



Full-Day 4K in Year Two: Examining Classroom Pedagogy in 4K and 5K

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Executive Summary

MMSD implemented full-day 4K starting in 2021-2022 as a part of the district's equity goals, with the intention to provide free and supportive programming while addressing family and child needs. During 2022-2023, the [Madison Education Partnership](#) (MEP), in collaboration with the MMSD Departments of Early Learning and Research & Innovation, implemented a second year of an evaluation of the program to understand how enrolling in full-day 4K affects student learning relative to half-day 4K and whether children who participated in the first year of the evaluation showed additional gains in 5K. In addition to [assessing gains in achievement](#) over the course of the year, we observed in 24 classrooms and interviewed 23 teachers to examine patterns in 4K and 5K pedagogy that may be influencing child gains across those years and identify qualitative differences in instruction, time use, and culturally responsive and inclusive practices across full-day 4K, half-day 4K, and 5K classrooms. In this report, we discuss findings from the classroom observations and interviews.

Findings

Differences between full-day and half-day classrooms

- We observed more individualized supports (e.g., special seating, individualized visual schedules, scaffolding) in full-day classrooms compared to half-day classrooms, which reflects teachers' observed responsiveness to individual child needs based on disability and/or cultural background.
- We observed more instances of the use of non-standardized English (e.g., Spanish, American Sign Language) in half-day classrooms, which, in part, may reflect who was placed in those classrooms (e.g., placement of children who are Deaf or Hard of Hearing).
- Full-day classrooms spent a larger proportion of time in whole group instruction compared to half-day classrooms, which often included more routines-based meeting activities, such as reviewing the classroom calendar and discussing the weather. While these meeting activities have benefits, extensive time spent on them may interfere with intentions to maximize the additional time of full-day 4K.
- Teachers reported that full-day 4K allowed them to focus on fewer students and fit in more activities or engage in activities at a more manageable pace, though some teachers expressed that a full day of school may be tiring for some four-year-olds, depending on family context.
- Some 5K teachers believed that full-day 4K may build children's stamina for the full day of school in 5K, but 5K teachers generally agreed that any amount of 4K programming provided children with a good foundation of knowledge and skills.

Differences between 4K and 5K classrooms

- 4K and 5K classrooms generally scored similarly on the Classroom Assessment Scoring System (CLASS) domains, which examine general teacher-child interactions related to teachers' emotional support towards children, classroom organization, and teachers' instruction. The primary difference in CLASS scores between 4K and 5K classrooms was observed within the Emotional Support domain, whereby 5K classrooms generally scored lower than 4K classrooms on the specific CLASS dimension, Regard for Children's Perspective (the extent to which teachers based interactions and classroom activities on children's interests and motivations, and offered opportunities for children to demonstrate responsibility and autonomy).
- 5K classrooms spent a larger proportion of time in whole group instruction and much less time in centers compared to full-day and half-day 4K classrooms. Additionally, they spent a larger proportion of time on literacy and language arts instruction.
- Slightly more culturally responsive practices (CRPs) were observed in 5K classrooms (98 compared to full-day (88) and half-day (92) classrooms; this primarily reflected a greater use of individualized supports (e.g., children using a tablet as an alternative and augmentative communication [AAC] device) in 5K classrooms.
- 5K teachers reported having little flexibility in their curricula and having to focus on learning and implementing new curricula with fidelity; this potentially interfered with their ability to be responsive to children. Meanwhile, 4K teachers more often reported basing curricular decisions on child interests, abilities, and support needs.

General Findings

- Overall, the most common CRPs were the use of individualized supports, non-Standardized English (e.g., Spanish), and practices that build classroom community.
- Teachers reported staffing challenges that specifically impacted their ability to support children with disabilities and multilingual children, particularly: a) securing consistent educational aides (EAs) and/or special education aides (SEAs); and b) their ability to access and collaborate with specialized teachers (i.e., cross-category special education teachers and teachers for dual language learners).
- Teachers described classroom placement decisions (i.e., clustering children with disabilities and multilingual children in specific classrooms) and practices based on one aspect of a child's identity (i.e., identification as a child with a disability or status as a multilingual or dual language learner); this meant children who both have a disability and were multilingual did not consistently receive support that was responsive to their strengths and needs.

Preliminary recommendations/consideration for reflection and proposed future work

We observed several patterns that indicate how full-day and half-day classrooms may be differentially supported to maximize child outcomes and potential opportunities to ensure 5K classrooms are equipped to build on the growth children achieve in 4K. First, we observed a higher proportion of individualized supports in full-day 4K and 5K classrooms compared to half-day 4K classrooms. Administrators may want to consider how to promote the use of individualized supports in half-day 4K classrooms given that teachers in such classrooms serve more children (across their two sections) and have less time with the children than full-day 4K teachers. For instance, this may include professional development around the use of individualized supports that are more easily embedded into the classroom environment and typical routines in a short period of time (e.g., the use of visual schedules). Providing individualized support based on an understanding of children’s individual abilities, support needs, and/or cultural backgrounds is a key inclusive practice for children with disabilities and children from diverse cultural backgrounds.

We observed a higher portion of classroom time spent in whole group teaching in full-day 4K and 5K classrooms compared to half-day classrooms. Yet, there is some research evidence that whole group instruction can be a less-effective instructional format for language development, in particular, because the activities during large group instruction are often rote- and recitation-based, which we observed (e.g., Cutler et al., 2023). Therefore, administrators may consider how to help teachers diversify their instructional formats, including building in additional small group and play-based instructional opportunities in full-day 4K and 5K. We observed more small group instruction in both half-day and full-day 4K classrooms in 2022-23 compared to 2021-22, but continuing to increase the use of small groups could be one way to best utilize the additional time in full-day classrooms. In 5K, increasing time in small group instruction may require helping teachers understand how to best differentiate and adapt new curricula. That is, as 5K teachers are provided with curricula, school administrators may offer additional guidance and coaching around how to adapt curricula to address different child abilities, support needs, and interests. 5K teachers reported that they were still learning new curricula and expectations of fidelity meant they were less able to adapt said curricula to be responsive to children. Learning how to balance delivering rigorous curricula with child responsiveness could help 5K teachers meet children where they are and better build on prior abilities and support needs.

When considering children with disabilities and children who are dual language learners, in particular, program leaders and teachers may consider how classroom placement and service delivery decisions and practices can be more responsive to children’s multiple identities, including disability and cultural and linguistic background. Relatedly, schools may consider how to support more consistent collaboration between classroom teachers, aides, and specialized teachers (e.g., cross-category special education teachers, teachers for dual language learners) and/or related services providers (e.g., speech therapists, occupational therapists). This could significantly impact teachers’ abilities to support children with disabilities within their classroom on a daily basis.

