- Dong, N (2009). The effects of head start on children's kinder garten retention, reading and math achievement in fall kinder garten an application of propensity score method and sensitivity analysis. Retrieved from https://files.eric.ed.gov/fulltext/ED514946.pdf
- Dong, Y (2010). Kept back to get ahead? Kindergarten retention and acade mic performance. *European Economic Review*, 54(2), 219–236. doi:
  10.1016/j.euroecorev.2009.06.004
- Dwyer, J. E, & Rule, D L (1997). The effects of a kindergarten prevention programon special education referrals, classifications and retentions. Retrieved from https://files.eric.ed.gov/fulltext/ED406806.pdf

Fitzgerald, L (2015). Consequences of Hgh-Stake Testing (Master's thesis, St. John Fisher College). Retrieved

from https://fisherpub.sjfc.edu/education\_ETD\_masters/306/

- Galini, R, & Penderi, E (2010, September 30). A collaborative action research project in the kinder garten: Perspectives and challenges for teacher development through internal evaluation processes. *New Horizons, 58*(2), 18-33. Retrieved from https://eric.ed.gov/?id=EJ966648
- Gol dst ein, J., East wood, M, & Behuniak, P. (2014). Can teacher ratings of students' skills at kindergarten entry predict kindergarten retention? *Journal of Educational Research*, 107(3), 217–229. https://doi.org/10.1080/00220671.2013.788986
- Hattie, J. (1999). Influences on Student Learning (Inaugural lecture: Professor of education, University of Aukland, New Zeal and). Retrieved from https://cdn.auckland.ac.nz/assets/education/about/research/documents/influenceson-student-learning.pdf
- Hattie, J. (2009). *Usible learning: A synthesis of over 800 met a- analyses relating to achieve ment*. London, England: Routledge.

Harvey, H, & Ohle, K (2018). What's the purpose? Educators' perceptions and use of a state-mandated kindergarten entry assessment. *Education Policy Analysis Archives*, 26(141/142), 1–25. https://doi.org/10.14507/epaa.26.3877

- Hat cher, B, Nuner, J., & Paul sel, J. (2012). Kindergarten readiness and preschools: Teachers' and parents' beliefs within and across programs. *Early Childhood and Research Practice*, 14(2). Retrieved from http://ecrp.uiuc.edu/v14n2/hatcher.ht ml
- Helsel, F., & Krasnoff, B (2015). Six ways principals can support the transition to kinder garten Retrieved from https://educationnorthwest.org/northwestmatters/six-ways-principals-can-support-transition-kinder garten
- Hinojosa, M.S., Hinojosa, R., Briht, M., & Ngyuen, J. (2019). Adverse child experiences and grade retention in a national sample of US children *Sociological Inquiry*, 89(3), 401-426. https://doi.org/10.1111/soin.12272
- Hong, G, & Yu, B (2007). Early-grade retention and children's reading and math learning in elementary years. *Educational Evaluation and Policy Analysis*, 29(4), 239–261. https://doi.org/10.3102/0162373707309073
- Hong, G, & Raudenbush, S W (2005). Effects of kindergarten retention policy on children's cognitive growthin reading and mathematics. *Educational Evaluation*

and Policy Analysis, 27(3), 205–224.

### https://doi.org/10.3102/01623737027003205

- Hong, G, & Yu, B (2008). Effects of kinder garten retention on children's social-e motional development: An application of propensity score method to multivariate, multilevel data. *Development al Psychology, 44*(2), 407–421. https://doi.org/10.1037/0012-1649.44.2.407
- Hong, G, & Raudenbush, S W (2006). Evaluating kinder garten retention policy: A case study of causal inference for multilevel observational data. *Journal of the American Statistical Association*, 101(475), 901-910.
  https://doi.org/10.1198/016214506000000447
- Hughes, J. N, West, S G, K m H, & Bauer, S S. (2018). Effects of early grade retention on school completion: A prospective study. *Journal of Psychology*, *110*(7), 974-991. https://doi.org/ 10.1037/edu0000243
- Justice, L, Jiang, H, Khan, K, & Dynia, J. (2017). Are rural Appal achi an children from lowincome households ready for kindergarten? *Journal of Applied Development al Psychology, 50*, 1-14. https://doi.org/10.1016/j.appdev.2017.02.004

