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Permission to Play: A District's Initiative to Innovate Kindergarten and Promote Developmentally Appropriate Practices

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Permission to Play: A District's Initiative to Innovate Kindergarten and Promote Developmentally Appropriate Practices

by

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Abstract

Kindergarten's original purpose was to promote socialization skills for young children using play (Mashburn, 2007). However, recent research has shown an increased focus on teaching literacy and math skills, combined with pronounced increases in more advanced academic tasks and activities (Bassok et al., 2016; Miller & Almon, 2009). Given this shift in kindergarten, as well as a lack of professional development for teachers to assist them in promoting developmentally appropriate practices, the Kindergarten Innovation Cohort was created in the Portland School District to address these needs for both students and teachers. Using findings from interviews and field notes, the current study addresses the question: What does the implementation of the Kindergarten Innovation Cohort look like and how do teachers view those changes? Results identified five themes about the program: (1) how Kindergarten Innovation Cohort changed classroom practices; (2) the benefits of KIC, which included a sense of community and a sense of "letting go" of certain expectations; the positive impacts of KIC on both (3) teachers and (4) students; and the (5) barriers and challenges that come with implementing this type of program. Given these results, this study highlights two implications, the first being the creation of a theory of change to describe the Kindergarten Innovation Program, and the second being recommendations for best practices when implementing this program.

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Chapter 1: Introduction

Over the past two decades, children's experiences in kindergarten have dramatically changed. When kindergarten was initially created by Friedrich Froebel in Germany in the 1830s, its purpose was to introduce children to the social world and allow space for them to play, explore, and develop (Dombkowski, 2001; Russell, 2011). During the next century and a half, kindergarten as conceived by Froebel was widely expanded throughout the United States (e.g., Dombkowski, 2001; Mashburn, 2008). However, in the past 20 years, education policies such as the enactment of No Child Left Behind (*No Child Left Behind - ED.Gov,* 2019) and Common Core State Standards (*Common Core State Standards*, n.d.) have privileged children's development of early academic skills (i.e., math and literacy) over their health and their social, emotional, and regulatory skills. This is known in the field as the swinging pendulum – kindergarten continues to swing from one side (play) to the other (academics), and struggles to settle either somewhere in the middle, or in a new space that leaves the pendulum behind.

As the pendulum, and policies, swing toward academics, activities that children experience in their kindergarten classrooms have changed, and nowadays, kindergarteners spend much more time during their school day involved in teacher-led activities that focus on academic skill development, instead of child-initiated activities that provide children opportunities to play and explore. The enactment of these policies

has, not surprisingly, led to some notable changes in children's experiences within kindergarten classrooms. Since 2000, kindergarten students have experienced substantial decreases in play-based activities, music, art, and other exploration activities in kindergarten classrooms. There have been increases in teacher-led activities that focus on academic skill development with the idea that this will better prepare these children for the types of activities and outcomes in first grade and beyond (Bassok et al., 2016). However, in these contemporary kindergarten classrooms, the needs of the developing child have been seemingly pushed to the side. We know that children develop at different rates, have different experiences before kindergarten (some go to preschool while others do not), come from different backgrounds, and have been afforded different resources leading up to kindergarten. Yet, with kindergarten in its current state, there is an assumption that all children will be able to meet the academic standards that have been set despite these differences in prior experiences. In addition, kindergarten initially began by serving the whole child—addressing their social, physical, academic and health needs. But as standards and practices have changed and as academics have taken a leading role in the purpose of kindergarten, the "whole child" has been neglected.

An unintended consequence of changing kindergarten curricula, assessment, and instruction to align with that of first grade is that kindergarten classroom activities may no longer be developmentally appropriate for many young children. In addition to exposure to literacy and numeracy concepts, young children also need a classroom learning environment that gives them a chance to grow and be challenged in many areas of their life. In other words, this push for kindergarten to be like first and second grade

pulls standards down onto students before they are developmentally ready to engage in academic skill development and before they have even had a chance to enjoy learning and being in a school environment.

The growing chasm in the design and implementation of preschool and kindergarten has led to challenges with the transition to kindergarten, both for parents and students. This struggle to transition into a classroom that may not be attuned to their developmental needs and is likely unfamiliar has made it even more challenging for students to be successful in kindergarten. While there are calls for putting back opportunities for young children to play in kindergarten (e.g., Miller & Almon, 2009), it is not enough to say that kindergarten needs to swing the pendulum back toward a play-based approach that provides extensive agency and choice to the child. Rather, for kindergarten to develop the whole child, it must include a variety of activities and learning modalities, as well as differentiated instruction based on the diversity of needs in the classroom.

In sum, kindergarten was not created with the idea of it being heavily standardized, and it was not designed to be a preparatory phase for the academic demands of elementary school. Kindergarten was created to introduce children to the world in a setting that would provide them with the support, scaffolding, and developmentally appropriate challenges they need to become successful. By centering kindergarten around academics, standards, testing, and teacher-directed learning, kindergarten education is shifting away from serving the multi-faceted developmental needs of young children. If kindergarten is to continue to address the true developmental needs of children who

attend, there needs to be shifts to create a more balanced experience for students, one where academics are not the only focus of the school day. There needs to be better training for teachers to implement a variety of learning practices while keeping in mind the differing supports and skills each student has or needs. But, if we are to expect more from teachers, we also need to update the policies that are in place and provide more funding, support, and staffing in early childhood education.

The field is currently focused on the crisis in kindergarten, and the ways in which kindergarten has perhaps been steered wrong. This, combined with the focus on the binary of play and academics, has left individual communities and school systems lost as to what to do, but with a strong awareness of the overemphasis on academics. While there is nothing inherently wrong with academics being included in kindergarten spaces, the issue is that this focus on academics has taken away from the other aspects of kindergarten that support other areas of development that are important in these young students' lives. The purpose of this thesis is to document one school district's effort to solve this problem of the over-academicization of kindergarten through a program called the Kindergarten Innovation Cohort, which provides kindergarten teachers with resources to support more play-based activities and innovative strategies in their classrooms that address the needs of the whole child, while maintaining a level of academic and learning rigor.

Chapter 2: Literature Review and Current Study

This section presents background literature that informs the research question addressed in this thesis. More specifically, in the first section, I describe how and why kindergarten has been transformed since its original implementation involving active, play-based experiences focused on the needs of the whole child. In the second section, I present theory and research about the role of play and learning in kindergarten classrooms, including defining what is meant by play and learning, and presenting teacher and child perceptions about play.

The Transformation of Kindergarten

Kindergarten was originally created in Germany by Friedrich Frobel in the 1830s. Its original goal was to promote socialization skills for young children using play. Kindergarten became widespread in the U.S. in the 1870s, and in 1873 St. Louis became the first city to offer kindergarten in every public school. It didn't take long for public kindergarten programs to gain popularity nationwide. These programs were initially created to serve immigrant children and others that were experiencing the struggles of urban poverty, but it didn't take long for these programs to include all children (Mashburn, 2007).

From the 1920s through the 1980s, kindergarten faced a so-called identity crisis as it attempted to define itself. It attempted to create an identity that was both separate from elementary school as well as related to but separate from other forms of early childhood education. In the early years of kindergarten, these programs maintained a

nonacademic learning identity—that is, programs focused on social time, play, movement, etc. However, debates around the nonacademic state of kindergarten were ongoing, and by the 1960s kindergartens were moving toward an academic orientation; that is, a focus on subjects such as math and literacy. Schools that continued in the nonacademic orientation were labeled as "traditional." Kindergarten attempted to continue the work of Head Start programs, while being clearly incompatible with first grade standards and methods, creating a muddled role for kindergarten in early childhood spaces. By the 1990s, kindergarten was generally understood as the beginning of a child's academic life (Dombkowski, 2001).

In 2009, Miller and Almon (2009) wrote *Crisis in the Kindergarten*, which outlined the drastic changes that have occurred in kindergarten. This chapter cited nine studies and analyses, which lead Miller and Almon to conclude that kindergarten is in fact "in crisis" (p. 11). This "crisis" is rooted in the fact that kindergarten has become standards and academic focused, with less and less influence from the play-based, child-centered experiences of preschool. Based on the analyses covered in *Crisis in the Kindergarten*, the authors state:

> If we are to best serve children and foster the full professional development of early childhood educators, we must reject an ideological approach to teaching young children, consider all the evidence of decades of research and experience–not just the results of a few narrow tests of suspect validity–and being a thorough reassessment of our kindergarten policies and practices. (p. 13)

Other researchers noted the changes to kindergarten as well. Bassok et al. (2016) found that within a 12-year period, kindergarten had gone through drastic changes, including a shift toward more challenging academic content, a "concerning drop" in art, music, and other child-selected activities, and an increase in the use of standardized testing (p. 15). With the combination of expanded access to public preschool, increased investment in early childhood development, and changing home environments, children today are entering school with higher "readiness" than two decades ago (Bassok et al., 2016). More specifically, the Bassok et al. (2016) study investigated two cohorts from the Early Childhood Longitudinal Study, including a nationally representative sample of children who entered kindergarten in 1998 and in 2011. This study assessed changes in public school kindergarten teachers' perceptions across two time points. It is important to note that within the span of the study, full-day kindergarten increased from 56% to 80%. The results of the study showed that teachers' ratings of academic skills being important for school readiness had greatly increased. There were also small increases in teachers' ratings of the importance of self-regulatory and social skills. The results also showed substantial decreases in nonacademic subjects like art or music.

Overall, the findings suggest an increasing focus on teaching literacy and math skills in kindergarten, as well as pronounced increases in more advanced tasks and activities. For example, in the first cohort in 1998, 54% of kindergarten teachers reported that children in their class typically spent an hour or more per day on child-selected activities. By the second cohort in 2011, this figure dropped to 40%. At the same time, the percentage of teachers that reported that their class spent more than 3 hours a day on

whole-class activities more than doubled —increasing from 15% in 1998 to 32% in 2011. Also, schools with higher numbers of low income and non-White children reported a higher focus on academic and didactic instruction (Bassok et al., 2016) relative to programs serving children for higher income and non-minority racial backgrounds. In conclusion, the findings show important shifts in the pedagogy surrounding approaches to kindergarten instruction over the past 25 years.

The research by Bassok et al. (2016), combined with the chapter by Miller and Almon (2009), created a call for action to redefine and restructure kindergarten to focus on developmentally appropriate practices, and to restore child-initiated play and non-academic learning. While researchers may have identified the current problems in the field and the need for action to occur, it is important to recognize what may have caused these shifts in the first place. This includes changes in education policies and shifts in our institutional logic about the purpose of kindergarten. Each of these is explored next.

Shifts in Education Policies

Shifts in educational policy may help to explain the changes in approaches to kindergarten instruction. Kindergarten used to be centered around play, exploration, and social interactions. However, in recent years, with the introduction of No Child Left Behind (NCLB) and other legislation, kindergarten has seen a shift toward curricula, preparation for tests, and a strict focus on academic skills (Bassok et al., 2016). NCLB scaled up the federal role in holding schools accountable for student outcomes and required that states must test students in reading and math in grades 3-8 and once in high

school. States are also required to meet “adequate yearly progress”, with consequences for not meeting these requirements (Klein, 2015).

The effects of policies like NCLB are now being felt as early as preschool. Preschools and kindergartens are starting to focus their activities on developing academic skills so that students will be able to reach the standards set for them in elementary school. There is also the hope that these academic skills will help to reduce the achievement gap that exists for students from more economically disadvantaged backgrounds (Stipek, 2006).

Similarly, another policy shift that may explain the increasing academic focus of kindergarten is the introduction of the Common Core State Standards, which are being implemented in over 40 states. These standards are a set of benchmarks for each grade that focus exclusively on academic standards (i.e., literacy and math skills and knowledge). For kindergarten alone, there are more than 90 standards related to acquiring academic skills that must be met under the Common Core State Standards (Carlsson-Paige et al., 2015). Like NCLB, legislation like the Common Core State Standards “falsely implies that having children achieve these standards will overcome the impact of poverty on development and learning, and will create equal educational opportunity for all children” (Carlsson-Paige et al., 2015, p. 8). Students that are already excluded from access to resources and support will likely be further excluded and marginalized with the onset of these reforms. With prescribed tasks and performance standards, students with a lack of resources and support will be expected to perform at the same level as students

with more access, and there is the "false assumption that equal opportunities to learn exist" under standards-based reforms (Hatch, 2002, p. 461).

While the pressure of NCLB may "stimulate constructive practices" (Stipek, 2006, p. 456), it may also do more harm than good by pushing aside the non-academic dimensions of early childhood education and undermining students' enthusiasm to learn. The Common Core State Standards require grade-specific standards that must be met, however there is "no evidence that mastering these standards in kindergarten rather than first grade bring lasting gains" (Carlsson-Paige et al., 2015, p. 6). The impacts of these policy changes are best highlighted by Bassok et al. (2016), where they found that the percentage of teachers that indicated that they considered an individual child's achievement in relation to local, state, or professional standards as "very important or essential" rose from 57% in 1998 to 79% in 2011. On top of teachers looking to external standards to judge achievement, "formative assessment practices are increasingly articulated in educational policies as core aspects of kindergarten learning environments" (Pyle et al., 2020, p. 2257).

There is also evidence that social emotional skills like self-regulation predict children's academic performance in school over and above their academic skills (Stipek, 2006). So, while the legislation focuses on academic skills and standards, a lack of standards around non-academic skills may be keeping students from reaching their full academic potential over time. As Miller and Almon (2009) state:

> These well-intended but fundamentally flawed mandates rely on testing and on didactic and scripted approaches–especially for teaching children

> from low-income backgrounds–in spite of the fact that these practices are not well supported by research evidence. Indeed, many of the current approaches to kindergarten are based on unfounded assumptions and preconceptions about what is best for children and schools. (p. 13)

Creating standards for kindergarten may allow for a more equitable experience for students, however, with the current policies in place, kindergarten teachers and administrators have had to push aside other aspects of the kindergarten experience in order to meet the standards that have been set.

Shifts in Institutional Logic

While policy changes have played a large role in the changes in kindergarten, we must consider that academics and policy do not exist in a vacuum, and therefore there may be other variables that are influencing the changes in kindergarten standards.

Russell (2011) studied the evolution of public discourse surrounding kindergarten through the analysis of newspapers, policy documents, and professional association activities. As indicated by the results of the study, education is something that is publicly debated, and therefore is embedded in a larger cultural environment. The shifts in kindergarten expectations are shaped by much more than policy changes, including messages that shift over longer periods of time than they may appear at surface level. These shifts can be influenced by several components of the "organizational field", which includes "both structural and symbolic dimensions" (Lounsbury & Pollack, 2001, as cited

by Russell, 2011, p. 238), such as school districts, government agencies, professional associations, and are informed by belief systems or *logics* that guide the field.