Introduction

Full-day 4K, which began in 2021-2022, is a key part of MMSD's equity efforts to address persistent gaps in opportunities and outcomes for marginalized students in the community, particularly students of color and families who are socioeconomically-disadvantaged. Moreover, MMSD has increasingly attended to the particular needs of students with disabilities within its racial equity efforts. To that end, during 2022-2023, the [Madison Education Partnership](#) (MEP) partnered with the MMSD Departments of Early Learning and Research & Innovation to implement a second year of a full-day 4K evaluation. The overarching purpose of the second year was to understand how enrolling in full-day 4K affects student learning relative to half-day 4K, whether children who participated in the first year of the evaluation showed additional gains in 5K, and the extent to which 4K and 5K teachers implemented culturally responsive and inclusive practices to support children's learning. In addition to assessing gains in achievement over the course of the year, we observed 24 classrooms and interviewed 23 teachers. The goal of the observations and interviews was to examine patterns in 4K and 5K pedagogy that may be influencing child gains across those years and identify qualitative differences in instruction, time use, and culturally responsive and inclusive practices across full- and half-day 4K classrooms as well as 5K classrooms. In the following report, we discuss findings from the classroom observations and interviews.

During the 2022-2023 school year, we expanded the full-day 4K evaluation from the prior year. In addition to observing half-day and full-day 4K classrooms and interviewing those teachers, we added a sample of 5K classrooms. The goal of this component of the evaluation was to provide important information addressing the following research questions:

- a) How have teachers' practices changed after a year of full-day 4K?
- b) To what extent and in what ways do full-day and half-day 4K teachers differ in instructional content, instructional formats, and their use of culturally responsive and inclusive practices?
- c) To what extent and in what ways do 4K and 5K teachers differ in instructional content, instructional formats, and their use of culturally responsive and inclusive practices?

The information presented here can provide some insight into mechanisms underlying findings from the child assessments conducted as a part of the 4K evaluation, including why children may or may not exhibit greater growth in full-day 4K and how 5K may add to child gains after 4K or possibly contribute to any fading of 4K effects on children. We hope this information will inform an understanding of how to support equity across 4K and support children's transition from 4K to 5K.

Methods

Sampling

For the qualitative sample, we prioritized classrooms included in the quantitative evaluation of full-day 4K during the same year. We selected classrooms that were diverse in terms of students' racial background and included students with identified disabilities while still being representative of the school district. We generally included classrooms in the sample if they were a) included in the quantitative data collection sample; b) located in a school that was within one standard deviation of the district average percent of students of color (i.e., between 24-62%); and c) had students identified with disabilities. We specifically wanted to explore the experiences of children with disabilities because that was not a focus of the evaluation last year and because children with disabilities are not represented in the quantitative evaluation sample. Bilingual classrooms were not included in the sample given that unique context.

We initially observed 24 classrooms (8 half-day 4K classrooms, 7 full-day 4K classrooms, 9 5K classrooms) across 10 elementary schools and one community-based center twice (i.e., two Rounds of observations). We also interviewed 23 of the lead teachers during the first round of observations about their instructional goals, classroom schedule, and use of inclusive and culturally responsive practices. Then, we returned to 19 of those classrooms for a third round of observations. At that time, we also interviewed all 19 lead teachers of the classrooms we observed. We were not able to return to all classrooms a third time due to time constraints. During the second round of interviews, we asked teachers about shifts in their practice over the course of the year, perceived differences between 4K and 5K priorities and pedagogy, and remaining follow-up questions about classroom observations.

Data Collection

During the first round of observation, two observers completed a semi-structured observation protocol recording classroom materials as well as the use of culturally responsive and inclusive practices. Round 1 observations and interviews took place between November 2, 2022 and January 31, 2023. During the second round of observations, one observer repeated the semi-structured observation protocol while the second observer used the Classroom Assessment Scoring System (CLASS), a standardized observation tool that examines teacher-child interactions broadly. Round 2 observations took place between February 10, 2023 and May 3, 2023. During the third round of observations, two observers again used the semi-structured observation tool. In total, the team conducted 67 observations. Round 3 observations and interviews took place between May 4, 2023 and June 1, 2023. Across all three rounds, observations took place for approximately 1.5-2 hours. We tried to vary the time we observed classrooms during across rounds in order to more accurately reflect classroom activities.

Semi-Structured Observations. We observed classrooms using an adapted version of the culturally responsive practices observation tool developed last year in partnership with Madison Metropolitan School District (MMSD) that built on previous MEP [work](#). Observers recorded teaching content (e.g., math, language and literacy, social-emotional development), format (e.g., whole group, small group with or without a teacher leading, individual interactions), and the use of culturally responsive and inclusive practices (e.g., individualized support, incorporation of non-standardized English or languages other than English, developing classroom community). The culturally responsive materials and practices we observed were based on prior research that has conceptualized culturally relevant and responsive practice (e.g., Aronson and Laughter, 2016; Bennett et al., 2018; Gay, 2010; Ladson-Billings 1995, 2014). See Appendix A for the observation tool.

Based on our use of the observation tool last year and the expanded project focus this year on inclusive practices for children with disabilities and 5K classrooms, we adapted the observation tool and protocol in several ways. First, some observation codes were redefined or collapsed for clarity and/or to better reflect typical classroom practices observed last year. For example, “Language” and “Literacy” were previously separate codes, but we collapsed them into a single code because we found they were typically supported, and coded, together. Additionally, some codes and protocol directions were redefined to reflect the expanded focus of work this year. For example, “individualized support” was expanded to include both individualized support intended to help children of color and those whose home language is not English participate and learn in activities (e.g., naming letter sounds in both English and a child’s home language) and support intended to help children with disabilities access the curriculum and learn (e.g., providing visual cues when verbally giving directions; adapting an activity to support accessibility).

Classroom Assessment Scoring System (CLASS). During the second round of observations, while one observer used the semi-structured observation protocol described above, another observer conducted an observation using the Classroom Assessment Scoring System (CLASS). The CLASS is a standardized and validated measure of teacher-child interaction that MMSD has used in the past to assess classroom quality and provide targeted professional development. Observers conducting the CLASS observations were trained and certified in the appropriate CLASS measure (Preschool or Kindergarten-Third Grade). For the purposes of this evaluation, we used the CLASS to understand teachers’ general practices and interactions with students outside of the explicit culturally responsive and inclusive practices captured by the semi-structured observation tool. The CLASS is divided into three domains: Emotional Support, Classroom Organization, and Instructional Support (Pianta, La Paro, & Hamre, 2008). Observers document teacher-child interactions across a variety of activities and then score classrooms on dimensions within each of these three domains on a scale of 1-7. The dimension scores are then averaged to come up with the domain score.