Kern, L, & Manz, P. (2004). Alook at current validity issues of school-wide behavior support. *Behavi or al Disorders*, 30(1), 47-59. https://doi.org/10.1177/0198742904030000102

Malone, L, West, J., Hanagan, K D, & Park, J. (2006). The early reading and mathematics achievement of children who repeated kindergarten or who began school a year late. NCES. Retrieved from https://files.eric.ed.gov/fulltext/ED491697.pdf

- Me ador, D (2019, July 3). Controversial Common Core, what you should know before taking sides. Retrieved from https://www.thoughtco.com/common-core-statestandards-3194603
- Mendez, L M R, Kim E S, Ferron, J., & Woods, B (2015). Attering school progression through delayed entry or kinder garten retention: Propensity score analysis of long-ter moutcomes. *The Journal of Educational Research*, 108(3), 186–203. https://doi.org/10.1080/00220671.2013.867474
- Mongeau, L (2016, June 5). Common Core standards bring dramatic changes to elementary school math Retrieved from https://edsource.org/2014/common-corestandards-bring-dramatic-changes-to-elementary-school-math-2/63665

- Morris, L R (1997, May 1). A study of children in kindergarten, first, second, and third grades at Ronceverte Hementary and the extent preschool has on retention and compensatory education (Master's thesis, Salem Teikyo University). Retrieved from https://files.eric.ed.gov/fulltext/ED412019.pdf
- Modeste, J. M (2016). Effects of early childhood education on kinder garten readiness scores. Retrieved from https://scholar.works.waldenu.edu/dissertations/2414/
- Moser, S E, West, S G, & Hughes, J. N (2012). Trajectories of math and reading achievement in low-achieving children in elementary school: Effects of early and later retention in grade. *Journal of Educational Psychology*, 104(3), 603–621. https://doi.org/10.1037/a0027571
- NAEYC. (n d). What does high quality kinder garten look like? Retrieved from https://www.naeyc.org/our-work/families/what-does-high-quality-program.forkinder garten-look-like
- Neuharth-Pritchett, S (2001). Recommendations for kinder garten retention: Assessing classroom practices and their relationship to non-promotion decisions. Retrieved from https://files.eric.ed.gov/fulltext/ED453909.pdf

NISL (2018). What high-performing districts look like. Retrieved from http://www.nisl.org/creating-high-performance-districts/what-a-highperforming-district-looks-like/

- Owens, J. S., Storer, J., Hol da way, A S., Serrano, V. J., Watabe, Y., H ma wan, L K, ... Andrews, N (2015). Screening for social, emotional, and behavioral problems at kindergarten entry. Utility and incremental validity of parent report. School Psychology Review 44(1), 21–40. doi: 10.17105/spr44-1.21-40
- Park, S., Steiner, P. M., & Kaplan, D (2018). Identification and sensitivity analysis for average causal mediation effects with time-varying treatments and mediators: Investigating the underlying mechanisms of kindergarten retention policy. *Psychometrika*, 83(2), 298–320. doi: 10.1007/s11336-018-9606-0
- Peel, B B (1997). Research vs. practice: Kindergarten retention and student readiness for first grade. *Reading Improvement, 34*, 146–153. Retrieved from https://www.projectinnovation.com/reading-improvement.html
- Penna, A A, & Tallerico, M (2005). Grade retention and school completion: Through students' eyes. Journal of A-Risk Issues, 11(1), 13-17. Retrieved from https://files.eric.ed.gov/fulltext/EJ853377.pdf

Pennsylvania Depart ment of Education (n d). Early Learning Retrieved from https://www.education.pa.gov/Early%20Learning/Pages/default.aspx

Pennsylvania Department of Health programs, services and health information (n d). Retrieved from https://www.health.pa.gov/

Penns yl vani a learni ng standards for earl y childhood: Kinder gart en (2016). *Pakeys. org* Retri eved from https://secureserver.cdn.net/198.71.233.197/69d.231. myft pupl oad com/ wpcont ent/upl oads/2018/03/ Kinder gart en Learni ng- Standards. pdf