Logics of instruction are related to the way we discuss kindergarten, which tends to exist on the binary of academic and developmental logics. The distinction between developmental logic and academic logic is not to say that classrooms are exclusively one or the other, but rather to show the shift in history from developmental to academic logic. *Developmental logic* views kindergarten as supporting the "individual child's social, emotional, and cognitive development, while the *academic logic* emphasizes academic skills and content" (Spodek, 1988; Stipek & Byler, 1997; Weber, 1984; as cited in Russell, 2011, p. 239). This shift toward academic logic pulls kindergarten further and further away from its connections to preschools and other early childhood spaces. It is important to note that by focusing on one logic or another, we are bringing back the swinging pendulum. The academic logic places more emphasis on academics, whereas the developmental logic places more emphasis on a child's several developing domains. By focusing on well-rounded experiences that include both academic and social, emotional, and cognitive development, kindergarten can once again be a place of development, discovery, and learning.

In its inception, kindergarten was created to be a part of the early childhood space, as a next step after preschool. However, as kindergarten becomes more academically oriented, this pulls it further from preschool, and aligns it more with elementary school, where academics are more of a primary focus. As kindergarten becomes more

disconnected from preschool, it is important to recognize how this tension impacts students in this key stage of development.

Preschool programs vary greatly in terms of their policies, expectations, curriculum, hours of operation, and other domains (Mashburn et al., 2018). There is a wide scope of variation in early childhood experiences. The early school transition period can be identified as a "sensory period" when children are rapidly developing and can be influenced by their environment, and this period can be important for later school success (Rimm-Kaufman & Pianta, 2000). Research shows that children's development is optimized when their developmental settings include high-quality interactions, consistent experiences across and within settings, and increasingly challenging interactions over time that are in line with their developing capacities (Mashburn et al., 2018).

It is important to note that the characteristics of children, the settings they are a part of, and that the systems that change them are dynamic. Because preschool and kindergarten settings are currently providing drastically different learning environments, it is making it challenging for students to transition to kindergarten (Rimm-Kaufman & Pianta, 2000). We are seeing inconsistent experiences from preschool to kindergarten, and the potential that classroom experiences are not attuned to students' current level of development.

Work is being done to align kindergarten, but it is being aligned to first grade rather than to kindergarten (Bassok, 2016). However, given the dynamic needs of children at this age (Mashburn et al., 2018) and the research surrounding play and learning, it may make more sense to align kindergarten with preschool experiences

instead to create consistency across settings and to better attune practices to the needs of developing children.

The following section will outline play and learning and demonstrate how implementing a play-oriented classroom does not eliminate academic practices, but it does bring kindergarten back toward a *developmental logic*, where the whole child is developing, rather than focusing solely on academic skill development. This dichotomizing of play and learning highlights the researcher-imposed world view, which is often not aligned to what teachers believe students need or what is happening in classrooms. This over-emphasis on "versus" or binary categories has created interruptions in implementing learning that is attuned to dynamic and developing students. This is even seen in educational practices, where early childhood education practices are often divided into two categories – the *what* and the *how* – the *what* being the curriculum or instruction being taught, and the *how* being the way in which things are taught. The following section will focus on the *how* of teaching.

Play and Learning in Kindergarten

This second section of the literature review addresses how academics can be infused in learning and kindergarten practices without remaining stuck in the academic logic. This occurs through developmentally appropriate practices and the play continuum. Play has been known to be important in early childhood since Parten (1932) made the connection between children's play and their social development.

Recent research also shows that four-and five-year-olds today are playing in a way that is more typical of younger children, which may be in part leading to lower levels of social and emotional skills. This decline in skills may be contributing to the decline in play as a central aspect of students' learning and development (Bodrova et al., 2023). Therefore, it is important to note that not only is play important, but the kind of play and the types of experiences and opportunities available for children to mature in their play is also important. This section outlines several types of play and learning, the false dichotomy between the two constructs, and ways in which the two can be infused together throughout the kindergarten experience.

Developmentally Appropriate Practices

When classrooms and programs are developmentally attuned, it creates programs that are more capable of helping students achieve their goals (Mashburn et al., 2018). Developmentally appropriate instruction often includes "hands-on, language-rich, discovery-focused, and purposeful play pedagogy" (Allee-Herndon et al., 2022, p. 119).

The National Association for the Education of Young Children (NAEYC) published systematic guidelines surrounding developmentally appropriate practices (DAP) as early as the 1980s. These guidelines were designed to emphasize the ties that kindergarten has to preschool programs, despite its administrative and financial ties to the later grade levels. DAP highlighted the "quality-versus-quantity" (Dombkowski, 2001, p. 542) concerns about different types of kindergartens. The DAP guidelines have been continuously updated since the 1980s, but the idea remains that if early childhood

education follows certain standards and practices, that the disparities in early childhood education programs may fall away (Dombkowski, 2001).

The *Developmentally Appropriate Practice (DAP) Position Statement*, 2020 defines developmentally appropriate practices as:

> methods that promote each child's optimal development and learning through a strengths-based, play-based approach to joyful, engaged learning. Educators implement developmentally appropriate practice by recognizing the multiple assets all young children bring to the early learning program as unique individuals and as members of families and communities. Building on each child's strengths—and taking care to not harm any aspect of each child's physical, cognitive, social, or emotional well-being—educators design and implement learning environments to help all children achieve their full potential across all domains of development and across all content areas. Developmentally appropriate practice recognizes and supports each individual as a valued member of the learning community. As a result, to be developmentally appropriate, practices must also be culturally, linguistically, and ability appropriate for each child. (p. 5)

DAP is a broad set of concepts, and so often researchers will focus on one aspect of DAP or create a simple definition that highlights the focus of what is being studied. For the purpose of the current study, the focus is on play as a developmentally appropriate practice, as well as the importance of learning environments and activities in kindergarten

classrooms. This means that play is the central practice that facilitates and encourages students' development and learning, that learning activities vary along the play continuum (free play to direct instruction), and that guided play is an important part of classroom practices. Schmidtke (2023) notes that:

> Developmentally appropriate practices like play are needed and demonstrate enormous potential for building children's concept knowledge and skills, language development, self-regulation, and executive function. (p. 50)

Developmentally appropriate practices include cross-curricular approaches and collaborative activities, as well as playful learning. In terms of academics, early childhood education is intended to lay the foundation for future learning and provide engaging and meaningful learning opportunities. Children need to be scaffolded, supported, and challenged just beyond their current mastery. They need to be provided with opportunities to practice and engage with their new skills as they develop (*Developmentally Appropriate Practice (DAP) Position Statement*, 2020; Stipek, 2006).

Another important component of DAP that will be highlighted is the concept of academic rigor. Academic rigor is often narrowly defined; however, academic rigor can also be defined as well-rounded education with frequent meaningful opportunities to engage in learning and investigation, and allowance for students to engage in opportunities as "self-directed scholars" (Riley-Ayers & Figueras-Daniel, 2018, p. 52). Like guided play, student interest should guide interactions and learning, allowing them to feel important to their classroom community. "Giving children the freedom to pursue

their interests and then building on their ideas can lead to academically rigorous learning" (Riley-Ayers & Figueras-Daniel, 2018, p. 56). The teacher's role can vary in these academic practices, where they can hold a leadership role, or a guiding role, while maintaining that certain learning goals are met (Riley-Ayers & Figueras-Daniel, 2018). It is important to note here the difference between academic rigor and the way in which academics are currently being approached in kindergarten. Academic rigor focuses on learning opportunities, student interest and engagement, and autonomy and exploration. The current academic focus in kindergarten is taught in a prescriptive way that focuses on standards, and is often taught in teacher-directed, didactic learning styles, which limits student engagement and exploration, and prevents the opportunity for students to be "self-directed scholars."

Components of Play and Learning

Child-centered versus Child-directed. The National Association for the Education of Young Children (*Developmentally Appropriate Practice (DAP) Position Statement*, 2020) calls for child-centered teaching, rather than child-directed activities. Pyle and Danniels (2017) distinguish between child-centeredness and child-directedness with the former focusing on the child's developmental need, interests, and abilities, and the latter focusing on the child having control or autonomy. Child-centered play and learning allow for the teaching of academic subjects, while being engaging and developmentally appropriate. This type of play is focused on expanding the interests of the child while matching the current abilities of the child in a more play-based manner. Child-directed play, on the other hand, focuses more on the child having choice in

activities and directing the course of play. Zosh et al. (2018, 2022) highlight the importance of having a spectrum of play rather than a singular, abstract definition. The key factor in different types of play is who is initiating and directing the play. Dichotomizing kindergarten experiences keeps children from receiving the variety of situations that kindergarten can provide, which include child-centered, child-directed, and adult-directed experiences.

Types of Play. NAEYC describes play as "an important vehicle for developing self-regulation as well as for promoting language, cognition, and social competence" (NAEYC, 2009). Pyle and Danniels (2017), in their qualitative study using classroom observations and interviews with teachers, found five categories of play in their analysis. *Free play* occurs when children choose what they play with and what the play narrative is, with little to no teacher involvement. *Inquiry play* happens when children show interest in a certain topic or activity, and the teacher responds by extending the play, with the inclusion of related academic standards. *Collaborative play* happens when teachers create an environment and set the standards for the skills students will develop, and children direct the play within the set environment. *Playful learning* occurs when teachers support the learning of skills that were less naturally present in play by developing target academic skills in a manner that is engaging and playful. There may be prescribed activities that take place in the play activity, with some of the control of the activity still with the child. *Learning through games* happens when mandated academic standards are made more engaging by teachers and are generally used to promote the

development of math and language skills. This is the most prescriptive type of play and involves the least direct child influence and involvement.

Pyle and Alaca (2018) note in their study that there are benefits to teachers participating in playful activities, and that children are willing to have their teachers engage during play, highlighting the importance of collaborative play activities and classroom environments where all in the classroom are active participants. Taylor and Boyer (2020) recommend that teachers get more involved in students' play, specifically by asking open-ended questions and using a variety of materials to enhance the learning process for students.

The Play Continuum. The play continuum is described in several ways depending on the researcher. For the current work, we are looking at two descriptions of the play continuum, the first being the types of play described by Pyle and Danniels (2017), which ranges from free play to direct instruction, with collaborative play in the middle. Collaborative play is emphasized as the most effective type of play. The other is the version from Weisberg et al. (2013, 2016) with guided play as the intersection between free play and direct instruction. See Figure 1 below for a full visual.

Figure 1: The Play Continuum

Pyle & Danniels (2017)	**PBL**	Free Play	Inquiry Play	**Collaboratively Designed Play**	Playful learning	Learning through games	Direct Instruction
Weisberg et al. (2016)	**Guided Play**	Free Play	Child Autonomy	Adult guidance			Direct Instruction

Similarly, we see Zosh et al. (2018) defining play as a spectrum, rather than just as free play. They focus on who is initiating the learning, directing the learning, and whether there is a learning goal attached to the play. We can see this below in Figure 2. By expanding the definition of play to include these concepts, we are better able to capture and understand play, how it benefits children, and what it looks like in classrooms (Zosh et al., 2018).

Figure 2: Play as a Spectrum

Adapted from "Accessing the Inaccessible: Redefining Play as a Spectrum" by J. Zosh., 2018, *Frontiers in Psychology*, *9*, p. 4. https://www.frontiersin.org/articles/10.3389/fpsyg.2018.01124 Creative Commons CC BY

Direct Instruction. Direct instruction is on one end of the play continuum (See Figure 1), and typically involves the teacher having an active role in teaching, and the students taking on a more passive role (Weisberg et al., 2013). Didactic approaches to teaching have been found to improve academic skills. However, there are many findings that show that students that are engaged in playful learning either match or perform above those in direct instruction learning environments (Weisberg et al., 2013). Direct instruction tends to encourage students to stay within a narrow lane of learning and to focus on a particular learning goal. Research shows that students engaged in heavily direct instruction-based learning tend to show more inattention, exhibit stress behaviors, and generally show less progress in social emotional and motor skills (Weisberg et al., 2013). In the early childhood space, there are other forms of teaching that provide better results than direct instruction in several domains. It is important to note that the research from Weisberg et al. (2013, 2016) is primarily in the preschool space rather than in the kindergarten space. However, in attempting to align kindergarten practices with

preschool practices, this research likely applies to all early childhood education spaces, kindergarten included.

Direct instruction is often pitted against free play (Pyle & Danniels, 2017); however, this is once again the creation of a false dichotomy. Both direct instruction and free play have a place in kindergarten classrooms, however the issues become clear when classrooms are "heavily direct instruction-based" or rely heavily on free play. A combination of play and learning styles is necessary for children to develop, and one way to include other styles of instruction is through guided play.

Guided Play. Guided play is intended to engage the whole child, support the development of skills, and enhance interest and understanding in differing subject matter (Allee-Herndon et al., 2022). According to Weisberg et al. (2016), guided play "refers to learning experiences that combine the child-directed nature of free play with a focus on learning outcomes and adult mentorship" (p. 177). While free play may seem like a clear method to get children involved and excited, some learning goals require adult support or guidance. Guided play is described as the middle ground between direct instruction and free play (see Figure 2). Guided play puts students' interests and needs at the center of the learning process and allows children to be actively engaged partners in play and learning (Weisberg et al., 2013). This type of play allows children to discover and explore on their own, which might help to cultivate their love of learning and promote engagement in the classroom and in knowledge acquisition. Guided play helps to shape learning in a way that also promotes a more positive attitude towards learning.

Weisberg et al. (2016) distinguishes between two types of guided play. The first is *child autonomy*, where adults design the setting to highlight a learning goal while ensuring that children have autonomy to explore within that setting. In this type of guided play, the adult's role occurs before the play begins, and during the play, the adult's role is much more hands off. The second type of guided play, *adult guidance,* involves adults watching child-directed activities and making comments, encouraging children to question, or extending children's interests. Children engage in play, and adults help to shape the learning goal by responding to the children's actions and interactions with the activity. Allee-Herndon et al. (2022) defines guided play as play-based pedagogy, and states that:

> With the significant impacts of purposeful play detected in the current study along with prior supporting research for purposeful play, kindergarten teachers should consider infusing play-based pedagogy into their daily routines, especially when serving students living in poverty. (p. 128)

Play-based pedagogy is a type of instructional approach that allows teachers to plan activities to include standards-driven learning objectives while also including playful and child-directed components (Allee-Herndon et al., 2022). Purposeful play, or purposeful learning, also called guided play, is designed to be interactive and playful, while also scaffolded to introduce connections to prior learning and support discovery. "The goal of purposeful, or guided, play is to combine a focus on specific learning goals related to

standards with the joyfulness of children's autonomy to choose" (Allee-Herndon et al., 2022, p. 120).