Teacher Interviews. We interviewed lead classroom teachers during an agreed upon time that would be least disruptive to classroom instruction (e.g., outside time, during the first half of center time). Interviews helped us learn more about teachers’ backgrounds, how teachers planned their time (including changes in their schedules and routines after teaching full-day 4K before), their priorities and goals for 4K and 5K (including 5K teachers’ expectations for children coming into 5K), and their experiences and approaches to being responsive to children of color and children with disabilities in their classroom. Interviews lasted approximately 30 minutes. We were not able to interview one teacher due to extenuating circumstances. See Appendix B for the general interview protocols. Note that some aspects of the protocol were individualized to teachers to ask about observed practices.

Findings

Classroom Observations

Similarities and Differences between Full-Day and Half-Day 4K. Half-day and full-day sections were very similar to one another, for the most part. We observed teachers implementing similar numbers of culturally-responsive practices (CRPs) in half-day (92) and full-day (88) over the course of the year. However, half- and full-day sections did differ slightly in their most common CRPs. Figure 1 illustrates the average percentage of each CRP observed across all three rounds in full-day 4K, half-day 4K, and 5K classrooms. See Table 1 for a breakdown of the most common CRPs and second most common CRPs across the classroom sections for each round.

Figure 1. Percentage of Culturally Responsive Practices (CRPs) Observed Across Rounds for Each Type of Classroom (Percentage of Total CRPs Observed)



Figure 1 is a bar graph that depicts the percentage of culturally responsive practices (CRPs) observed across rounds for each of the three types of classroom sections. The Y axis is the percentage of total CRPs observed and the X axis is the seven types of CRPs observed for: multicultural literature and materials, incorporating non-standardized English, developing classroom community, using social justice framework/practices, discussing teacher or child social identities, individualized support, and family engagement. There were few observed instances of multicultural literature and materials, using social justice framework/practices, and discussing teacher or child social identities. The most common CRPs were individualized supports, developing classroom community, and incorporating non-standardized English (in 4K only).

In full-day classrooms, the most common CRP across rounds was individualized supports (38% of all CRPs observed in full-day 4K) followed by the use of practices that develop classroom community (27% of all CRP practices observed in full-day 4K). In half-day classrooms, the use of non-standardized English (e.g., Spanish, American Sign Language) was the most common CRP (37% of all CRP practices observed in half-day 4K) followed by practices that develop a sense of classroom community (20% of all CRP practices observed in half-day 4K). Examples of building classroom community included facilitating children’s play across differences or disagreements, engaging in whole group activities where children shared about their home life or interests, and suggesting children move to sit with a child who was eating by themselves.

Table 1. Most Common Culturally Responsive Practices (CRPs) Across Classroom Sections (Percentage of Total CRPs Observed)

Classroom Type	Most Common CRP			Overall Most Common CRP	2 nd Most Common CRP			Overall 2 nd Most Common CRP
	Round 1	Round 2	Round 3		Round 1	Round 2	Round 3	
Full-Day	IS 40%	CC 71%	IS 39%	IS 38%	NSE 28%	IS 14%	CC 21%	CC 27%
Half-Day	NSE 32%	NSE 67%	NSE 39%	NSE 37%	IS 30%	CC 33%	IS 24%	IS 24%
5K	IS 51%	IS 65%	IS 47%	IS 40%	MLM 18%	CC, FE (tied) 12%	CC 33%	CC 13%

Note: CC=Classroom Community; IS=Individualized Supports; NSE=Non-Standardized English; FE=Family Engagement; MLM=Multicultural Materials

More individualized supports were observed in full-day classrooms (33 instances; 38% of observed CRPs) compared to half-day classrooms (23 instances; 24% of observed CRPs), and individualized supports represented a larger portion of CRPs in full-day classrooms across the three rounds of observations. Individualized supports were recorded when teachers provided scaffolding, accommodations or modifications, or other types of help to a specific child based on an understanding of their individual abilities, support needs, and/or cultural background to enable the child’s participation and learning while maintaining high expectations. Examples of individualized support included children being able to use special seating (e.g., a rocking chair), a teacher using an individualized visual schedule with a child, and teachers or aides providing a child with scaffolding cues to spell out words. For example, in the following excerpt, a full-day 4K teacher helps a child spell their name. Note that the letters of the child’s name have been changed for confidentiality and all child and teacher names have been removed in this report.

[CHILD]: [TEACHER], can you write my name?

Teacher: You do the first three letters. I know you can do that.

Child does.

Teacher: ADD...I...

Child: S

Teacher: O

Child: N

The teacher knew the child's abilities and prompted her to exercise those and then helped her finish spelling her name. What makes this example even more powerful is that this exchange took place during Round 3 observations. The same child was observed asking the teacher to write her name during Round 1 and the teacher did it. By the end of the year, the child had developed the ability to mostly write her name and the teacher knew that and prompted her to continue growing in that skill.

Teachers were observed engaging in non-standardized English (NSE) more in half-day classrooms (35; 40% of observed CRPs) compared to full-day classrooms (21; 24% of observed CRPs), though this could have been because of the placement of dual language students and students with disabilities in those classrooms. For instance, we recorded consistent use of American Sign Language (ASL) in a half-day classroom within a school that was designated for students who are Deaf/Hard of Hearing. Additionally, more instances of family engagement or referral to children's home lives were recorded in half-day classrooms (13; 14% of observed CRPs) compared to full-day classrooms (4; 5% of CRPs).

While the use of languages other than standardized English was observed often last year as well, we observed more substantive examples this year, including teachers providing the morning message in multiple languages and reciting the Pledge of Allegiance in English and Spanish. There were also individualized instructional examples such as the following exchange where a teacher was having children draw what they wore in the winter and write a sentence about it:

T to [CHILD]: What do you wear when it's cold? Hace frio [*It's cold*], what do you like to wear?

Child inaudible

T talks to another child at the table about their picture.

T to [CHILD]: Ouuu...it's your favorite. Es tu favorito [*It is your favorite*]...hace frio [*It's cold*]...(T seems to be describing the different things she's drawn)...Chaqueta [*Jacket*]. Sombrero [*hat*] - your hat. Write hat. Escribe hat [*Write hat*]...What does it say?

Child inaudible

T: Now write hat. Escribe hat. [*Write hat.*] /H/a/t/...muy bien [*very good*]...yay, and what does it say?

[CHILD]: Hat.

T: Hat.

In addition to giving the child directives in Spanish (frequently observed last year), the teacher both acknowledged the child's work using Spanish and encouraged the child's English writing skills at the same time. Even without knowing much Spanish, the teacher engaged in a complex interaction that ultimately supported the child's bilingual language development.