Perry, J. E (2010). Age of kindergarten entrance and its relationship to early academic achievement (Doctoral dissertation, Philadelphia College of Osteopathic Me dicine). Retrieved from https://digitalcommons.pcomedu/cgi/viewcontent.cgi?article=1114&context=psy

chology\_dissertations

- Prochner, L (2011). "Their little wooden bricks": A history of the material culture of kindergarten in the United States. *Paedagogi ca Hstori ca 47*(3), 355-375. https://doi.org/10.1080/00309230.2010.513688
- PSEA (2016). The Every Student Succeeds Act: "H ghl y qualified teacher" requirements. Retrieved from https://www.psea.org/globalassets/formembers/psea-advisories/advisory-essa-highl yqualified teacherreqs.pdf

Range, B G, Holt, C R, Hjanowski, J., & Young, S (2012). The perceptions of pri mary grade teachers and elementary principals about the effectiveness of grade level retention *Professional Educator*, 36(1), 16. Retrieved from https://files.eric.ed gov/fulltext/EJ989520.pdf

- Ray, K, & Smith, M C (2010). The kinder garten child What teachers and administrators need to know to promote acade mic success in all children *Early Childhood Education Journal*, 38(1), 5–18. https://doi.org/10.1007/s10643-010-0383-3
- Ri chard, J. (2007). How effective principals encourage their teachers. *Principal*, 48-50. Retrieved from https://www.naesp.org/sites/default/files/resources/2/Principal/2007/J-Fp48.pdf
- Ri vera, P. (2019). Testi mony Compulsory school attendance age. Retrieved from https://www.education.pa.gov/about/Pages/Testimony6419.aspx
- Robertson, D L, & Reynolds, A J. (2010). Family profiles and educational attainment. *Children and Youth Services Review 32*(8), 1077–1085. https://doi.org/10.1016/j.childyouth 2009.10.021

- Roos, D (2019, August 13). How the cold war space race led to US students doing tons of home work. *Hst ory*. Retrieved from https://www.history.com/news/home workcold-war-sputnik
- Scott, T. M, Gagnon, J. C., & Nelson, C. M (2008). School-wide systems of positive behavior support: Aframe work for reducing school crime and violence. The Journal of Behavior Analysis of Offender and Victim Treatment and Prevention, 1(3), 259–272. doi: 10.1037/h0100448
- Shin, I.-S., & Chung, J. Y. (2009). Class size and student achievement in the United States: A meta-analysis. *KEDI Journal of Educational Policy*, 6(2), 3–19. Retrieved from http://eng.kedi.re.kr/
- Wall, C A, Rafferty, L A, Camizzi, M A, Max, C A, & Hargan, D M (2016).
  Action research of a color-coded, onset-rime decoding intervention: Examining the effects with first grade students identified as at risk. *Preventing School Failure: Aternative Education for Children and Yout h*, 60(1), 1-9.
  doi: 10.1080/1045988x.2014.954513
- Wernke, J. (2017). Kindergarten teachers' perceptions of student readiness for school (Doctoral dissertation, East Tennessee State University). Retrieved from https://dc.etsu.edu/cgi/viewcontent.cgi?article=4640 &context=etd

West, J. (1993). Readiness for kindergarten: Parent and teacher beliefs. (pp. 2–10).
Washington, DC National Center for Education Statistics.
https://nces.ed.gov/pubs93/web/93257.asp

- Winsler, A, Hutchison, L A, De Feyter, J. J., Manfra, L, Beiker, C, Hartman, S C, & Levitt, J. (2012). Child, family, and childcare predictors of delayed school entry and kindergarten retention a mong linguistically and ethnically diverse children *Devel op ment al Psychol ogy, 48*(5), 1299–1314. https://doi.org/10.1037/a0026985
- Wofford, H (2016). Retention in kinder garten: Acase study of teacher perceptions and practices. The *Journal for Undergraduate Ethnography*, 6(2), 56-68. https://doi.org/10.15273/jue.v6i2.7067

### Appendix A

Dear Participant:

My name is Traci Kuhns and I ama doctoral student at California University of PA. For my final project, I am det er nining how to reduce kindergarten retention through teacher and student supports. This project has California University of Pennsylvania Institutional Review Board approval from 8/13/19 through 8/12/20. Because you are a kindergarten teacher in the district, I a minviting you to participate in this research study by completing the attached survey. There is minimal to norisk in participating. The following questionnaire will require approximately 20 minutes to complete. There is no compensation for responding nor is there any known risk. In order to ensure that all information will remain confidential, please do not indude your name. Copies of the project will be provided to my California University of PAinstructor and to the Connellsville Area School District central administration. If you choose to participate in this project, dease answer all questions as honestly as possible and return the completed questionnaires promptly. Participation is strictly voluntary and you may refuse to participate at any time. Survey participation will be anony mous and results will be kept confidential. Results will be housed in a secure location at West Grawford Elementary. Thank you for taking the time to assist mein my educational endeavors. The data collected will provide useful information regarding kindergarten retention. If you would like a summary copy of this study please complete the Request for Information Form and return it to me in a separate envelope. Completion and return of the questionnaire willindicate your willingness to participate in this

study. If you require additional information or have questions, please contact me at the number

listed below

Sincerely,

Traci Kuhns

KUH8759 @caluedu

(Instructor's Name and email - Dr. Kevin Lordon, Iordoncalu edu)

### Appendix B

# August 14 2019 VOTI NG MEETI NG

hide det alls

View Mode

8/14/2019 [7:00 PM & 00 PM] @ Senior High School Auditorium 201 Falcon Drive Agenda:

• August 14, 2019

This Agenda belongs to members of the Board Members Group and is visible to the public

# **Research Survey Request**

Request approval for Ms. Traci Kuhns, principal, requests per mission to complete a research survey of school district staff and access the personally identifiable information of students in grades K-1 in the Connell sville Area School District as a requirement of the Doctoral Capstone Project for the Educational Administration and Leadership Program through California University of Pennsylvania per Policy 235. 1. The staff survey is voluntary, anony mous, and does not elicit personal information. The survey and data compilation will comply with Institutional Review Board (IRB) regulations and approval.

Appendix C

August 7, 2019 Mr. Bradley Superintendent 732 Rockridge Road, Connellsville, PA 15425

RE: Per missi on to Conduct Research Study

Dear Mr. Bradley,

I am writing to request permission to conduct a research study in the Connellsville Area School District. I am currently enrolled in the Education Administration and Leadership program at California University of PA, and a min the process of completing my Doctoral

Capstone Project. My study will be looking at the causes for the number of kindergarten retentions in the district. The Capstone Project will require IRB Approval and all IRB requirements will be followed throughout the process.

Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns that you may have.

If you agree, kind y sign below and return the signed for m

Sincerely,

Traci Kuhns

Approved by: <u>Soscph A. Roadley</u> <u>Augl G. Breakly</u> <u>S/8/19</u> Print Sign Date

Appendix D

August 7, 2019 Mrs. Kuhns Principal 215 Falls Ave., Connellsville PA 15425

RE: Per missi on to Conduct Research Study

Dear Mrs. Kuhns

I am writing to request per mission to conduct a research study in the Connellsville Area School District. I am currently enrolled in the Education Administration and Leadership program at California University of PA, and am in the process of completing my Doctoral

Capstone Project, My study will be looking at the causes for the number of . kindergarten retentions in the district. The Capstone Project will require IRB Approval and all IRB requirements will be followed throughout the process.

Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns that you may have.

If you agree, kind y sign below and return the signed for m

Sincerely,

Traci Kuhns

Approved by:		
Traci Kuhns	Z.K-	8-7-19
pri nt	Sign	Dat e
August 7, 2019		

Ms. Porter

Principal

125 Pleasant Valley Road, Connellsville, PA 15425

RE: Per mission to Conduct Research Study

Dear Ms. Porter

I am writing to request per mission to conduct a research study in the Connellsville Area Schod District. I am currently enrolled in the Education Administration and Leadership program at California University of PA, and a min the process of completing my Doctoral

Capstone Project. My study will be looking at the causes for the number of kindergarten retentions in the district. The Capstone Project will require IRB Approval and all IRB requirements will be followed throughout the process.

Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns that you may have.

If you agree, kind y sign below and return the signed for m

Sincerely, Traci Kuhns

Approved by: Kristen H. Porter Atoter 8-8-19

Pri nt

Sign

Dat e

August 7, 2019 Mrs. Romanishan Principal 14 School House Road, Nor malville PA 15469

RE: Per mission to Conduct Research Study

Dear Mis. Romanishan

I am writing to request per mission to conduct a research study in the Connell sville Area School District. I am currently enrolled in the Education Administration and Leadership program at California University of PA, and a min the process of completing my Doctoral

Capstone Project, My study will be looking at the causes for the number of kindergarten retentions in the district. The Capstone Project will require IRB Approval and all IRB requirements will be followed throughout the process.