Zosh et al. (2018) highlighted a growing body of research called the science of learning to showcase just how effective guided play is for learning. It encompasses a "minds-on" perspective, encourages engagement, provides meaningful information, is socially interactive, iterative, and joyful. Weisberg et al. (2013) also notes that while guided play is a common format to achieve engaging and meaningful learning, it should not be the only format for achieving this goal.

Play versus Learning. Play is often considered to be separate from learning, where learning is considered more of a teacher-led practice that is often held in higher priority than child-led play practices (Pyle & Danniels, 2017). Pyle et al. (2020) note that "there appears to be a gap between intention and practice across different types of play" (p. 2282).

Allee-Herndon and colleagues (2022) noted this dichotomy of play versus learning, leading to a study looking at two direct instruction Title I kindergarten classrooms, one of which infused a play-based pedagogy and the other that focused on more didactic approaches to teaching. The findings pointed to a blend of strategies being the most effective, given that students in both classroom conditions showed improvement in literacy learning and receptive vocabulary. The study also highlighted that the dichotomy of play and direct instruction may be a mistaken perception, and that current research encourages "purposeful, focused-play based, developmentally appropriate

practices" (Allee-Herndon et al., 2022, p. 127), especially in terms of creating equitable opportunities in the classroom.

Play-Based Learning. Play is often integrated into learning and vice versa. Play-based learning (PBL) is a teaching approach that involves some degree of adult scaffolding while also including child-directed components (Pyle & Danniels, 2017). Previous studies have shown teachers describing play as something that should not be disturbed, rather than as a way for children to explore and gain academic concepts by involving teachers into the play activity and providing guidance and exploration (Pyle & Danniels, 2017).

According to previous research, play-based learning has been divided into child-directed pretend play, which is helpful in developing social emotional skills, and teacher-directed play, which helps students to develop academic skills. In an exploratory paper about play-based learning, Taylor and Boyer (2020) found that current research shows that a group of PBL students showed higher learning gains than a control group, and Carlsson-Paige et al. (2015) cite a number of long-term studies that show there are greater gains for students in play-based programs in comparison to students in more academically focused early childhood education programs. Taylor and Boyer (2020) also note that PBL could be used to promote equal access to learning for students of all backgrounds and abilities. Studies show that PBL is a developmentally appropriate practice, and that it also can support social-emotional learning for students (Taylor & Boyer, 2020). PBL provides programs with a sense of "joyful discovery" (Hatch, 2002, p. 459), essentially meaning that students find enjoyment in learning and feel fulfilled by

their school experiences. As shown in these models that describe play and learning to be a continuum or spectrum (Figures 1-2), we move away from dichotomizing kindergarten experiences and allow for a broader range of classroom activities and learning opportunities for students.

This literature review shows that there is a lot of language around play and learning in the early childhood education literature, and some of the terms are interchangeable. On top of the confusion that may create, teachers are entering classrooms with their own perspectives, practices, beliefs, and experiences. Teachers may have differing ideas and potential misconceptions about play, and the ways that play and learning show up in their classroom can impact how students view these activities as well.

Perspectives on Play and Learning

Research in the early childhood education field has noted the importance of not only defining play and learning and the impacts of different types of interactions, but also the importance of how both students and teachers perceive what is going on in their classrooms.

Child Perceptions. Researchers have emphasized the importance of understanding children's perspectives surrounding play and learning in their classrooms (Keung & Fung, 2021; Pyle & Alaca, 2018). Keung and Fung (2021) found that children overall perceive play to be 'fun', and this was often in tandem with being able to play with peers and having the freedom to interact with materials as they wanted. The

researchers deemed children to be "born 'active learners'" (Keung & Fung, 2021, p. 590). Conclusions from the study state that children need both playful learning and active, self-initiated play that allows them to create meaningful and significant connections with classroom experiences. In a study by Pyle and Alaca (2018), there was a split in kindergarteners' view of play – half viewed play and learning as connected, and the other half viewed them as two distinct categories. In classrooms where various opportunities to engage in different types of play and academic resources were readily available, students viewed learning and play as connected. In classrooms with free play as the predominant type of play, students felt that play and learning were distinct, and even distinguished the different areas in the classroom where play activities and learning activities occurred. This highlights the importance of guided play in kindergarten classrooms, where the play context is specifically set up for children to explore and feel capable of asking questions. This allows for scaffolded learning, unlike in direct instruction practices, where the environment is set up to encourage a specific learning goal and implicitly instructs children to not deviate from the task at hand (Weisberg et al., 2013).

Teacher Perspectives. Research shows that teachers have varying perspectives on the role of play and how it intersects with learning, and even in play-based classrooms, there can be confusion and a lack of understanding of the teacher role in play and how to (and if to) integrate learning and play.

In a study of pre-service teachers, it was found that these soon-to-be teachers had strong, and often incorrect, perceptions of play. Rodriguez-Meehan (2022) found that the pre-service teachers had broad and contradicting definitions of play, were uncertain

regarding play's role in learning, and lacked an understanding of the value of play in several developmental domains. Finally, they articulated difficulties with implementing play, given that it can be challenging and time-consuming.

In a study of Ontario kindergarten teachers, Pyle and DeLuca (2017) found that teachers varied in their perspectives on the purpose of play in kindergarten classrooms. Two groups emerged: one that focused on the personal and social benefits that play can have, and the other that viewed a more blended perspective of play that included both social/personal skill development as well as academic skill development. Similarly, Pyle, Prioletta, and Poliszczuk (2018) found that in interviewing kindergarten teachers in a play-based kindergarten program, two themes around play emerged. One was the "play and development" group, which separated play and learning and felt that play might not be the best approach to learning, whereas the other was the "integrated play and learning" group, where play and learning were integrated in a variety of strategies. The results of the study showed that teachers' beliefs about play and its purposes guided the way they set up their classroom, how they interacted with students during play, and their pedagogical decision-making (Pyle et al., 2018).

Pyle et al. (2018) emphasizes that the data shows that regardless of the types of play that teachers were implementing, in general teachers were concerned about students meeting curricular standards and the upcoming standards of elementary school. Teachers were having a difficult time in making sure that all the learning needed for kindergarten standards happened, while also creating a play-based learning environment. This research highlights that even when teachers are doing their best to implement play in their

classrooms, it is often being misconstrued or is challenging to implement in combination with kindergarten standards and curriculum. This calls for more specific professional development for teachers that will allow them to learn how to better implement play practices, as well as provide them with a better explanation of how play and learning can be integrated in the classroom.

Professional Development for Teachers

Hatch (2002) notes that the standards movement in early childhood education is creating a movement away from teacher agency. Teachers, like students, require trusting relationships with their peers and advisors, as well as opportunities for professional development that allow them to learn about the work they are doing and to learn more about themselves as teachers. They require support from both their peers and from school leaders and administrators, as well as skills and resources to help the students in their classroom reach their fullest potential (Mashburn et al., 2018).

Schmidtke (2023) created a study focused on how to help teachers implement guided play practices in kindergarten to help them meet academic needs without compromising developmentally appropriate practices. Teachers in the study engaged in a two-year play leadership cohort where they focused on developing play practices in their classroom. They met frequently with the other teachers to plan together and to advise district leaders about what was needed to improve play in kindergarten. This community and the professional development opportunities provided led to improvements “in teacher-child interactions, child-child interactions, children’s approaches to play, and children’s learning” (Schmidtke, 2023, p. 61). Schmidtke (2023) concludes by

recommending that professional learning experiences for teachers need to be rooted in "cognitive engagement, emotional engagement, social engagement with students, and social engagement with colleagues" (p. 61).

In searching for other professional development and play-based learning interventions for kindergarten teachers, the findings were slim. Many of the interventions occurred outside of the U.S., including in Ontario (Danniels & Pyle, 2022; Fesseha & Pyle, 2016; Pyle et al., 2017), Japan (Matsui, 2021; Yodogawa et al., 2022), and China (Li et al., 2022). Ones that occurred in the U.S. were often surrounding preschool instead of kindergarten (e.g., Barker et al., 2022), or documented the importance of play-based learning (Ali et al., 2018). The other common thread was that play-based learning is being used as an intervention for young students with autism or other disabilities (Gibson et al., 2021; *WWC | Play-Based Interventions*, n.d.). This focus on playful learning as a way to improve communication and social skills in children with disabilities further highlights that by including playful learning into the classroom, it is creating a more equitable environment for students with diverse learning and developmental needs and supports.

Purpose of the Current Study

As described and detailed in the previous two sections, the current literature in the field highlights the need for more well-rounded approaches to kindergarten that include a range of play activities, academic goals, and learning surrounding social and self-regulatory skills. By moving away from the dichotomy of play versus academics, kindergarten can start to return to its original purpose: to provide a space for students to

explore, discover, and develop. The current study will work to describe and understand a district's initiative to reconnect kindergarten to its roots by including a combination of play and rigorous academics, as well as a strong emphasis on community. This initiative, called the Kindergarten Innovation Cohort, or KIC, was created in 2021 as a professional development opportunity for teachers to find new ways to, as noted in the title, innovate kindergarten and its practices and pedagogy. The hope is that KIC is helping to soften the blow of the kindergarten crisis and innovate practices that will reorient these classrooms toward a developmental logic. Internal evaluation reports from the first year of the program show promise that improvements have been made in terms of teacher feelings of support and satisfaction, and changes in the way that activities are being run in classrooms (Vossen, 2022). The goal of the current study is to describe what this program looks like for teachers from the first cohort, as well as how teachers have interacted with and implemented this program. This study will highlight both the successes of the program as well as the challenges and provide insights into future recommendations.

The research question guiding this study is as follows: What does the implementation of the Kindergarten Innovation Cohort look like and how do teachers view those changes? The overarching goals of this study are to describe the Kindergarten Innovation Cohort, bring information about the positive impacts of the program back to the district and to describe how to better support these changes, and to bring forward recommendations for kindergarten practices based on the information and insights from the Kindergarten Innovation Cohort. I intend to highlight the voices and experiences of

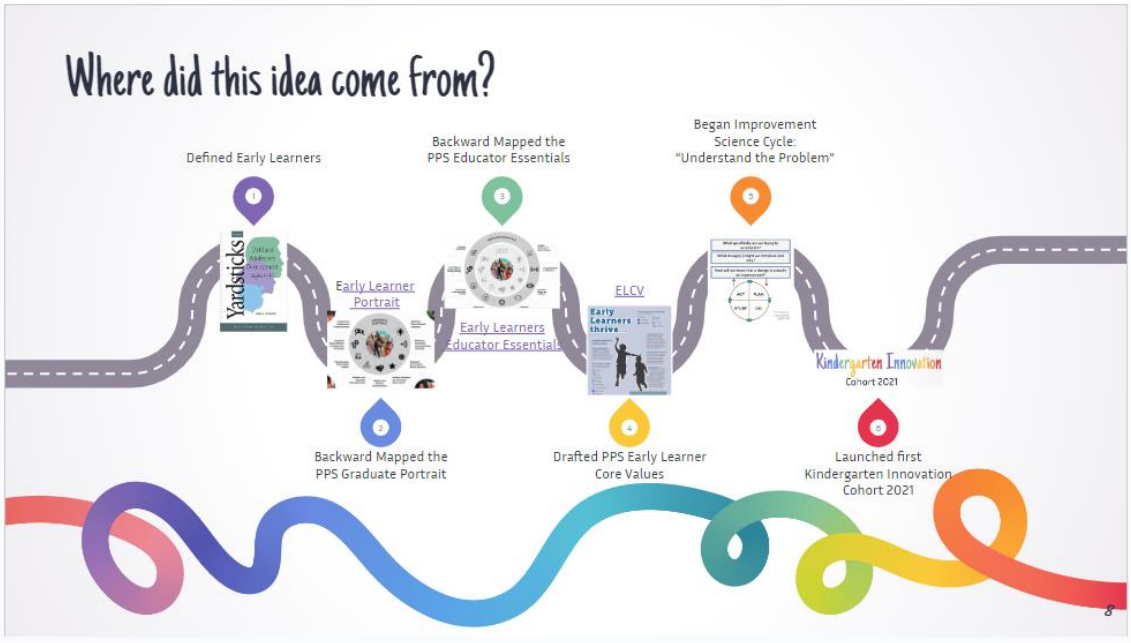
the teachers participating in this program, and to describe the benefits that programs like this can have both for them, and for the broader kindergarten community.

Chapter 3: Study Context

What is the Kindergarten Innovation Cohort?

The Portland Public Schools Kindergarten Innovation Cohort (KIC) pilot program was established in 2021 for the purpose of implementing guided play and developmentally appropriate practices in kindergarten by offering professional development resources to PPS kindergarten teachers. As seen in Figure 3, the foundation for KIC comes from the district's prior initiatives related to early childhood education.

Figure 3: KIC Map



From KIC Welcome 2022-2023 PowerPoint

This included explicitly defining what an Early Learner is, backward mapping the PPS graduate portrait and the PPS Educator Essentials and creating the PPS Early Learner Core Values. The Early Learner Portrait, PPS Educator Essentials, and the PPS

Graduate Portrait were all part of the lead up to KIC. These concepts were designed to help define who is part of Early Learner education, as well as what is needed and expected from each of the participants. These efforts helped to define who the audience was for KIC, and what values would be emphasized in the program. More specifically, an Early Learner is defined as students in preschool (age 3) through third grade (age 8). The Early Learner Core Values are exploration, movement, creativity, choice, social interaction, and play. As seen in Figure 4, the Early Learner Core Values have been defined in terms of the context in which Early Learners thrive, and this includes several domains, such as dynamic, joyful, predictable, and safe environments, equitable and engaging learning environments, meaningful learning, and social-emotional teaching.