Figure 2 illustrates the percentage of different types of instructional content observed across rounds for each type of classroom (full-day 4K, half-day 4K, 5K). See Table 2 for a summary of the most common instructional content observed for each classroom type over the course of the year. The most common instructional content was literacy and language arts for both full-day and half-day 4K classrooms. The second most common instructional content in full-day 4K was Meetings, which include primarily routine-based activities in a whole-group format, such as greeting each other, reviewing the calendar and weather, and introducing class activities for the day. The second most common instructional content for half-day 4K classroom sections was Reading. One noted difference between half-day and full-day classrooms was that full-day classrooms were observed engaging in social-emotional learning (SEL) much more than half-day classrooms during Round 1 -12% of observed instructional content in full-day classrooms compared to 5% of instructional content in half-day classrooms. However, this difference dissipated in Rounds 2 and 3 with both classrooms significantly reducing the amount of recorded targeted SEL practices (2% and 3% in Rounds 2 and 3, respectively, for full-day classrooms; 0% and 2% of observed instructional formats for half-day classrooms across the two rounds of observations).

Figure 2. Percentage of Instructional Content Types Observed Across Rounds for Each Type of Classroom (Percentage of Total Excerpts Coded as Each Instructional Content)

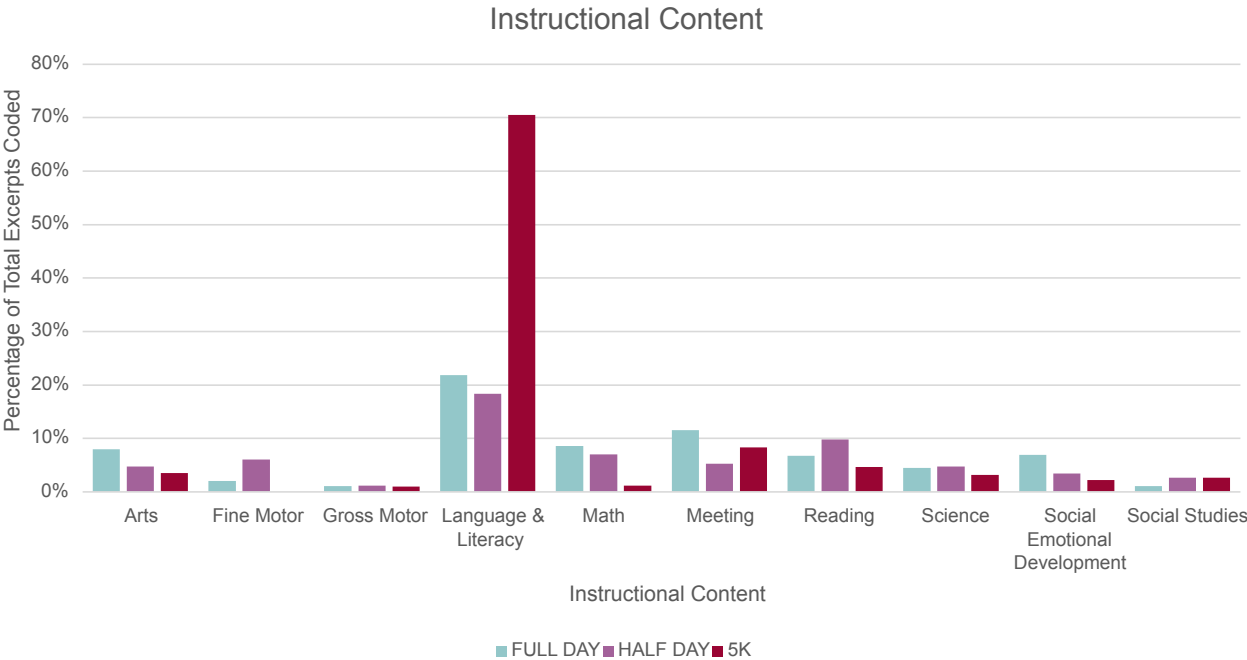


Figure 2 is a bar graph that depicts the percentage of instructional content types observed across rounds for each of the three types of classroom sections. The Y axis is the percentage of total excerpts coded as instructional content and the X axis is ten instructional content areas observed for: arts, fine motor, gross motor, language and literacy, math, meeting, reading, science, social emotional development, and social studies. Language and literacy was the most common content area; in 5K, this was true by a particularly large margin. Gross motor was the least common content area for all three types of classrooms.

Table 2. Instructional Content Across Classroom Sections (Percentage of Total Instructional Content Observed)

Classroom Type	Most Common Instructional Content			Overall Most Common Instructional Content	2 nd Most Common Instructional Content			Overall 2 nd Most Common Instructional Content
	Round 1	Round 2	Round 3		Round 1	Round 2	Round 3	
Full-Day	L/LA 24%	L/LA 24%	L/LA 19%	L/LA	MT 14%	R 12%	M 11%	MT
Half-Day	L/LA 25%	R 10%	L/LA 17%	L/LA	R 11%	R 10%	A 12%	R
5K	L/LA 55%	L/LA 37%	L/LA 47%	L/LA	MT 11%	A 8%	SEL 16%	MT

Note: L/LA=Literacy & Language Arts; R=Reading; MT=Meeting; M=Math; FM=Fine Motor; SEL=Social-Emotional Learning

Figure 3 illustrates the percentage of different types of instructional formats observed across rounds for each type of classroom (full-day 4K, half-day 4K, 5K). See Table 3 for a summary of the most common instructional formats observed. In full-day classrooms, whole group teaching and centers were tied as the most common formats followed by individual interactions between teachers and children. Whole group teaching was coded when the teacher was leading an activity with the entire classroom. Note that this differed from the code, whole group, which was coded when the entire class was together and engaging in the same activity, but the teacher was not actively leading the activity (e.g., all children in the classroom are working on the same art activity while the teacher circulates). In half-day classrooms, Centers was the most commonly observed format followed by individual interactions. Note that formats could be double-coded so, for example, teachers may have had individual interactions with children within the context of centers -both formats would be noted. It is notable that small groups were observed significantly more in both full-day and half-day classrooms compared to last year, though the two types of classroom sections did not differ much in their use of small groups. Full-day classrooms were observed engaging in whole group teaching (23% of observed instructional formats) much more than half-day classrooms (16%).