Your approval to conduct this study will be greatly appreciated. I would be happy toans wer any questions or concerns that you may have.

If you agree, kind y sign below and return the signed for m

Sincerely, Tradi Kuhns

hanie Romanishan Supro-Approved by: Sign

8

Print

August 7, 2019 Mr. Snyder Principal 711 Ridge Blvd., Connellsville, PA 15425

RE: Per mission to Conduct Research Study

Dear Mr. Snyder

I am writing to request per mission to conduct a research study in the Connellsville Area School District. I am currently enrolled in the Education Administration and Leadership program at California University of PA, and a min the process of completing my Doctoral

Capstone Project. My study will be looking at the causes for the number of . kindergarten retentions in the district. The Capstone Project will require IRB Approval and all IRB requirements will be followed throughout the process.

Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns that you may have.

If you agree, kind y sign below and return the signed for m

Sincerel y, Traci Kuhns

Approv ed by:

Fry WSnydyr 500

Print

WAde-Sign

Date

# Appendix E

# Capstone Survey Questions

(This survey is for kindergarten teachers only)

To what extent do the following items determine student retention:

1. Par ent i nvd ve ment

Mark only one oval.

- H ghl y si gri fi cant
- Some what significant
- Slightly significant
- Not si gri fi cant
- 2. d ass size

Mark only one oval.

- Highly significant
- Some what significant
- Slightly
- si gri fi cant

Not significant

3. Reading achievement

Mark only one ovd.

- H ghl y si gri fi cant
- Some what significant
- Slightly significant
- Not si gri fi cant

### 4. Mathachievement

Mark only one oval.

- Highly significant
- So me what significant
- Slightly significant
- Not significant

# 5. Maturity

Mark only one oval.

- H ghl y si gri fi cant
- Some what significant
- Slightly significant
- Not significant

6. Behavior

Mark only one ovd.

- H ghl y si gri fi cant
- Some what significant
- Slightly significant
- Not si gri fi cant

### 7. Preschod attendance

Mark only one ovd.

- H ghl y si gri fi cant
- Some what significant
- Slightly significant
- Not significant

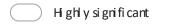
# 8. Fa mil y confi gurati on

Mark only one ovd.

- H ghl y si gri fi cant
- Some what significant
- Slightly significant
- Not significant

# 9. Social/Emotional Concerns

Mark only one ovd.



Some what significant

- Slightly significant
- Not si gri fi cant
- 10. Instructional Practices

Mark only one ovd.

- Highly significant
- Some what significant
- Slightly significant
- \_\_\_\_ Not significant

Please choose the response you feel is accurate for the statement given.

11. Retaining a student should be a teacher decision

Mark only one ovd.

- \_\_\_\_ Al ways
- So meti mes
- Occasi onally
- Never
- 12. Retaining a student should be a parent decision

Mark only one ovd.



# 13. Retaining a student should be a team decision

Mark only one ovd.

$\bigcirc$	Al ways
$\bigcirc$	Someti mes
$\bigcirc$	Occasi onally
$\bigcirc$	Never

14. What supports are necessary to reduce the possibility of a child being retained?

15. What supports for teachers/staff can be put into place to reduce the possibility of a child being retained?

16. Describe the communication that should occur with a parent of a student who is a candidate for retention. This content is neither created nor endorsed by Google.

Google For ms

Appendix F

Institutional Review Board California University of Pennsylvania Morgan Hall, 310 250 University Avenue California, PA 15419 instreviewboard @caluedu Melissa Sovak, Ph.D.

Dear Traci,

Please consider this email as official notification that your proposal titled "Determining how to reduce kinder gart en retention through teacher and student supports." (Proposal #18-081) has been approved by the California University of Pennsylvania Institutional Review Board as amended.

The effective date of approval is 8/13/19 and the expiration date is 8/12/20. These dates must appear on the consent for m

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following: (1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)

(2) Any events that affect the safety or well-being of subjects

(3) Any modifications of your study or other responses that are necessitated by any events reported in (2).

(4) To continue your research beyond the approval expiration date of 8/12/20 you must file additional information to be considered for continuing review Please contact <u>instreviewboard@caluedu</u>

Please notify the Board when data collection is complete.

Regards,

Melissa Sovak, PhD.

Chair, Institutional Review Board