Figure 4: Early Learner Core Values

From Early Learners Department (Pre-K and Kindergarten) / Department Main Page

These efforts led to an awareness that students and families in PPS were not experiencing a system that provided programs and supports that align with the vision of the Early Learner, especially as they move from preschool into PPS kindergarten. There was also a lot of discussion about the idea of "kindergarten readiness" and how the focus is on whether children are ready for kindergarten rather than the inverse – whether kindergarten is ready for them. There was an awareness that the kindergarten program often doesn't meet the needs of kindergarten students and families. This understanding of the wide range of problems surrounding the context of kindergarten led to the Kindergarten Innovation Cohort, a program designed to engage kindergarten teachers and educators in a guided process that will help them and the KIC staff "reimagine" kindergarten. Teachers opted into the program with one requirement – all the kindergarten teachers in their school had to be willing to participate. This included a variety of schools, as Portland Public Schools serves students in a variety of school and classroom types. PPS includes PK-5, PK-8, and independent early childhood education schools. It also includes a growing dual language immersion program, as well as "looping" classrooms, where teachers follow their kindergarteners to first grade before teaching a new class of students (*Portland Public Schools Information/Overview).* Teachers from any of these types of schools were welcome to join, with KIC serving as diverse of a school population as PPS.

Professional development and other supports were provided through the duration of KIC. This included PLCs, or Professional Learning Communities, in which each month the teachers of a KIC site would get together to share resources, problem solve

with other teachers, and discuss what is going well and not going well in their classrooms both with other teachers and with KIC staff. These meetings typically lasted for 1-1.5 hours and included a varying number of teachers (typically 3-5 teachers) and were led by 1-2 KIC staff. The PLCs were a safe space for teachers to discuss the good and bad of the program and problem-solve together. These meetings allowed for me to observe teachers and provided access to the teachers' thoughts and opinions, and allowed what they viewed as important and relevant to come to the surface given the safe space that was created.

District-wide meetings of KIC teachers were also used as a form of professional development, including beginning of the year welcome meetings, end of the year celebrations, and cohort orientations. The welcome meetings were used to introduce new teachers to KIC, and later there was an orientation meeting as well to better situate teachers in their role in KIC and determine their goals for their school. End of the year celebrations were a way for all the KIC teachers, regardless of cohort, to come together to learn what teachers had done in their classrooms and celebrate the successes of KIC from that year. These meetings took place either over Zoom or at a PPS location (e.g., school auditorium), and they were run by KIC staff, with teachers sharing out when prompted, or through a structured PowerPoint that they had contributed to. Because these were often cohort-wide or even larger, there were usually upwards of 15 teachers present at these larger KIC-wide meetings.

This goal of supporting developmentally appropriate, child-centered, high-quality academic classrooms was bolstered by providing funding to each teacher for resources

for their classrooms. Funding was provided to teachers for them to purchase classroom materials, games, classroom furniture, or anything else they felt was necessary to aid them in this process. In the first year, each school was provided with $1,500, but this has decreased since the first year, given the introduction of a second cohort of teachers, and the already-existing resources that had been purchased in the first year. Participating teachers also received support, feedback, and scientific readings from the KIC staff. Teachers were exposed to wider professional development meetings with all the KIC teachers to further understanding and to develop the community within KIC.

The teachers in this program were encouraged to implement creative practices in their classrooms that infused learning, exploration, and play, and that cultivated the Early Learner Core Values. Exploration was encouraged not only for students but also for these teachers as they innovate their classrooms and teaching practices, so they are more developmentally appropriate and engaging for students. They were encouraged to take risks and implement ideas that might not be commonly seen in kindergarten classrooms. This includes guided play, academic rigor, developmentally appropriate practices, and playful learning. Much of the research they were citing or discussing in their PLCs were articles that have been cited earlier in this document (NAEYC research; Weisberg et al., 2016).

Innovations for the 2021-2022 school year that teachers adopted included 20 minutes of guided play for all students, launching the day with student-directed play and inquiry, embedding play across the day, releasing teacher control, using construction to spark writing, and exploring games in curriculum. Several teachers returned for the 2022-

2023 school year, and their work over their two years in KIC are the focus of the current study. Their goals for the 2022-2023 school year included starting the day with guided play, constructing knowledge through play, releasing teacher control, collaborative play and problem solving, building words and vocabulary, and observation and assessment.

The Kindergarten Innovation Cohort pushed back against the dichotomies that have been created around early childhood education, and worked together to create innovative, playful, creative, and developmentally appropriate learning spaces for kindergarteners. As stated earlier, most interventions in early childhood are professional development based, and are created by those who are not in the classroom. KIC has created a collaborative and creative space for teachers to implement practices that are best for their students and reorient practices toward a developmental logic.

KIC Evaluations

Previous work has been done by program evaluators to better understand the KIC program and the ways it has impacted the several actors involved in the program. After the first year of the program and the PPS Internal Evaluation was completed, further evaluation was done to better understand KIC and these teachers through a PSU Quantitative Evaluation.

PPS Internal Evaluation

The first cohort of the Kindergarten Innovation Cohort took place in the academic year 2021-2022. This cohort consisted of 23 educators, 20 of whom completed a fall

survey, and 15 who completed a spring survey. An internal evaluation by PPS evaluators was conducted (Vossen, 2022), and several important findings have been noted. First, it was found that there were increases in the percentage of educators who spend more time on child-selected and small-group activities from fall to spring. Educators also reported that they were using more play-focused centers in their classroom, and 10 of the teachers reported implementing at least one innovative practice, many of which were described as ways of integrating play with instruction. Some of the barriers to implementation mentioned in the first year included issues in aligning curriculum and standards with play, as well as a lack of time to implement these practices.

The internal evaluation also included a qualitative component. Administrators of schools that were implementing KIC were interviewed in a focus group setting, and it was found that their experiences were largely positive, and that the program helped educators change both the way they think about teaching and their instructional practices. The program also created opportunities for collaboration and created a sense of community. Overall, results from the first year of the program showed promise that integrating play-based pedagogy within academic instruction has the potential for a positive impact on educators' instructional and classroom management practices, and students' learning experiences. Given the positive impacts found from this evaluation, further work was done in the second year of the program to better understand its implementation and impacts.

PSU Quantitative Evaluation

Seven teachers in Cohort 1 were surveyed in Fall of 2022, at the start of the second year of KIC. Six of the teachers identified as female, and one responded that they prefer not to answer. On average, these teachers have been teaching at their current school for 8.57 years (SD = 6.05), and on average were 42 years of age (M= 41.71, SD = 6.60). Five of the seven teachers had a master's degree, with one having at least one year of coursework beyond a Bachelor's degree, and one selecting that their highest level of education was either an education specialist or that they hold a professional diploma.

Survey Results. One of the questions that was asked was "What best describes your reason(s) for choosing to join the Kindergarten Innovation Cohort? (select all that apply)". The results of this question can be seen in Table 1.

Table 1: Reasons for Joining KIC

What best describes your reason(s) for choosing to join the Kindergarten Innovation Cohort? (select all that apply)	**Responses**
I was genuinely interested in the opportunity to develop my skills as a kindergarten teacher.	6
Other kindergarten teachers at my school wanted to participate in the KIC.	1
My principal encouraged kindergarten teachers at my school to participate in the KIC.	1
PPS district staff encouraged kindergarten teachers at my school to participate in the KIC.	1
I was told that I would be participating in the KIC.	0
Other (please specify): "It sounded like a unique opportunity." "I want to make play a more accepted part of Kindergarten!" "Ensuring that play remains in kindergarten to work on social skills, language, and to keep learning developmentally appropriate"	

Teachers were also asked to rate several items from 1 (not important) to 5 (essential) on the question: "How important do you believe the following characteristics are for a child to be ready for kindergarten?" Table 2 summarizes how the teachers responded. The full list of questions can be seen in Appendix F.

Table 2: Kindergarten Readiness Survey Results

How important do you believe the following characteristics are for a child to be ready for kindergarten?	Mean	SD
Takes turns and shares	4.43	0.79
Communicates needs, wants, and thoughts verbally in primary language	4.43	0.79
Is friendly to classmates and teachers	4.29	0.76
Is not disruptive of the class	4.14	0.70
Is sensitive to other children's feelings	4.14	0.90
Has good problem-solving skills	4.00	1.00
Can follow directions	4.00	0.82
Can focus attention on a single task	3.71	0.49
Finishes tasks	3.29	0.49
Is able to use pencils and paintbrushes	3.29	0.76
Sits still and pays attention	3.29	0.76
Identifies primary colors and shapes	2.71	1.25
Can identify numbers 0 through 10	2.71	1.25
Counts to 20 or more	2.57	0.98
Knows the English language	2.57	0.54
Knows the names of most letters of the alphabet	2.57	1.40
Knows the sounds that most letters make	2.43	1.40

As shown in Table 1, KIC teachers hold social-emotional and self-regulatory skills higher than academic skills in terms of what is important for kindergarten readiness. The skills that were shown to be most important are "takes turns and shares"

(M = 4.43, SD = 0.79) followed by "communicates needs, wants, and thoughts verbally in primary language" (M = 4.43, SD = 0.79). The items with the lowest scores were those related to math and literacy skills. These results highlight the priorities outlined in the Early Learners Core Values, which include an emphasis on social-emotional learning and fostering supportive communities.

Given the results of the PPS Internal Evaluation and the PSU Quantitative Evaluation, more questions were raised regarding the workings of this program and the ways it impacted teachers and their classrooms. Given that the quantitative evaluation provided limited information and did not provide insight about the teachers' experiences, this qualitative study was proposed to better understand KIC, and the teachers involved.

Chapter 4: Methods

Data Collection

Given that this is a new pilot program that has yet to be fully documented, it was best to incorporate several sources of data to create a more well-rounded, comprehensive understanding of the Kindergarten Innovation Cohort. Data sources included professional learning community observations, cohort-wide meeting observations, classroom observations, and interviews with KIC teachers. The interviews were used as the primary data source for this study, with the additional notes and observations used to fill in and elaborate on the themes that emerged from the interviews.

From the span of February 2022 to May of 2023, I observed seven PLCs and three cohort-wide meetings. These meetings also frequently gave me access to PowerPoint presentations, which were used to create a description of KIC, as well as a source to compare to what had been recorded in my observation notes.

I was also able to observe two KIC classrooms for approximately 45 minutes each. One classroom was working on projects about reptiles and spent time “being scientists” in the garden, and the other classroom was engaged in free choice activities. These observations will be used as supplementary data to help describe what KIC looks like in some of the participating classrooms, especially around ways in which child-centered and play-based learning practices are being incorporated into classroom activities.

In addition to these observations, I interviewed three teachers in their second year of KIC for this study. Seven teachers were surveyed, and after reaching out to all seven, three responded agreeing to be interviewed (43% response rate). All three teachers identify as female, with an average age of 38. All three teachers have master's degrees, with one having an additional professional diploma. On average, the participants have been teaching at their schools for 9 years. While these teachers are in the same cohort, they all come from different schools, providing diverse perspectives. The three teachers I interviewed are Madison, Susan, and Lucy. Their names have been changed to protect their privacy and identities. Interviews were conducted over Zoom. Teachers were asked about their students, how KIC changed their teaching beliefs, and what changes occurred because of KIC and the other teachers in the program. See Appendix D for the interview questions and Appendix E for the interview script. Upon completion of the interview, participants were asked if they had any final questions or comments, and information was collected to provide participants with a $50 gift card as a way to thank them for their time.

Participant-Observer Role

It is important to note that as I engage in this study, I have been a part of KIC for over a year now. I started attending Professional Learning Communities in Winter 2022 and have had several opportunities since then to be a participant-observer in PLCs and in the End of the Year Celebration for both 2022 and 2023. I gained access to this program through my lab, which had partnered previously with Portland Public Schools. We were approached by one of the KIC administrative staff members to see if we had any interest

in the program, and another graduate student and I have been a part of KIC since that initial invitation from them. Due to this ongoing role, I have gained a considerable amount of knowledge about KIC, which may help me to contextualize the data collected and inform the analysis process due to the insider knowledge I have gained around this topic, beyond the data described here. A reflexivity and positionality statement can be found in Appendix A.

Data Analysis

My observation notes were handwritten, so they were typed into documents and reviewed several times since some of the observations had taken place more than a year prior. Data from interviews were all transcribed and engaged with several times. Data was then uploaded to Atlas.ti, where each type of data source was inductively coded using the General Inductive Approach (Thomas, 2006). The full codebook can be found in Appendix G.

In looking at the codebook, you will see five major themes. Each theme has a description, and then following each description is a table with the codes embedded in each theme, including descriptions and examples of each code. These codes were created by lumping together initial, more descriptive codes to make more cohesive codes that fit into each theme. Memoing was done throughout the data collection and analysis process, especially to help track similarities and differences across sources. Between memoing, several engagements with the data, and extensive time reviewing the codes and starting to lump them together, themes emerged. I was then able to use the different sources to

create a more well-rounded picture of how those themes showed up for teachers and in their classrooms.

Chapter 5: Results

The final themes that emerged from the codes I created from the data were: innovation in action, pathways to implementation, teacher impacts, student impacts, and barriers to implementation. In the following sections, I offer more insights into each theme that emerged and the ways that they showed up in the differing contexts in which I interacted with KIC.

Innovation in Action: Changes to Classroom Practices

The Kindergarten Innovation Cohort, as is stated in its name, is about innovating kindergarten. Every teacher was able to explore how they would innovate their classroom in their own ways and in ways that were best for their students, and there were several common threads. These innovations centered around several ideas: changes in classroom practices, such as starting the day with play and combining play and learning activities; teachers working to be more flexible around classroom activities and classroom structure; and promoting child-centered learning.

A concept of innovation that was mentioned again and again was the idea of starting the day with play. Several teachers have now implemented this, and it may have been one of the most widespread innovations in this cohort. One kindergarten teacher, Lucy, described this shift in her classroom practices:

> When people started talking about that I started shifting it more and more. I have been doing it like every couple of days, or on Fridays or whatever, and then I

> finally shifted it to just being completely like, that's how we start our days, and that has just made such a shift in my classroom.

Susan, another teacher, noted that her classroom starts the day with STEAM centers, and that students "come in really excited to do whatever that activity is that I have up on the screen." She discussed how she can connect the curriculum to the activities they're working on each morning:

> And then you can connect it to what you're currently learning about. So today we did a 'how to draw a castle' because we've been reading the Cinderella unit. So, you can find ways to connect it to your science and to your reading and your units.

Both Lucy and Susan note how much of a positive change this made in terms of engagement for their students, and similar sentiments were shared by teachers during the PLCs. Teachers found that this increase in engagement and a focus on play helped students to generalize skills outside of direct instruction. As noted in the literature, while direct instruction is a useful tool, engaging in more integrated playful activities is more effective in terms of students gaining skills (Allee-Herndon et al., 2022; Carlsson-Paige et al., 2015; Taylor & Boyer, 2020).