Figure 3. Percentage of Instructional Format Types Observed Across Rounds for Each Type of Classroom (Percentage of Total Excerpts Coded)

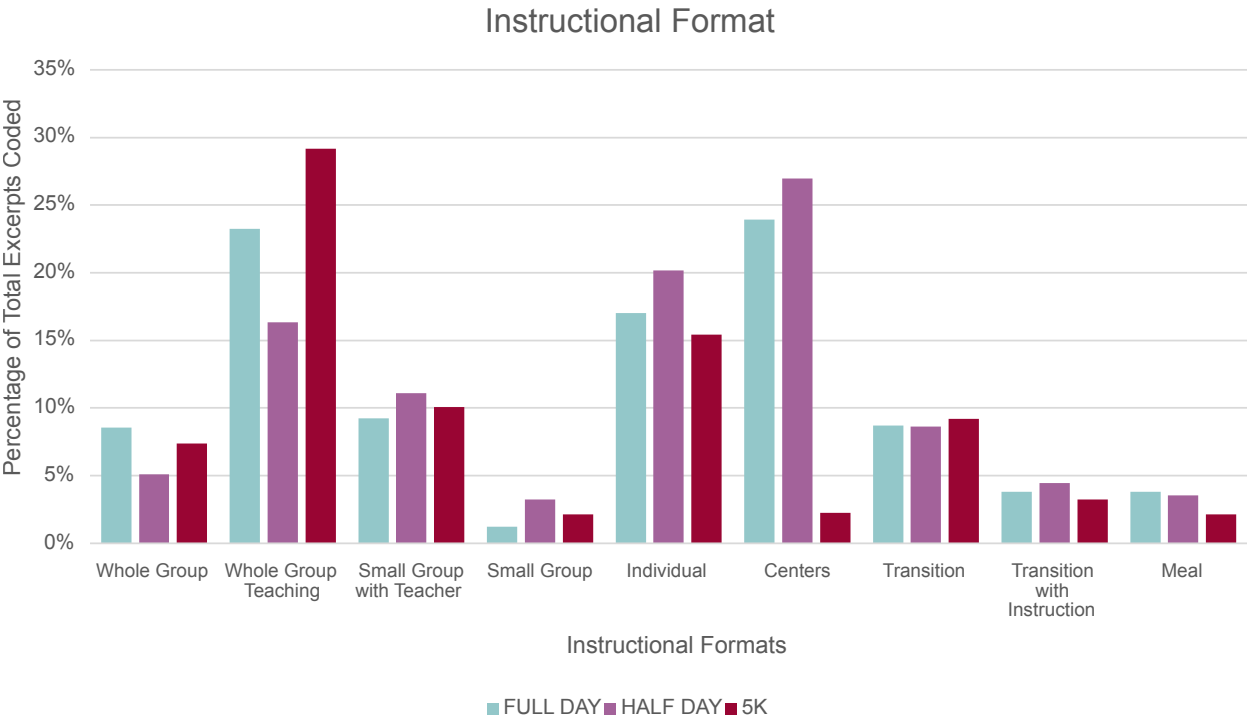


Figure 3 is a bar graph that depicts the percentage of instructional format types observed across rounds for each of the three types of classroom sections. The Y axis is the percentage of total excerpts coded as a instructional format and the X axis is the nine instructional formats observed for: whole group, whole group teaching, small group with teacher, small group, individual, centers, transition, transition with instruction, and meal. Whole group teaching was the most common instructional format for full-day 4K and 5K classrooms. Centers was the most common format in half-day classrooms. Small group was the least common observed format for full-day and half-day classrooms while meals was the least common format in 5K. Centers was observed significantly more in full-day and half-day classrooms compared to 5K classrooms.

Table 3. Instructional Formats Across Classroom Sections (Percentage of Total Instructional Formats Observed)

Classroom Type	Most Common Instructional Format			Overall Most Common Instructional Format	2 nd Most Common Instructional Format			Overall 2 nd Most Common Instructional Format
	Round 1	Round 2	Round 3		Round 1	Round 2	Round 3	
Full-Day	C 26%	SGT 25%	WGT 26%	C, WGT (tied)	Ind 22%	WGT 23%	C 25%	Ind
Half-Day	C 27%	SGT 29%	C 35%	C	Ind 25%	WGT 25%	WGT 17%	Ind
5K	WGT 43%	Ind 35%	WGT 24%	WGT	Ind 15%	WGT 28%	Ind 23%	Ind

Note: C=Centers; SGT=Small Group Led by Teacher; WGT=Whole Group Teaching; Ind=Individual Interaction

Half-day and full-day classrooms did not differ much in their Classroom Assessment Scoring System (CLASS) scores (Table 4). They both scored highest on the Classroom Organization domain, which includes behavior management, productivity (i.e., children being engaged in meaningful tasks and activities), and the use of diverse instructional learning formats. Classrooms scored lowest on the Instructional Support domain, similar to [prior findings based on CLASS observations in 4K classrooms](#).

Table 4. Average CLASS Domain Scores and Score Range Across Classrooms

		Full-Day (n=8)	Half-Day (n=7)	5K (n=9)
Emotional Support	Average	4.63	4.74	4.25
	Range	3.5-5.25	4.25-5	3.5-4.83
Classroom Organization	Average	5.98	5.59	5.44
	Range	4.5-6.83	4.33-6.56	3.25-6.67
Instructional Support	Average	4.20	4.46	3.28
	Range	2.5-5	3.67-5.5	2.33-4.67

Similarities and Differences between 4K and 5K. We observed slightly more CRPs in 5K classrooms (98) compared to half-day (92) and full-day classrooms (88), even though several 5K classrooms could not be observed a third time due to time constraints. Refer to Figure 1 and Table 1 for a summary of CRPs observed and the most common CRPs observed across classroom sections.

The most common CRP observed in 5K classrooms was the use of individualized supports. For instance, in a 5K classroom, we observed two children being prompted to use a tablet as an augmentative and alternative communications (AAC) device to participate in a whole group conversation. An observer recorded this in the following exchange:

T goes and gets the iPad for [CHILD]. She's doing something with it, getting set up?
T to another child: Tell her what you like to do? What do you like to do outside when it's sunny?
T gives iPad to [CHILD].
T: What do you like to do outside when it's sunny?
[Child picks a picture.]
T: Swing! She likes to swing. Ok, thank you.
[T takes the iPad back.]

The child had a disability and the teacher described her as being minimally verbal or non-speaking, but she was able to participate in the classroom conversation about weather using her iPad. While children should have constant access to their AAC device, it is great that the teacher provided the iPad to the student in time to participate in the conversation. 5K classrooms demonstrated similar amounts of individualized supports as full-day 4K classrooms and individualized supports were observed in both more than in half-day classrooms. The use of non-standardized English and practices supporting classroom community was observed much less in 5K classrooms compared to both full-day and half-day classrooms. Additionally, while the second most common CRP observed in 5K classrooms were practices building classroom community, 5K classrooms demonstrated a smaller percentage of those practices (13% of observed CRPs) compared to full-day (27%) and half-day classrooms (20%). Finally, 5K classrooms demonstrated few instances of the use of non-standardized English (1% of observed CRPs) compared to full-day (24%) and half-day classrooms (37%).