Another topic that emerged from the PLCs was finding a balance between play and academics. Some teachers mentioned that they were able to find time for both play and academics in the school day, whereas other teachers described ways they have combined the two, like Susan does in her STEAM centers. For example, in a KIC

presentation at the end of the year celebration, one teacher discussed how they are combining literacy and play:

> We are engaging in literacy skills through dramatic play in the farmers market we built. We learned about farms in Wit & Wisdom [literacy curriculum] …we learned about what people do on farms, what grows on farms, which animals live on farms. In the farmers market children are writing what is for sale, making shopping lists, negotiating prices, and exchanging money for food.

This was seen in one of the classrooms I observed as well, where students were in the garden "being scientists" – while this was not necessarily a play activity, they were taking on a role where they had to document what they could see. This gave them a level of autonomy within a structured activity and allowed them to engage in the activity in a new way.

In addition to finding a balance between play and academics, teachers also discussed finding ways to adjust activities to better fit students' differing needs. Susan described how she approached this:

> [I] come at it from the lens of my kids who would have the hardest time accessing that and think about what if I did it in a fun way. Oh, maybe they'd have an easier time accessing it, or my TAG-like [talented and gifted] students who are like, "I already know that!" like if I make it a fun thing, they want to do it because it's fun, and they forget [to] tell me "I already know that."

Other teachers noted this as well, that by providing different versions of activities, more students were able to access the activity. This type of teaching required a level of flexibility, which several teachers discussed in the PLCs. They talked about trying to not get stuck in a plan or a schedule, and adjusting their plan based on what students need that day. Teachers found that they needed to be open to things changing, both on a day-to-day level and on a broader scale. Being more flexible in their classroom practices allows for a wider range of activities to happen in the classroom, which is increasing the likelihood that the practices are developmentally attuned, helping students to better achieve kindergarten goals (Mashburn et al., 2018).

Outside of the play sphere specifically, several teachers noted throughout the PLCs that child-centered learning led to students being more engaged and more motivated. Teachers noticed that lessons that were child-centered were more meaningful and memorable for the child and found that creating time for exploration and allowing students to discover things on their own time were important to child-centered learning. Lucy noted this in relation to child-directedness as well, which is described by Pyle and Danniels (2017) as focusing on the child having control or autonomy. Lucy asked, "Where can I sneak in the play? Where can I sneak in student choice, like, where is there a little more space for student ownership and creativity?" Questions like these help teachers to see where they can make changes in their classrooms and in their activities throughout the day. Similarly, Madison noted that, "We know that kids learn best through play. And how do we structure the play in a way that helps kids move forward academically and socially and all of that good stuff?" Teachers asking these types of

questions allowed them to think outside the box, coming back to the idea that flexibility plays an important role in teachers implementing more balanced practices in their classrooms. Further, throughout several conversations I had with teachers, they were using play to further skill development in other areas, especially student autonomy, social skills, and creativity – bringing kindergarten back to that focus on well-rounded developmentally appropriate practices.

Pathways to Implementation

The second theme that emerged, pathways to implementation, concerns the elements that helped teachers to implement KIC, including teachers feeling they have the "permission" to do things in a different way, the value teachers placed on sharing what they're doing and learning, and their beliefs involving KIC and the Early Learner Core Values. All these pathways also have the underlying element of a teacher community, either through the PLCs or through their shared values, like the Early Learner Core Values.

KIC was described by teachers as providing "permission" for teachers to "be proud of the things that we do and the ways that we meet students," as Lucy explained. All the teachers I talked with discussed that they already knew that developmentally appropriate practices were needed in kindergarten and that play was important, but that KIC provided a team and a justification to help back up the choices they were making. They now felt that it was okay to make those changes, especially because they knew other teachers in PPS were making similar changes. Teachers frequently discussed that

the community aspect of KIC was important to creating that permission and flexibility. Madison described:

> [In the] last couple of years I'm like, well, guess what we have this Kinder Innovation team. We're part of this Kinder Innovation team, and the purpose of it is to allow us to be able to be creative and flexible with the curriculum and implement it in ways that we think are appropriate. And this is the research behind it. And this is the team that's backing me up on this. And so, it's been much easier to defend my teaching.

KIC allowed teachers to feel that it was okay to make changes to the curriculum, and to adapt their classroom practices to what is best for their students. Madison also talked about the impact that KIC and her fellow teachers had on her confidence and her ability and willingness to speak up for what is right. She mentioned that she already felt she knew what was best, emphasizing that teachers are professionals, but had not previously felt that she could do what was best in her classroom, and was perhaps not viewed as a professional or as someone with an opinion that mattered. This community built by KIC and the PLCs has allowed teachers to feel supported by each other, and as Lucy mentions, brings the fun back to teaching: “It goes so much better when I step back from the big academic piece, and just dedicate time to play and time to fun.”

This connection between teachers is especially important when their school, district, and/or country has views that do not align with how they feel they should be structuring their classroom and supporting their students. This community allowed them to share their beliefs about their classrooms and reminded them that it is okay to have fun

in their classroom, and that sometimes they can try not to worry about standards or curriculum milestones.

Similarly, all the teachers I interviewed in some way mentioned the importance of sharing the work of KIC with other teachers, either in the district or more broadly. As Susan said, “How can we teach others about the importance of play in the classroom? Be it at your school, at the district level, at state level.” This curiosity and drive to expand this work beyond their own classrooms were likely strong motivators that kept these teachers engaged in the work they were doing, even when things became challenging. This passion for the work they are doing and the way they approach teaching helped to foster that community aspect – they all shared this drive to do what is best for their students, and to share those ideas with others.

Another component of KIC that was mentioned frequently was the Early Learner Core Values. Teachers discussed using the Early Learner Core Values as a framework in their classroom, for example I noted in one of the PLCs that teachers were “using the Early Learner Core Values as a framework and a check in – where are the Early Learner Core Values showing up in the classroom? And how can those be lifted up?” Lucy aligned the Early Learner Core Values with how she met her students:

> We're supposed to teach [the curriculum] with fidelity. But also, you know, it's just like what’s often this interesting place of like...where is that line of...I'm still teaching to fidelity, but I'm still you know, living by the values, the core values.

The Early Learner Core Values worked to create community for these teachers by giving them a sense that they all believe in the same things, while also helping to create a scope of innovation. These values helped the teachers to determine what is important in their classrooms and design their activities to highlight and nurture those values.

Impacts of KIC on Teachers

KIC not only influenced how teachers set up their classroom and daily activities, teachers noticed that they also personally experienced positive effects of the program. One topic that was repeatedly mentioned was the importance of the community created by KIC. In addition to the positive benefits of this community, teachers also noted that they felt more confident and empowered, were having fun in their classrooms, and that they were building connections with their students.

The community built because of KIC was important not only for things like idea generation, but it also provided a source of support for teachers as well. Lucy described the importance of this community:

> I'm gonna come away feeling supported. I'm gonna come away feeling like the work I'm doing matters. And I think so much of it is just being part of a community doing something bigger together. It's just so helpful on mental health levels, on social emotional levels as a teacher.

This was mentioned in the PLCs as well, as teachers talked about the support and inspiration that came from the PLCs. Outside of direct statements related to this support,

it was also clear in the PLCs I attended that these meetings were more than just professional development meetings. I distinctly remember in one meeting that at the start, I noted in my observation that several teachers looked tired or burnt out, but by the end of the meeting, several teachers were smiling, laughing, and seemed to be in better spirits. The power of being around other teachers with the same goals and attitudes, combined with the well thought out implementation of the PLCs, truly impacted these teachers.

KIC was key for teachers feeling confident and empowered as well. Madison mentioned again and again in her interview that KIC made her more confident and more able to defend her abilities and knowledge as a teacher:

> Between this year and last year, for sure it has made me much more confident in my teaching practices, and confident in knowing that my gut as a teacher, that I am pretty well-versed, and I know what I'm talking about as a kindergarten teacher. I've had a lot of experience. I've done a lot of research. I am very invested in it. And I think this team has allowed me to really, it's kind of reinforced everything that I knew, and it's given me a platform to be like, 'Yes, I do know what I'm talking about.'

Because of the community and the professional development provided by KIC, Madison felt like she could do what she has known all along, but with a team to back her up. Lucy similarly discussed the importance of KIC being developed *for* teachers, not *by* teachers:

> It's never been, it's never been like one more thing to do on our plate, you know, for me, at least, it's never been one more thing to do on my plate. It's been like,

> ‘Oh, I'm gonna go to these meetings, or I'm gonna have somebody come in and observe and I'm gonna come away with these ideas.’

Providing teachers with resources to build community that they might not have had otherwise helped teachers to meet other teachers that they likely wouldn’t have met without KIC. By facilitating positive environments for teachers, it not only takes a task off their shoulders, but it may also be helping in terms of their own stress and mental health levels. By extension, this may have allowed them to show up better in their classrooms; for example, teachers noticed that they were able to “find the fun” in their classrooms.

Teachers also noted that they felt more connected to their students, and Lucy notes that because of that connection, she felt inspired and thought of more ideas because of those interactions and time with students. This brought her to the conclusion that playing is important for everyone. She noted, “And I think it just reminded me how play is important for adults, as teachers, too...It's just good for humans to play.” This sentiment was noted in the Innovation in Action theme as well, as Susan noted that she can approach activities from the lens of several different students to make it more fun for everyone. Teachers noted in the PLCs that they found that “the kids are showing me how they need to learn and it’s really eye-opening”, and in a similar sentiment, that teachers are “getting to know your students as people not as learners.” Because of these changes teachers were able to implement in their classrooms and in their teaching practices, there was the potential for KIC to have an impact for students as well.

Student Impacts

Teachers noted that in addition to the impact that KIC had on them, both personally and professionally, there were impacts of KIC that had a direct impact on students as well. One of the questions I asked teachers in the interviews was, "What do you hope your students will gain from being in your classroom?" Each teacher had their own unique answer that influenced what they focused on in their classrooms, and therefore the impact it would have on their students.

Madison talked about the importance of students taking ownership of their learning and being able to pursue what they want to learn about. Susan discussed the importance of social skills in her classroom. Lucy talked about the importance of creating community and teaching students how to work and learn together. Other teachers discussed the importance of community and social skills in the PLCs and in one of the End of Year meetings as well.

The teachers also noted that play was important in reaching these goals. Susan discussed how important play was to help her connect with different kinds of students in her classroom:

> Play can help you connect with the kids, like I have several who are super quiet and didn't talk for a long time, and that is something that you can talk to them about, and it gives you a way to connect to them. It's like, 'Oh, you really like these cars, you know, which car is your favorite?' So, I think that that's the other

> important piece that sometimes people miss is that it helps all the different kinds of kids.

This was noted in the Innovation in Action theme as well. Teachers found that as they expanded their classroom practices, it also allowed them to adapt and adjust to students with different needs, interests, and abilities. Zosh et al. (2018) and Weisberg et al. (2016) describe in their work on guided play that there are distinct types of guided play, where students and teachers can take on more or less active roles. By teachers taking on varying roles in play, they can provide support of different kinds, depending on what students need in that moment, as well as based on what the learning goal is.

Teachers noted that play also helped to generalize skills – it gave students time to use the knowledge they've gained in other areas. This is clear in the literature on play, as play is stated repeatedly to have impacts on learning (Pyle & Alaca, 2018: Taylor & Boyer, 2020). Purposeful play, or guided play, is designed specifically to be interactive and playful while also creating connections to prior knowledge and scaffolding discovery for students (Allee-Herndon et al., 2022). These teachers showed that when put into practice, these types of play can in fact have an influence on students, highlighting the importance of these practices being enacted in kindergarten classrooms.

Barriers to Implementation

Teachers noted several challenges or roadblocks that they encountered as they engaged with the KIC program. Both classroom-level and broader challenges were discussed, including standards and practices that did not change along with KIC,

challenges related to time and resources, expectations around what KIC would look like, and broader expectations around kindergarten practices.

One issue that was consistently mentioned was the curriculum, standards, and practices that did not change along with KIC. Lucy states:

> I think the challenge has been that the learning can look really different. And so, and what we're trying to do doesn't necessarily match the cookie cutter standardized testing…we've been playing with things and building things and creating things and doing art. That doesn't necessarily show their learning. I don't know where this shows up on our all of our metrics and standardized tests. So, it's just like a challenge that we're both trying to do this piece that I believe is really important. And we're being evaluated, based on these other things.

This was noted in the PLCs as well, as several teachers noted that curriculum and standards are "not aligned to the goals of KIC" and "do not allow for differentiation or adaptability and are not developmentally appropriate." Madison discussed this with her class as well: "In every kindergarten classroom – there is such a wide range of needs and kids and abilities, and there is no one curriculum that is going to meet the needs of all of those students." These sentiments showed that while these teachers are hard at work making changes to their classrooms, there are several things that are beyond their control, especially the curriculum and standards that exist on broader system levels. If there was more flexibility, these teachers may be able to make decisions around how to approach curriculum activities and may be better equipped to provide activities that are adaptable to students with different needs. As Madison noted, no one curriculum is going to work

for every student. This relates back to the issue of time teachers mentioned – if they do not have the time to make adaptations for their students, or they are using their spare time to make adaptations to a curriculum that doesn't do that already, their classroom activities may not be developmentally appropriate, and therefore will impact the skills and knowledge they gain from their time in kindergarten.

Teachers discussed in one of the PLCs that they felt there wasn't enough time in the day to provide the opportunities they wanted for their students. Teachers discussed that there was "not a lot of time for [kids] to just go for it" and that they wish there were "opportunities like that throughout the day" for kids to play, explore, and "go for it." However, due to time constraints that were often caused by the strict curriculum, teachers also wondered whether it was worth spending time to let students create. Similarly, teachers also discussed that they often wanted to implement something in their classroom, but that it would take too much set up or more resources than they had available. One thing that was discussed a lot in the first year was the pressure teachers felt for innovation to be "big" – once that idea was let go, teachers found it easier to find ways to engage and make shifts in their classrooms. However, even small changes to the classroom or activities may require more time than teachers have available.

Lucy also mentioned that there was a part of KIC that had been planned for but had not been carried out, which was that teachers were intended to visit other KIC classrooms for a day or two throughout the year to give them new ideas and be inspired by the other teachers. There were unforeseen issues that occurred, including a shortage of substitute teachers, which would have been necessary for teachers to go visit another

classroom. Lucy noted: “I think about how much more there could be if the initial plans of like all these classroom visits and things that were supposed to happen, had happened.” If these initial plans had been carried out and expectations for what was going to occur in the first year were laid out in a way that prepared teachers for the potential that it might not all happen, teachers may not have felt as disappointed, or could have found other ways to support and inspire each other with new ideas and innovations in their classrooms.