Language and literacy instruction was the most common instructional content in 5K (49%), similar to 4K classrooms, though to an even greater proportion. That is, there was greater variance in content in 4K classrooms compared to 5K classrooms. Unlike 4K classrooms, 5K teachers seemed to be closely following a literacy curriculum using explicit instruction and choral responses during whole group instruction. We repeatedly observed such literacy exercises in 5K classrooms with teachers leading children through segmenting and blending words, isolating beginning and ending sounds, adding and deleting letters/sounds to words, and related skills. For example, the following is a field note excerpt from an observation where a 5K teacher worked through several of these skills during an approximately 15 minute "skills block" of whole group time that was solely focused on literacy.

Teacher: Alright, I'm gonna segment. I'm gonna give you the word, you're chunking it out.

Teacher: Way

Children (chorus): W ay

Teacher: Hi

Children (chorus): H i

Teacher: Aim

Children (chorus): A im

Teacher: That one's tricky, you're right. A im. See

Children (chorus): S ee

Teacher: New

Children (chorus): N ew

Teacher: We're gonna add, are you ready?

Teacher: /B/ add /at/, the new word is...let's try again, the new word is...bat

Teacher: S add it, the new word is... (some children join in saying) sit

Teacher: Ok, deleting, we're taking away. The word is bag without g, the new word is...ba.

Teacher: We're going to substitute.

Teacher: The word is hill, take away h add p, the new word is...pill

Child: What's that?

Teacher: A pill is like something you take to make you feel better.

Child: Peel

Teacher: No, not peel. Listen to [TEACHER], pill

Child: Piell

Teacher: That's close.

[continue doing a couple other words]

This exact sequence and/or approach was observed across 5K teachers, indicating it was a part of the curriculum. Multiple times, observers noted children with disabilities or other children who were not actively participating in these blocks of literacy instruction and did not get additional support or scaffolding during the activity. For example, an observer recorded a similar sequence in the following excerpt in a different 5K teacher's classroom, noting that two children with disabilities were left at their table for most of the exercise. One of the children, a child in a wheelchair, was eventually moved closer to the rest of the classroom while his SEA went to go fix something and then attended to the other child with a disability, who was by himself at a table.

Teacher: Let's say the word, tug.

Class: Tug.

Teacher: If I take away the /t/ /t/ what am I left with?

Class: Tt ug

Teacher: If I take away the t what am I left with?

Class: Ug

Teacher: Box. Box. If we take away the b, what are we left with?

A couple kids: Ox

Woman aide comes and moves [CHILD] in wheelchair over to rug (he had still been at his table spot which is right next to the rug) then she goes over and looks at his other chair she brought in for a few seconds then goes back over to [OTHER CHILD WITH DISABILITY]

Similarly, multiple instances were observed where children were removed from the exercises or allowed to leave the whole group if they interrupted, as seen in the following field note excerpt from a third 5K teacher:

Teacher: Ok, say ten. Say ten again. Turn that /en/ to an /an/. Tan.

Teacher: Say bat. Sat bat again. Turn that /at/ into a /en/. Ben.

Children repeat after her.

Teacher: You guys are so smart. I was going to trick you again.

Class does that exercise with a few more words.

A Black boy stands up and grunts.

T: Ok, go take a break.

He goes and sits at his table and takes a drink.

Class does a couple more words (e.g., pig)

These excerpts illustrate the continuity across 5K classrooms in the implementation of the literacy curriculum as well as the nature in which it was carried out.

The second most common instructional content in 5K classrooms was classroom meetings -again, this code reflects typical whole group activities that are more routines-focused, such as reviewing the calendar, greeting each other, and engaging in general classroom discussions. Discussions during 5K classroom meetings were different from 4K classroom meetings however because, in 5K, teachers often led a morning discussion where they viewed a pre-made powerpoint and/or video and discussed a topic that would be carried throughout the day, week, or unit. Thus, “meeting” was often double-coded with other instructional content codes, such as social studies. In 4K, meetings were broader in scope and often primarily included opportunities for children to share about themselves rather than an explicit academic topic. For instance, one 5K teacher was observed leading a morning discussion about why we celebrate Black History Month and talked through a powerpoint and video describing a young Black girl and her mother who started a hair barrette business. 5K also differed from 4K classrooms in that they had an inverse pattern of social-emotional learning (SEL) practices observed compared to full-day and half-day 4K classrooms. While 4K classrooms demonstrated more interactions coded as explicitly supporting SEL in the first round of observations and then tapered off, 5K classrooms were observed engaging in few SEL-focused interactions during Rounds 1 (2%) and 2 (0%) and then greatly increased in Round 3 (16% of observed instructional content). Finally, 5K classrooms demonstrated fewer instances of practices that build classroom community (13% of observed CRPs) compared to full-day (27% of observed CRPs) and half-day 4K classrooms (20% of observed CRPs).

There was slightly less variation in instructional formats in 5K classrooms compared to 4K classrooms, with more time spent in whole group teaching (29% of observed instructional formats) compared to full-day (23%) and half-day 4K (16%). whole group teaching was the most commonly observed format across the three rounds of observations in 5K. The second most common format was Individual instruction. Children were observed in centers much less in 5K (2% of observed instructional formats) compared to both full-day (24%) and half-day (27%) classrooms.

5K classrooms, like 4K classrooms, scored highest on the Classroom Organization domain of the CLASS. They scored similarly to, but lower than, 4K classrooms in the Instructional Support domain. However, note that all scores are within the mid-range (3-5 out of 7). Other domain scores were very similar across 4K

and 5K classrooms. When we looked at individual dimensions, 5K classrooms scored slightly lower than 4K classrooms in the *Regard for Children's Perspectives* dimension (within the *Emotional Support* domain), in particular. *Regard for Children's Perspective* reflects the extent to which teachers based interactions and classroom activities on children's interests and motivations, and offered opportunities for children to demonstrate responsibility and autonomy. Most 4K teachers scored in the high range (score of 6 or 7) for this dimension while most 5K teachers scored in the mid-range (3-5). For instance, in many 4K classrooms, children were able to take leadership roles during routine-based class meetings, such as picking the letter or shape that the class would discuss, choosing a song that gets played or the book that the class will read, and marking a pattern on the class calendar. Meanwhile, the 5K CLASS observer noted multiple times that activities were all pre-determined for children during such routines in 5K classrooms. Some opportunities were observed where children were able to express a choice or preference. For instance, the observer noted an instance where 5K children responded to a question about whether they would ride a dinosaur, but after children gave a response, the teacher marked their choice. Whereas, similar opportunities were observed in 4K classrooms but children were able to mark their own answer using a mark of their choice or writing their name.

Interviews with Teachers

Differences between Full-Day and Half-Day 4K. Based on teachers' perspectives, there are several differences between full-day and half-day 4K. Like last year, 4K teachers expressed several benefits of full-day 4K for them, including fewer children and families to whom they had to be responsive. Unlike last year, however, teachers also expressed that they were able to fit in additional activities during full-day 4K because of the additional time. For instance, one full-day 4K teacher who had previously been a half-day 4K teacher expressed:

Well, in half-day we, there were, like, a certain number of minutes we had to meet for everything. And it was just really hard to fit all that in...now it just doesn't feel so rushed all the time. Yeah, so like, for example, in half-day, I only really had time to do one read-aloud a day. And now I have time to do two and then, you know, eventually implement some of the early childhood letters, lessons with, like, the Repeated Reading and the vocabulary stuff,...so it's just a little bit more of a relaxed pace, I think.

Another full-day 4K teacher agreed that full-day 4K allows a better pace, saying, "the half day, I do notice, like, wow, you're really under the crunch. So, I think, you know, I know all day is a lot, but...we don't have to quickly get through something." In general, 4K teachers believed they were able to do more with children during full-day compared to half-day or were able to do similar types or amounts of activities, but at a more manageable pace. This may contribute to full-day teachers being observed engaging in more individualized supports for children. Teachers may have been able to get to know children better because they taught fewer children and then had the time to implement more individualized supports based on that knowledge.

However, some teachers—all half-day teachers—expressed concerns that full-day could be too much time for some children. For instance, one half-day 4K teacher shared:

“I’d say for most kids it’s perfect because you can tell by the end of the day they’re crashing, like a lot of our kids still nap, and most of them go home, just we have, we have a really high like stay-at-home mom population here....once in a while, you know, it’d be nice to have more time. But, like, our afternoon groups, so many of them sleep in to like mid-morning, or they’ll get up at like 10/11. So, if they were here all day, I would feel terrible because they’d be exhausted but like our morning group, they crash kind of by the end [of the day].”

The teacher conceded that more time would be nice, but believed it may be too tiring for some children. Another teacher similarly expressed that some children are “not quite ready for a full-day schedule” and that they would benefit from “start[ing] them out with a half day and get[ting] them really accustomed.” Interestingly, while the prior teacher cited responsiveness to childrens’ and families’ schedules as a benefit of half-day programming, some teachers also cited families’ schedules as a benefit of full-day 4K. Namely, while the prior teacher noted that she had a lot of stay-at-home moms in her school, other teachers noted that children whose caregiver(s) work would benefit from being at school all day and families would benefit from not having to find half-day childcare and transportation. Taken together, it is clear that teachers believed that some children and families would benefit from half-day 4K while others would benefit most from full-day 4K and that family context mattered.

In addition to 4K teachers, we also interviewed 5K teachers this year. Universally, 5K teachers expressed that any 4K experience was beneficial for children. For instance, one 5K teacher with whom we spoke, said:

“you can definitely tell students that have been in the 4K program are pretty proficient ...those who have not had a 4K program before that, it’s -it’s a lot harder. And I think it can be a little overwhelming for them at first. But it doesn’t have to be you know, all the letter names and sounds, we don’t expect that but just having just a good -a good baseline and exposure to it. ”

The teacher believed that any 4K programming provided children with an important foundation for the academic skills they would learn in 5K. At the same time, several 5K teachers believed that full-day 4K may better prepare children for Kindergarten. Another 5K teacher explained that full-day 4K, specifically, helped familiarize children with schooling procedures and “build stamina.” She further expressed that, because 5K is “much more academically oriented” than 4K, “getting [children] used to spending [a] full day at school, I think, is important.”

Differences between 4K and 5K. As noted in the above quote, 5K teachers often emphasized academic goals for schooling while 4K teachers focused on social-emotional skills, similar to last year’s findings. 4K and 5K teachers also expressed different priorities for children entering 5K. For instance, when asked about her goals, one 4K teacher reported, “the biggest one is that social-emotional goals, that they kind of know how to be in community with one another, that they can know how to safely express themselves, or get the words to express themselves, regulate themselves, have tools to do that.” Another 4K teacher described 4K as a “social-emotional development time.” Like other 4K teachers, these teachers emphasized social-emotional development as most important for their instructional goals as well as children’s preparation for 5K. Meanwhile, 5K teachers often named specific academic knowledge and skills that they hoped children would enter 5K with as well as the need for children to be independent to some extent. For example, one 5K teacher explained,

I expect them to have, like, some letter knowledge, not sounds, but just, like, identifying letters. It's nice if they can write their name, but that's not always the case. You know, and just those like, self, like, independence skills, like, can they get ready at their locker? You know, are they independent in the bathroom?

5K teachers also named other specific skills like counting to 10, identifying letter sounds, and identifying rhyming words. Thus, 4K and 5K teachers seemed to have different foci.

These differences may be, in part, due to the expectations of teachers' instruction in 4K and 5K. In particular, 4K teachers appeared to have greater flexibility in the ways they spend their classroom time compared to 5K teachers. 4K teachers described adapting curriculum and materials to respond to children's interests and abilities while 5K teachers more often described specific curricula they had to follow closely in order to meet academic standards. This is not to say that 4K teachers ignored academic skills, but the ways they sought to develop academic skills in their students were different from the approaches 5K teachers typically employed. For instance, one 4K teacher explained, "Kindergarten readiness kind of drives all of the underlying learning of the basic concepts, but I kind of do it based on the kids and their interests." In contrast, 5K teachers typically referred to needing to follow specific curricula, slide decks, and books. When asked how she selected the topics and activities she implements in her class, one 5K teacher described, "There's not much teacher choice [over topics]... So if I think about each content area, there are books that are kind of walking us through each phase of it, and I think it's becoming more set that way." This is similarly observed in the following exchange when another 5K teacher was asked the same question.

Interviewer: Well, you mentioned there's a new curriculum, but can you describe your process of choosing the topics you cover in class?

5K Teacher: Yeah, that's all picked for us.

Interviewer: Yeah

5K Teacher: It's, like, pretty scripted in the sense of, like, it's, it's just all there.

Interviewer: Is it the same with the material that you leave available? How do you choose that?