One topic that was not mentioned much throughout my time engaging with KIC was the funding provided for teachers. Lucy was the only one to explicitly mention funding in her interview, and she stated that “not feel[ing] like that financial piece is like the stopping point like at all, like so often is of like, ‘Oh, I have this idea. I want to do it, but like I don't want to pay for that on my bank account.’” It was a topic that was not brought up frequently, and it also was not a question I asked in my interviews, which may be why it was not mentioned, however it did not seem to be a topic at any of the PLCs I attended either. One of the KIC administrative staff mentioned that teachers in the first year of the program waited until the end of the year to spend the funding, or didn’t spend it at all, and so funding was lowered in the second year of the program. Despite additional funding, teachers may still not have resources related to time and support to implement or use any resources that they purchased for their classrooms. KIC staff also mentioned the possibility that teachers were either unsure of what to use the funding for or were hesitant to spend the funds, as they are not used to having money for their classrooms and may try to save it instead of spending it right away.

Finally, broader expectations around kindergarten were frequently mentioned as barriers. For example, Madison noted that:

> The second year [of KIC] I started noticing, like more and more that district policies were creeping in and, curriculum was creeping in. And it's kind of slowly chipping away at developmentally appropriate practice in kindergarten and specifically play.

She also noted that the policies and curriculum are created by people who "don't have experience" in early childhood spaces, sharing that:

> I think that a lot of the expectations of what kindergarteners are doing, especially at the beginning of the year, are off. And it comes from a lot of people who don't have experience, because really the only way to know what the beginning of your kindergarten looks like is to see it firsthand, because it's kind of nuts.

This brings to light the need for curriculum and standards developers to have more insight into what kindergarten looks like, as well as the potential for teachers to adapt the curriculum as needed, which is what Miller and Almon (2009) call for in their paper stating that there is a crisis in kindergarten. By creating such strict standards for what kindergarten should look like, it may be keeping students from engaging in the type of activities they need at that age (Allee-Herndon et al., 2022; Mashburn et al., 2018; Zosh et al., 2018).

Chapter 6: Discussion

The KIC program is a professional development program for kindergarten teachers designed to help them implement and cultivate developmentally appropriate practices for kindergarten students in Portland Public Schools. This program was investigated using qualitative methods, including open-ended interviews and observations in multiple settings, to answer the question: What does the implementation of the Kindergarten Innovation Cohort look like and how do teachers view those changes?

Qualitative methods were used in this study as a way to elevate teachers' voices and perspectives in addressing this question. Once I began spending time in KIC spaces, it became evident that these teachers held a wealth of knowledge, both about their classrooms and about this program. By going to the source and working directly with these teachers, their voices are at the forefront of this project. KIC was created by teachers, for teachers, and it only seemed right that in evaluating and understanding the program, they play a central role in describing it as well. Also, given the individualized nature of the program and the way in which teachers were encouraged to adapt the program to their specific classroom and goals, speaking to individual teachers about their experiences with KIC allowed for a better understanding of what the program looked like across different classrooms.

The qualitative methods approach to this project allowed for teachers to openly talk about what they felt was important, which would not have been possible with quantitative methods, such as closed-ended surveys or preplanned observational rating

systems. It also gave insight into the nuances of the types of play and activities being implemented in the classrooms, and the ways in which teachers increased and improved their interactions with their students. Because of the time spent talking with these teachers and by spending time with them in their classroom and PLCs, as qualitative research requires, I was able to get a much closer look at the program and a deeper understanding of how it works based on the five themes that emerged: the ways in which KIC changed classroom practices (innovation in action); the benefits of KIC, which included a sense of community and a sense of "letting go" of certain expectations; the positive impacts of KIC on both teachers and students; and the barriers and challenges that come with implementing this type of program.

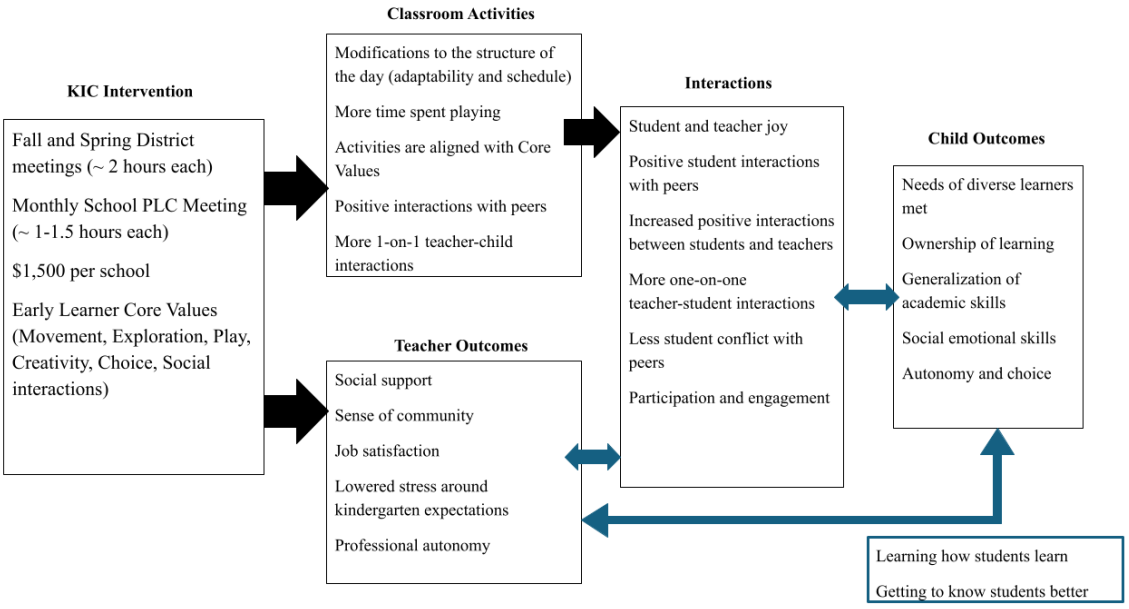
The themes that emerged from this study have two implications—they allow me to create a theory of change using teachers' voices, as well as my own insights, to explicate the important components of the program, and the teacher, classroom and student outcomes that are impacted by the program. This allows the program and its outcomes to be clearly and succinctly depicted in a single figure. Also, given the feedback and knowledge gained, I am able to provide recommendations for best practices that address the barriers that have been mentioned, as well as providing a broader conversation about challenges that exist in the sphere of public education.

Implication 1: Creating a Theory of Change

Based on the results derived from the varying qualitative data resources, a theory of change was created to highlight the elements of this program and the impacts it had. A

theory of change is a visual representation used often in program evaluation as a way to show the components of the program, as well as the results or outcomes. The theory of change has four components: the KIC intervention, teacher outcomes, classroom experiences, and student outcomes. Different aspects of the program have impacted these outcomes. Each component will be described more fully below.

Figure 5: Theory of Change



KIC Intervention

The intervention itself comprised three major components: district-wide meetings, the Professional Learning Communities (PLCs), and the funding to bolster classrooms ($1,500 per school). The district-wide meetings included the orientation-style meetings and the End of the Year Celebrations. The orientation-style meetings helped to create that

initial sense of community by showcasing the common values that KIC teachers held, as well as helping them to create Inquiry Questions that would guide their innovation in their classrooms for that year. The End of the Year Celebrations were used as a way to showcase all of the work that had been done – each school in KIC was given an opportunity to share with the other KIC teachers the work they had done, both through sharing out, and through the sharing of pictures and videos of students in their classrooms engaged in these innovations.

The PLCs, while labeled professional development meetings, proved to be much more than that. Teachers met each month with their fellow KIC teachers in their school, as well as KIC staff, to brainstorm, problem solve, and share what they had been working on or struggling with in their classrooms. Teachers discussed repeatedly that these meetings provided support and a sense of community. This may be in part due to the norms set up for this meeting: they often began with a check in with a lighthearted question (e.g., "What is something that brings you joy?"), followed by a varying agenda, including a teacher sharing about their classroom, or teachers collectively brainstorming or problem-solving. The norms for the PLCs allowed for teachers to share, be heard, and be supported. When a teacher shared, another teacher would respond by repeating what they heard, and then sharing what it made them wonder, feel, and so on. This environment and the norms set in these meetings seemed key to developing a safe, supportive environment for these teachers that they likely weren't getting anywhere else.

The final piece of the program, the funding, was talked about the least during this inquiry. However, I don't believe that it is because it was unimportant, but rather that the

support and community provided proved to be more salient. A KIC staff member mentioned the idea that teachers were perhaps hesitant to use the funds because they didn't want it to run out before the end of the year. The same staff member also mentioned that if one thing could be changed about the program, it would be that more funding would be available in general. This might not necessarily mean more funding for individual teachers, but rather for more professional development opportunities or funding for substitute teachers or classroom aides.

Teacher Outcomes

Teacher outcomes included social support, a sense of community, job satisfaction, lowered stress around kindergarten expectations, and professional autonomy. The social support and community derived from several components of KIC. The PLCs played a large role in fostering both support and community, as teachers discussed the importance of the safe place they provided. They were able to share in this space with a team of teachers who held the same values as they did. Likely due in part to these components, teachers also mentioned increased job satisfaction. This showed up in a few different ways - teachers mentioned feeling more confident or capable; that they were finding joy not only for their students but for themselves throughout the school day; and that they felt that they knew their students better and as more than just students. Due to an increase in confidence and the support of the KIC team and staff, teachers also felt more able to do what was best for their students, and to worry more about what their students needed and less about kindergarten expectations. They found professional autonomy, meaning that they had more control and choice when it came to the decisions they made in their

classrooms and for their students. The support of the KIC team helped many teachers to step outside of the box when it came to teaching and activities, and to find ways to foster the Early Learner Core Values in their classroom, rather than solely focusing on the curriculum. Teachers also noted that the increased professional autonomy allowed them to be more adaptable and flexible in their classrooms. A lot of teachers also mentioned the idea of permission – that KIC gave teachers permission, releasing some of the pressures around kindergarten rules and standards that would keep them from being adaptable and flexible for the benefit of their students. It is important to note, however, that the curriculum and standards did not disappear. A discussion on the impacts of curriculum and standards will be further discussed below.

Classroom Experiences

The increased flexibility combined with the permission teachers felt from KIC, led to teachers being able to modify their classroom structure or the way they scheduled their day. Teachers created more time in their day for play-centered activities, and found ways to combine play and learning activities so that learning was more interactive and hands-on for students. They also focused their activities to align with the Early Learner Core Values (movement, exploration, play, creativity, choice, and social interactions). By having central values to focus on, teachers were able to find ways to better incorporate those ideas. Given that the school day was more structured around these Core Values and more interactive activities, teachers found that they also had more positive interactions with their students and had more opportunities for one-on-one interactions. It also provided more time for students to interact with each other and practice their social skills

and problem-solving skills. These play based learning and guided play concepts that are being implemented in the classrooms reflect those discussed in the literature review and show that these play concepts do in fact have the positive outcomes that were described.

Student Outcomes

Due to these changes in classroom experiences, as well as the impacts that the teachers felt from KIC, students experienced closer and less conflictual interactions with their peers, as well as positive interactions with their teachers. It was also shown that with the ability to adapt and be flexible, teachers were more able to meet the needs of their diverse learners, and therefore students were able to be more engaged in their classroom. Teachers also reported that students were able to gain ownership of their learning, as well as more autonomy and choice as activities changed and allowed for student-directed and student-centered activities. Given the variety of activities being presented, rather than exclusively adhering to the curriculum, teachers found that students were able to generalize their skills from one activity to another, showing that different types of activities may actually increase student learning and academic skills.

Implication 2: Recommendations for Best Practices

This theory of change clearly details the strengths of KIC, as well as the positive impacts that came from this program. However, teachers also discussed barriers that they faced, which could be developed into recommendations for KIC. The recommendations listed here are meant to apply both to KIC and to other similar programs going forward. They also add to the discussion around the "crisis" in kindergarten (Miller & Almon,

2009), and the ways we can better support students and teachers in the early childhood education space.

My recommendations are as follows:

1. Increasing funding resources for kindergarten on all levels: classroom, school, and district.
2. Allotting more time and resources for kindergarten, including support staff and substitute teachers, and more time for planning and creating innovative activities.
3. Providing better, flexible curricula that are developmentally appropriate for kindergarteners.
4. Implementing inclusive, adaptable, hands-on professional development for teachers.
5. Consulting teachers in education-based research and decision-making.

Each of these recommendations will be discussed in more detail below. Before further discussion, I would like to acknowledge the challenges associated with making changes to accommodate these recommendations. This program is one potential solution for working within a system with a myriad of challenges and barriers, and these recommendations operate under ideal conditions. More discussion is needed around the broader early childhood education system if we truly want to implement long-lasting, influential changes.

Increasing funding resources for kindergarten on all levels: classroom, school, and district. KIC provided funding to teachers on a school level, allowing

teachers to make decisions about what their individual classrooms needed. However, funding may be needed on a broader level rather than a classroom level to create effective change. Providing funding for individual classrooms highlights the disparities in classrooms – anecdotally, some were able to purchase robotics kits, whereas others bought the craft supplies needed for their classrooms. Teachers shouldn't need additional classroom funding in order to purchase things like classroom supplies, further showing that more work needs to be done to create equitable experiences for both teachers and students. Classrooms need to be equipped with the materials needed for kindergarten to be a successful experience for students. There is no other line of work in which the materials needed to be successful are not provided up front, or that the expectation is to use your own resources to be successful. And while it was a great opportunity for teachers to receive extra funding for their classrooms, it could be argued that it shouldn't have been necessary in the first place if public education was properly funded and supported to begin with.

Allotting more time and resources for kindergarten, including support staff and substitute teachers, and more time for planning and creating innovative activities. This work highlighted the needs of teachers when it comes to implementing innovative practices in their classrooms. The teachers in KIC all had similar beliefs about developmentally appropriate kindergarten practices but were often stopped from adhering to these values due to a lack of time or resources. Teachers who set boundaries to create a work-life balance may not have the time to plan or create activities within their workday, and those that had not set those boundaries likely worked outside of school hours to

create activities for their students. That burden could be lessened by the addition of staff to their classrooms, whether that be to provide time during the day for teachers' activity preparation, or for the additional staff to set up activities or work on other tasks that would allow the teacher to put classroom experiences first.

Teachers also mentioned that they wanted to see the classrooms of other KIC teachers to motivate them, but that there was a lack of substitute teachers available to make that happen. Teachers were asking for an extra level of professional development, however due to a district-level shortage of substitute teachers, that was unable to happen. It would be so important to be able to provide the motivation of other teachers in a way other than the PLCs. While these meetings provided a sense of support and community, seeing another teacher's classroom in action may have provided an extra boost for teachers who may have needed it.

Teachers also noted that the curricula they were working with were not adaptable, and as they got to know their students better, they found that by creating adaptable activities, they were better able to serve their students. But this often took extra time as teachers had to create that adaptability rather than it being provided in the curriculum. This highlights another reason why additional support staff may be helpful in making kindergarten more developmentally appropriate for all students. This discussion highlighted that the prescriptive curricula that is currently being used in kindergarten spaces and, given the broad spectrum of development that is a hallmark of this age group and the diverse learners present in classrooms, more work is required to address student needs.

Providing better, flexible curricula that are developmentally appropriate for kindergarteners. Kindergarten expectations are prescriptive and created by people that have very possibly never been in a classroom setting, and so teachers are calling for better, flexible curricula that are developmentally appropriate for kindergarteners. Not only do the current curricula focus extensively on kindergarten standards, they also are heavily didactic in nature, making it challenging to teach students who range so broadly in development and needs at this age.

While curriculum and standards are not an inherently bad thing, the way they have been structured has made it challenging for teachers to create meaningful, hands-on, accessible, playful activities for their students. It has also made it challenging to find time in the day for non-academic activities, and teachers have to spend their own time finding ways to connect the curriculum to other activities, rather than the curriculum being set up to connect to the rest of the kindergarten day and play time. Teachers are doing extra work to "translate" the curriculum into activities that are fun, accessible, and engaging to their students.

Implementing inclusive, adaptable, hands-on professional development for teachers. This evaluation also brought to light the need for inclusive, adaptable, hands-on professional development for teachers. I have argued that didactic learning as the sole way to teach children is not developmentally appropriate, and yet professional development for teachers is often delivered in the same didactic approach. This method of delivering information to teachers is likely not effective for the same reasons that it is not effective for students – it creates a barrier between the teacher and the student and

does not allow for engagement or discovery. Teachers need to be active learners in the same way that their students do. Engaging learning opportunities are effective for everyone, not just young students. Providing better and more hands-on opportunities for teachers may lead to more investment and outcomes from teachers in the same way that it did for students in the KIC program.

Consulting teachers in education-based research and decision-making. Teachers are the experts in their field, and their voices are often left out of discussions that will directly impact their work. If we are aiming to better understand classroom practices, it needs to be done on the ground, in the classroom. I argue that more qualitative work is needed in early childhood education research to better understand the ins and outs of classroom experiences, both for teachers and for students. Teachers mentioned several times that decisions are often made by those that do not spend time in classrooms, and those impacts are not assessed on a classroom level, but often on a broader scale that may not show the nuance that exists in early childhood spaces.

Recommendations for KIC

It is also important to note directions more specifically for the KIC program. Recommendations for improvement going forward would be to implement a "library of best practices" to document teachers' ideas and innovations. This would allow for other teachers to get ideas and strategies from teachers who they might otherwise not hear from until the cohort wide meeting at the end of the school year. Teachers could upload how-to documents and videos to illustrate what worked and didn't work, and ways that activities

could be adapted for students with different needs and abilities. This may also allow teachers who work in varying classroom styles (dual language; looped) to receive support that would be specific to their classroom and students.

It may also be helpful to implement more PLCs or community building opportunities for teachers throughout the school year. Teachers repeatedly noted the positive impacts that came from having a community of teachers and a team for support, and that was mostly based on two or three meetings a year (the PLC with their school, and the two cohort wide meetings). The potential for stronger connections and increased support would likely make additional meetings worthwhile. Another potential addition would be to incorporate meetings specifically related to funding and budgeting given the challenges that were noted in that program component. It may also help to provide teachers with alternative uses for the additional funding, perhaps like using the money to pay a substitute teacher for a day so that they can either use that time to prep activities, or to go visit another classroom like was originally intended.

Directions for Future Studies

Future studies may include collaborating with teachers using focus groups to create an updated theory of change, and including parent, teacher, and administrator voices in evaluating the effectiveness and impacts of the program.

One potential future study with KIC would be to use focus groups to create an updated theory of change based on the one created from this study. This theory of change was created based on information from teacher interviews and my own observations, and

only includes the perspectives of the teachers in the first cohort of KIC. By meeting with teachers in other cohorts, it would provide updated information and be able to show the changes that have occurred since the first cohort of teachers. Also, by working in focus groups, the input would come directly from the teachers, further aligning with the recommendation to include teachers' voices and input in research related to their classrooms.

A follow-up evaluation could highlight differences since the first cohort of teachers and, given the extensive information that now exists about the program itself, more time could be spent to include other perspectives in an evaluation. This may include parents, students, administrators, and possibly teachers that either were not included in KIC or that have since left the program. Gathering information from participants other than teachers would allow for a more well-rounded picture of KIC to be created and may highlight other challenges or benefits related to the program. By listening to those involved in and impacted by KIC, we can better understand the ways it has worked, and the ways that programs like this can be supported both in Portland Public Schools and more broadly in early childhood education and beyond.

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Appendix A: Researcher Reflexivity and Positionality Statement

In qualitative work, it is crucial to take the time to understand and reflect on who you are as a researcher and how your identities, statuses, privileges, and experiences might shape the knowledge you hold, data collection, interpretation of data, interaction with participants, and how research is written and described (Mann & Kelley, 1997; Stein & Mankowski, 2004). Qualitative work is in no way a neutral practice, and it is important to me to acknowledge how my role as a researcher impacts this work.

Experiences/Identities

My own experiences with education have led me to have strong beliefs about what is considered developmentally appropriate for kindergarten students. Not only have I worked and volunteered in a variety of early childhood settings, but I have been a student for almost my entire life. I went to a Catholic private school from kindergarten to eighth grade, and then transitioned to a large, urban, inner-city high school where I was placed in an advanced academic program. I was taught from a very young age that my value stemmed from my academic success, and that school was the most important thing that I could be doing. I think that those experiences have created a bias in terms of this work, because I am a strong believer that the focus of kindergarten should not be academics, likely at least in part due to my own experiences of academic achievement being such a large focus in my life, even as early as preschool. Also, as someone that is in the process of getting a master's degree and is in a PhD program, this likely impacts how I engage with education and the knowledge I have around the topic and may impact how participants interact with me and the level of trust they have.

My identities may impact this work as well. As a white, AFAB (assigned female at birth) person who has had many experiences that women can relate to, I will likely be able to connect with teachers who share those identities. Being queer and genderfluid may also impact how I connect with teachers. Also, I have had experience in several early childhood classrooms and taught in a preschool, and these identities may help me to be trusted by the participants, as we will likely share these identities. My identity as a researcher may create a barrier in talking to participants, as there is sometimes a level of mistrust of researchers, since the stereotype is that researchers come into classrooms and administer a survey and "fix" the problems – something I have heard directly from teachers – but I am hoping that since I am aware of this potential bias teachers might have that I will be able to gain trust in other ways.

It is also important for me to note that I am a novice qualitative researcher, and so this is my first time formally conducting this type of research. This may come through in my research process, or in any nervousness or lack of confidence as I interact with participants or the data. As a late-diagnosed autistic person, I often have "black and white" thinking, and sometimes take things more literally than they are intended or misunderstand social cues. Also, since I was diagnosed late in life, I am still learning how autism impacts me and how I interact with others. This, combined with being an early researcher, and a novice qualitative researcher, may impact how I interact with participants and engage in the interviewing process, how I understand and interpret the data collected, and how I share the findings.

Positionality

Given my background in education both as a student myself and as someone with a variety of teaching experiences in classrooms, I want to take the time to acknowledge that it would be impossible for me to not take a stance when it comes to these practices and debates that are discussed in this study. I have spent a lot of time in the education sphere and in the KIC space, and I feel strongly about developmentally appropriate practices for students as well as for supports for teachers to do what is best for their students. My goal throughout this work is to highlight the experiences and opinions of the KIC teachers that participated in this study, however, I acknowledge that my own opinions and beliefs may come through. I engaged in continuous reflexivity and memoing as I navigated this process and worked to keep the teachers' voices and experiences at the forefront of this project. I also made sure to include and analyze statements that did not align with my own beliefs and was careful to include a well-rounded picture of this project rather than one that fit into my perception or hopes of what KIC might look like.

Appendix B: Consent Form

Dear Colleague,

We are writing to request your consent to participate in an interview as part of an evaluation of the PPS Kindergarten Innovation Cohort. Your participation in this research study is completely voluntary, and the purpose of this letter is to inform you about the study's purpose, the rights of study participants, and the details of the study procedures. This research study is being organized and conducted by **Eli Labinger** and **Cristin McDonough** as a part of their graduate training at Portland State University (PSU), and is being supervised by **Dr. Andrew Mashburn**, Professor of Psychology at PSU.

In this information and consent letter, we describe (a) the **purpose** of the study; (b) your **rights** as a participant in the study should you choose to participate; (c) the **procedures** of the study; (d) an **assurance of strict confidentiality**; (e) **anticipated risks and benefits** of participating in the study; and (f) **contact information** for the researchers should you have any questions or a need for further information about the study.

a. **Study Purpose:** The aim of this research study is to gain a better understanding of PPS kindergarten teachers' experiences in the Kindergarten Innovation Cohort (KIC). Specifically, we are interested in how the KIC program could be improved to better support kindergarten teachers and students.

a. **Study Participants' Rights:** As is standard in all research studies, it is important for you to know that your consent to participate in this study is entirely voluntary. If you choose to participate, you have the right to skip any aspect of the research assessments that we will ask you to complete as part of being in the study. In addition, you can decide to discontinue your participation in the research study at any time without penalty.

a. **Study Procedure:** The study will occur from Fall 2022 to Spring 2023. We are reaching out to you as a follow-up to your completion of the survey you submitted at the end of one of your PLC meetings this year.

- *Interviews.* You will be asked to participate in an interview. The questions we will ask will mainly focus on your perceptions of strategies and barriers to the successful implementation of strategies identified through the KIC program. Interviews will be scheduled at your convenience and will take place via video conference. You will be compensated $50 for your time and effort the each 1-hour interview.

d. **Confidentiality:** All information resulting from this research study–including individuals' identities as study participants and their survey and interview responses will be kept strictly confidential. No one will see any data collected from individual teachers or their classrooms except members of the PSU research team -- not principals, fellow teachers, district office staff, parents, or anyone else. Only aggregated and de-identified numerical and interview response data will be published and/or shared with PPS. All data and recordings collected during the study will be identified only by a unique numerical identifier (and not the participants' names) and will be kept in secure, password-protected data storage systems and locked filing cabinets. No information that discloses your identity will ever be released or published. Research records identifying participants may be inspected in the presence of the Investigator or his or her designate, however, by representatives of Portland State University Human Subjects Research Review Committee for the purpose of monitoring the research. After the study is completed all data will be destroyed.

d. **Study Risks and Benefits:** We anticipate no risks for participation in the study–your data will be confidential and anonymous, and only aggregated and de-identified data will be shared. With regard to study benefits, we hope that the results of this research study will inform how the PPS Kindergarten Innovation Cohort can be improved for teachers and students in following years. To thank you for your time and effort, we will also offer you gift cards in the amount of $25 for each survey (fall and/or spring) and $50 for each interview (fall and/or spring), for a total of $75 - $150 for completing all components of the study.

d. **Contact Information:** If you have concerns or problems about your participation in this study or your rights as a research subject, please contact:

Office of Research Integrity at PSU:
PO Box 751, Portland, OR 97207-0751
Phone: (503) 725-5484
Toll Free: 1 (877) 480-4400
Email: psuirb@pdx.edu

If you have questions about the study itself, contact Cristin McDonough at 978-905-0604 or by email: cristin@pdx.edu.

Thank you very much for considering this request for your participation in the study.

Sincerely,

Eli Labinger, M.S.
Department of Psychology
Portland State University

Cristin McDonough
Department of Psychology
Portland State University

Andrew Mashburn, Ph.D.
Department of Psychology
Portland State University

Portland State
UNIVERSITY

PPS Kindergarten Innovation Cohort Evaluation:
Participant Consent Form (Copy)

Study Investigators:
Eli Labinger, MS
Cristin McDonough
Andrew Mashburn, PhD
Department of Psychology,
Portland State University, Portland, Oregon

PLEASE KEEP THIS DOCUMENT FOR YOUR RECORDS.

I have read and understand the attached letter regarding the research study entitled "PPS Kindergarten Innovation Cohort Evaluation"

I understand that my participation in the above research study is entirely voluntary, that I may refuse to participate, and that I am free to withdraw from the study at any time without any consequences. I understand that if I withdraw, I may be asked to conduct a brief, confidential interview with the lead researcher about the reason for my withdrawal.

I have received a copy of this consent form for my own records. I understand that by signing this document, I consent to my participation in this study. I also understand that by signing this document I am in no way waiving my legal rights.

PLEASE CHECK ONE:

_____ YES, I agree to participate in this research study.

_____ NO, I do not consent to participate in this research study.

_____ _____
Teacher Signature Date

PLEASE SIGN AND RETURN THE FOLLOWING PAGE.

Portland State
UNIVERSITY

PPS Kindergarten Innovation Cohort Evaluation:
Participant Consent Form

Study Investigators:
Eli Labinger, MS
Cristin McDonough
Andrew Mashburn, PhD
Department of Psychology,
Portland State University, Portland, Oregon

PLEASE READ, FILL OUT, and SIGN BELOW.

I have read and understand the attached letter regarding the research study entitled "PPS Kindergarten Innovation Cohort Evaluation"

I understand that my participation in the above research study is entirely voluntary, that I may refuse to participate, and that I am free to withdraw from the study at any time without any consequences. I understand that if I withdraw, I may be asked to conduct a brief, confidential interview with the lead researcher about the reason for my withdrawal.

I have received a copy of this consent form for my own records. I understand that by signing this document, I consent to my participation in this study. I also understand that by signing this document I am in no way waiving my legal rights.

PLEASE CHECK ONE:

_____ **YES**, I agree to participate in this research study.

_____ **NO**, I do not consent to participate in this research study.

_____ _____
Teacher Signature **Date**

Please send a signed copy to cristin@pdx.edu. Please keep the study information letter and the attached copy of the consent form for your own records.

Appendix C: Email Template

Hello [teacher's name]

My name is Cristin McDonough, and I am one of the Portland State University researchers and graduate students working on the Kindergarten Innovation Cohort evaluation. You have likely seen me at some of the PLC meetings, most recently at the April meeting. You may remember that I asked you a while back to fill out a survey - thank you for doing that! At the end of the survey, it was mentioned that we may reach out about scheduling an interview.

If you are still interested in being interviewed, please fill out the consent form attached below and email the last page back to me. Also, if you could send me three to four days/times in May (starting the week of 5/8) that work best for you for an interview, that would be great. Please plan for roughly an hour and fifteen minutes from start to finish. The interview will be focused around your experiences with KIC, and your teaching practices.

I am planning to conduct interviews over Zoom (as it will transcribe the interviews as we go along), and so once we decide on a date that works for both of us, I will send you a Google Calendar invite with the Zoom link attached. If for any reason Zoom does not work for you, please let me know.

Thank you again for your willingness to participate, and I look forward to hearing from you!

Appendix D: Participant Version of Interview Questions

Students in your classroom

1. What do you hope your students will gain from being in your classroom?
2. How would you describe a successful student in your classroom?
3. What does your school think a successful student looks like?

Being a KIC teacher

4. How did you learn about KIC?
5. Could you describe the goals of KIC to me in your own words?
6. Has KIC changed you as a teacher in any way?
7. Why do you think KIC has had that impact? [If it hasn't had an impact, why not?]
8. How have the other teachers in the PLCs (Professional Learning Communities) impacted you? [If they haven't, why not?]

Teaching

9. Could you describe your teaching practices now and how they have changed since the start of KIC?
10. Has what you believe about what is important for students in kindergarten changed since the start of KIC?

Appendix E: Interview Script

Guiding Research Question: How do teachers in the Kindergarten Innovation Cohort describe changes in their classroom experiences as a result of the program?

Hi, [teacher's name]. Thank you so much for joining me today! I am looking forward to talking to you.

[Before beginning the interview, say the following, stopping to hear consent or agreement after each point.]

Before we get started, I'd like to ask your permission to record this interview.

The recording will be used to transcribe the interview verbatim. Only the researchers associated with this research study will have access to the recording.

[pause for consent]

In this interview we will be talking about your experiences as a teacher and with KIC. It should take roughly an hour to complete. If at any point you want to stop, please let me know.

[pause for consent]

Based on this information, do you agree to participate in this interview?

[pause for consent]

To start: I'd love to start by hearing how you got into teaching.

- What are some things that influenced you to teach?
- Have you always taught kindergarten?
- How long have you been at [school name]?

Thank you for sharing that! I have some questions I'd love for you to answer.

Students in your classroom

1) **What do you hope your students will gain from being in your classroom?**
   a) What would make you proud if you heard someone talking about one of your students?
   b) When your students leave your classroom at the end of the school year, what do you hope they leave with?
2) **How would you describe a successful student in your classroom?**
   a) What would you need to make all of your students successful?
   b) What does a successful student look like to you?
   c) Can you describe someone in your classroom that you would consider to be a successful student?
3) **What does your school think a successful student looks like?**
   a) If your principal/administrator was here, what would they say a successful student looks like?
   b) Does your school have any goals or values they hold for their students?

Being a KIC teacher

4) **How did you learn about KIC?**
    a) Describe what it felt like to learn about KIC
    b) Is there anything that immediately resonated with you?
        i) Why?
5) **Could you describe the goals of KIC to me in your own words?**
    a) What does KIC mean to you?
    b) Do you agree with the goals you just described to me?
6) **Has KIC changed you as a teacher in any way?**
    a) Can you think of a time when you noticed that KIC influenced you?
    b) Has KIC changed anything about your classroom and students?
7) **Why do you think KIC has had that impact? [If it hasn't had an impact, why not?]**
    a) How have you experienced KIC?
    b) What experiences from KIC have influenced you?
8) **How have the other teachers in the PLCs (Professional Learning Communities) impacted you? [If they haven't, why not?]**
    a) Why do you think that is?
    b) Can you describe an instance where another teacher influenced you?
    c) What about other influences or impacts?

Teaching

9) **Could you describe your teaching practices now and how they have changed since the start of KIC?**
    a) Can you provide a specific example of that?
    b) What has been the most noticeable change?
    c) What challenges have you encountered as your practices have shifted?
10) **Has what you believe about what is important for students in kindergarten changed since the start of KIC?**
    a) What have you noticed that's changed?
    b) Have the shifts in your beliefs impacted your teaching?
    c) Has it impacted how you interact with your students?
    d) What do you value as important for your students?
        i) Why do you think that is?
        ii) Or, why not?

Last question: Is there anything that I haven't asked you today that is important for me to understand? Anything else you'd like to add?

Debrief:

1. **Is there anything you'd like to share about the interview process today?**

2. **Do you have any suggestions for me for future interviews?**

That brings us to the end of the interview! Thank you so much for participating, and it means a lot that you made time in your schedule for this interview. If any questions come up or anything like that, feel free to email me! ***[include email in chat]*** *Also, it was mentioned in the consent form that you would be receiving a gift card as a thank you for taking the time to participate! Would you prefer an e-gift card or a physical card?*

Appendix F: Survey Questions (PSU Quantitative Evaluation)

Finishes tasks
Can count to 20 or more
Takes turns and shares
Has good problem-solving skills
Is able to use pencils and paint brushes
Is not disruptive of the class
Knows the English language
Is sensitive to other children's feelings
Sits still and pays attention
Knows the names of most of the letters of the alphabet
Can follow directions
Identifies primary colors and shapes
Knows the sounds that most letters make
Can focus attention on a single task
Can identify numbers 0 through 10
Communicates needs, wants, and thoughts verbally in primary language
Is friendly to classmates and teachers
Children who begin formal reading and math instruction in Head Start or pre-K will do better in Kindergarten
Most children should learn to read in kindergarten
Parents need help in learning how to teach their children how to read
Parents should set aside time every day for their kindergarten children to do homework
Homework should be given to kindergarten children almost everyday
Parents should read to their children and play counting games at home regularly
Attending Head Start or pre-K is very important for success in kindergarten
Staff members in this center/school generally have school spirit
The level of child misbehavior (for example, noise or horseplay) in this center/school interferes with my teaching
Many of the children I teach are not capable of learning the material I am supposed to teach them
I feel accepted and respected as a colleague by most staff members
Teachers in this center/school are continually learning and seeking new ideas
Routine administrative duties and paperwork interfere with my job of teaching
Parents are supportive of center/school staff

I really enjoy my present teaching job
I am certain I am making a difference in the lives of the children I teach
If I could start over, I would choose teaching again as my career
Teacher-directed whole class activities?
Teacher-directed small group activities?
Teacher-directed individual activities?
Child-selected activities?
Work on learning the names of the letters
Practice writing the letters of the alphabet
Have child(ren) tell you a story
Practice the sounds that letters make
Listen to you read stories where they see the print (e.g., Big Books)
Listen to you read stories but they don't see the print
Retell or make up stories
Show child(ren) how to read a book or magazine (the way to hold it, point to words)
Have the child(ren) practice writing or spelling their names
Learn about rhyming words and word families such as cat, mat, sat
Practice or teach directional words such as over, up, in, etc.
Count out loud
Work with shape blocks
Counting things such as small toys, chips, etc. to learn math
Use dance or act out stories to practice math ideas such as numbers, size, or shapes
Work with rulers, measuring cups, spoons, or other measuring instruments
Talk about calendar or days of the week
Work on arts and crafts activities
Go on field trips
Have the child help with chores such as cleaning, setting the table, caring for pets, or cooking

Answer choices:
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree

Answer choices:
No Time
0-30 minutes
30 minutes to 1 hour
1-2 hours
More than 2 hours

Answer choices:
Never
Once a month or less
Two or three times a month
Once or twice a week
Three or four times a week
Every day

Appendix G: Qualitative Analysis Codebook

Theme: Innovation in Action. Innovation in action includes examples of how teachers decided to "reinvent kindergarten" in their classrooms, as well as changes to classroom practices. Innovation in action does not include positive impacts or challenges to implementation. Innovations include play to start the day, being more flexible around activities and classroom structure, creating child-centered learning, and combining play and learning activities.

Code	Description	Example
Changes to classroom practices	Includes topics related to changes in classroom practices, including balance and integration, combining play and learning, and prioritizing non-academics.	*So you can find ways to connect it to your science and to your reading and your units. And then it's also another way to stick art in there, because we don't always have time for that art. Give math free choice, stuff like that.*
Starting the day with play	Includes quotes related to the innovation of starting the day with play.	*I have definitely been more intentional about how I set up my schedule. I made the shift based on seeing what some other colleagues have been doing in KIC of like starting that day with the play time and the community time.*
Flexibility	Includes topics related to flexibility and adjusting to student needs.	Teacher levels of understanding what kids are like and how they behave and what they might want/need. So many things "depend on the kid" (PLC)
Less structure	Includes topics related to playful learning, creativity, and structure or less structure.	It's okay to change/abandon plans according to what your students need that day. (PLC)
Child-centered	Includes child-centered practices like inclusivity and accessibility, student autonomy, students as active parts of the classroom, "whole child" examples, guided play, engagement, and social emotional practices.	*Where can I sneak in the play? Where can I sneak in student choice like? Where is there a little more space for student ownership and creativity?*

Theme: Pathways to Implementation. Pathways to implementation includes examples of what helped teachers to enact the KIC program in their classrooms. It also includes the values and beliefs that define KIC and the ways in which they contrast the values and beliefs of the larger systems (schools, districts, national standards/assessments, general beliefs about what kindergarten should be).

Code	Description	Example
Permission	Includes topics related to teachers' job as an educator, and the KIC values versus the kindergarten standards and how teachers have permission to focus on KIC values.	*In knowing our kids, we figure out how to best reach them, and how to best like, light their passion and help them move forward. And I think that this team has really…given me the space to be able to say, Hey, this is why I'm doing this, because I'm meeting the needs of these students and your curriculum frankly doesn't do that because it can't!*
Teachers care about impacts/dissemination	Includes teachers wanting to share out what they've learned, the goals of KIC, and the successes they've had.	*How can we teach others about the importance of play in the classroom? Be it at your school, at the district level, at state level.*
Teacher values aligned with KIC	Includes topics around shifts in beliefs, the KIC Norms and Needs, and ideas around what is important for students.	*This is what I wanted. Just what I dreamed of is like a group of people who want to teach like this, and who want to really push these values forward.*
Early Learner Core Values	Includes discussion around the Early Learner Core Values as well as what a successful student looks like.	*I think there's just like always more of this piece of like those Early Learner Core Values are like they're in the back of my head a little more, and I'm looking for them.*

Theme: Positive Impacts of KIC – Teachers. This includes positive effects of KIC on teachers. This does not include classroom-level impacts, but rather focuses on what teachers stated around how it impacted them as a teacher or the ways in which they engaged. It does not include changes in classroom practices or impacts on students. It is not directly related to implementing the program. This includes building connections with students, feeling more confident, feeling empowered to be more flexible and to defend their teaching choices, and having fun in their classrooms.

Code	Description	Example
Teacher community	Includes topics related to the impact of KIC, the impact of other teachers, and how KIC supports teachers.	*But I think the biggest piece really is just like the idea sharing in the both directions*
Teacher confidence	Includes topics related to teacher confidence and empowerment, teachers' ability to defend their teaching and speak up, and the permission KIC gave them to do what they know is best.	*And I think this team has...given me a platform to be like, Yes, I do know what I'm talking about. I do know how to teach kids in a way that's fun and engaging where they're really learning rigorous academics. And that confidence for me especially, has been really important*
Fun for teachers	Includes topics related to teacher joy, teacher self-compassion, and the ways teachers have found fun in their classrooms.	Where is the space for adults to play? (PLC)
Connections with students	Includes teachers connecting with their students, kids teaching their teachers, and teachers getting to know their students.	*It's not this, like, okay, everybody get your stuff unpacked and get in, and we need circle, and then math time, and then this and this and this, and it's allowed me to slow down my interactions and slow down my connections.*

Theme: Positive Impacts of KIC – Students. This includes positive impacts of KIC that were described that had a direct effect on students. This does not include classroom or teacher level changes. This includes building community, finding/adding joy into the day, and helping students to have ownership of their learning and find their sense of self.

Code	Description	Example
"What do you hope your students will gain from being in your classroom?"	Includes how each teacher interviewed answered this question.	*Find their sense of ownership around their classroom, their school, their classroom community and as a foundation for the academic pieces.*
Connections with students	Includes topics related to community and joy found in connections with students.	*Play can help you connect with the kids, like I have several who are super quiet and didn't talk for a long time, and that is something that you can talk to them about, and it gives you a way to connect to them.*
Supporting students	Includes examples of how teachers found ways to support their students.	Rules of community to create independence (PLC)
Skills generalizing	Includes examples of when teachers saw academic skills generalizing in their classrooms.	*I put new cubes out, and he's like, "I made a cube," and the little boy goes, "No, that's not a cube! That's a rectangular prism. Look on the side. You can see it's a rectangle." This is what we taught this year. But you won't have those conversations if you're just doing workbook pages.*

Theme: Barriers to Implementation. Barriers to implementation includes examples of what challenges or roadblocks that teachers endured as they engaged with the KIC program. This includes both classroom-level and broader challenges that were discussed. These include challenges related to time, the standards and practices that did not change along with KIC, and broader expectations around kindergarten practices.

Code	Description	Example
Standards and practices that didn't shift	Includes topics related to assessments and standards not being aligned, challenges with curriculum, and other pieces of the kindergarten experience that did not change along with KIC.	*Like, I think the challenge has been that the learning can look really different. And so, and what we're trying to do doesn't necessarily match the cookie cutter standardized testing.*
Challenges related to time and resources	Includes challenges teachers noted related to classroom resources, time, and energy when it came to implementing KIC.	*I don't have the capacity to put the energy, as much energy as I want to, into this project.*
Expectations around KIC	Includes barriers that were mentioned in relation to expectations around the components and implementation of KIC.	*I think, about how much more there could be if the initial plans of like all these classroom visits and things that were supposed to happen, had happened.*
Misaligned kindergarten expectations	Includes topics related to the push for academics, assessments and standards being the priority, and the ways teachers' schools defined and measured a successful student.	*And like half of the year, we have more PreK like students. And in the second half of the year we have more like first grade students. And so, it's such a big transition.*