5K Teacher: Yeah. It's all part of the whole, like, language arts curriculum comes with books and, like, student workbooks. I mean, there's, like, slideshows online that we use. So yeah, it's -it's, I guess, it's nice in the sense that it's all kind of planned out for us. But it also doesn't leave like a ton of flexibility

At the same time, 5K teachers pointed out how expectations of fidelity to the curricula impacted their ability to be responsive to children. For example, this 5K teacher worried about the intensity of academic expectations in the required curricula, stating:

"There's so much to get through in a day, a week. And, so, sometimes it feels like, for five- and six-year-olds, it's a lot. So, I do wish there was a little more flexibility and just letting them be kids, you know, like letting them play."

The teachers' emphasis on the importance of play and concern about a lack of time for play in 5K is consistent with other findings from around the state of Wisconsin (Hirschl & Grotzky, 2020). Moreover, the differences in 4K and 5K teachers' descriptions triangulates with the previously described finding that 4K classrooms scored higher on the CLASS dimension, Regard for Student Perspectives. Scholars have similarly called attention to the tension that teachers report between expectations of fidelity to scripted or heavily-

protocolled curriculum and teachers' ability to be responsive to students' learning needs, interests, and cultural backgrounds (Kavanagh & Fisher-Ari, 2020). 5K teachers' comments point to the need to balance an academically-rigorous curriculum with guidance that helps teachers be responsive to children and provide opportunities for play.

However, it is also important to note that 5K teachers reported having new Language Arts and Science curricula this year. Many explained that they were still learning the curricula and were expected to implement the new curricula with fidelity. Therefore, teachers may not have been able to adjust the curricula as robustly as they typically would since they were still learning it. For example, one teacher acknowledged that she did not have a lot of input on curricula, but explained that, as she learned the curricula better, she was able to be more responsive to students. She told us:

So, unfortunately, we don't have a lot of say in [the curriculum]. I wish we did...But now with the curriculum we have, we do -we are pretty much told, like what books to read, what topics to focus on. I will say that the learning is slowly starting to get a little bit more engaging. But this is a brand new curriculum...I'm learning literally along with the students.

A couple teachers similarly said that they were starting to make changes to some of the curricula as they learned it. For instance, another 5K teacher explained that she "kind of took [her] own, like, initiative" to make adjustments. She further said,

[I'm] trying to hit all of the standards, follow the curriculum, but also pulling in things that I feel like are going to meet their needs and eliminating some things that I feel like we don't need. So I tried to, like, find that balance. And so that it doesn't feel super scripted to them...

While 4K has long-used the Creative Curriculum and teachers felt comfortable making sometimes significant changes based on child interests (e.g., which units they used from the curriculum), the curricula in 5K were fairly new and teachers felt more beholden to closely follow it with few exceptions.

Ongoing staffing concerns. Although staffing came up as a challenge for teachers, similar to last year, the reasons this year were different. In the 2021-22 academic year, COVID-19 was a larger concern and a primary reason for teachers and staff absences outside of hiring shortages. In the 2022-23 academic year, however, we explicitly asked about supports for children with disabilities and teachers more frequently referred to support staff inconsistency (e.g., educational assistants [EAs] and special education assistants [SEAs] being moved around to cover vacancies) and the common practice of using educational assistants (EAs) and special education assistants (SEAs) interchangeably. For instance, during the first round of interviews, one 4K teacher was very positive about her EA, saying "having a good assistant helps too. I have [EA name] and she's really good with the kids." However, when we interviewed her later in the school year, she explained that her EA was replaced with an SEA, but then that person was also moved to a different classroom. She said

So we have an SEA, they just reshuffled. There were some issues going on, so that my SEA from the year got shifted to other classrooms. So they brought someone new. And -but so I have an SEA, but we don't really get any CC [cross-category special education teacher] support...my former SEA who just got taken out a few weeks ago, she had been doing a lot of it. And then that left me kind of in charge of the rest of the group.

While it is not necessarily a concern that EAs and SEAs were used interchangeably, teachers particularly found this challenging because EAs were getting switched over to SEAs, meaning they were primarily responsible for specific students with disabilities, without additional training or consistent support from a cross-category special education teacher. Moreover, SEAs were not necessarily in their classrooms long-term, which is necessary to build relationships with children and get to know their support needs. As another example, a 5K teacher described that she previously had an SEA who would lead groups and work with her to develop activities and strategies for children with disabilities. However, that SEA was removed and she explained, “[the] new SEA who’s in the room isn’t really doing any of that. I don’t think she’s had any guidance from the CC [cross-category special education] teacher of the building or anything. So currently, I’m just kind of stepping in, like, as needed.” How she was working with her SEA and the children with disabilities in her classroom changed with a change in SEA and she expressed concern about the extent to which the new SEA was supported by a special education teacher.

The availability of specialized teachers and staff was a concern for many teachers, particularly (cross-category) special education teachers and teachers specifically for dual language learners. Access to both seemed to vary significantly across classrooms or buildings and across years. Many teachers said they were not able to work with their cross-category special education teacher very often or that it depended on the special education teacher. For instance, one teacher explained that she worked closely with a special education teacher the prior year, but did not often work with the teacher this year. She reported,

It’s different each year. This year I don’t -I have one that doesn’t really check in with me. Last year, I had one that I had a meeting [with]...she set it up. And so we met every week. So, it really depends on the teacher that is supporting them at that time.”

While teachers described having challenges accessing a cross-category SPED teacher for consultation, they also recognized how busy those teachers were. For instance, during her second interview, a 4K teacher explained, “I haven’t had a special ed teacher consult with me about [child] all year, because they’re...she’s overwhelmed in kindergarten.” Thus, teachers described inconsistent access to special education teacher support. The same appeared to be teachers for students who speak English as a second language (ESL teachers), as seen in the following exchange:

Interviewer: Right. And then similar question, but focusing on multilingual students. Do you have ELLs [English Language Learners]?

Teacher: I do, that was that one teacher that came and took some students. Yeah. So she will take different groups on different days. We don’t work as closely together...part of it is because she has been pulled so much this year from our classrooms.

Interviewer: So not even as in her role.

Teacher: No, which is, like, really bad and unfortunate, because then, you know, the ELL students are not getting all the supports that they need. But it’s beyond our control. So yes, I mean, I, I would like to...like, meet with her more and to really, like, collaborate with her more. But it just, this year has been, I mean, she had to, like, cover third grade for a few weeks and, like, so it hasn’t been as smooth.

Similar to access to special education teachers, teachers described ESL teachers as not having much time for consultation or certain kinds of collaboration, though they were more consistently described as coming into the classroom to directly support students compared to special education teachers.

The teachers who did describe working closely with a specialized teacher reported that it was very helpful to them and essential for their ability to support children with disabilities. For instance, one 4K teacher listed many ways her cross-category teacher supported her, saying

The CC [cross-category special education] teacher gives us resources to use with them like a visual, individual visual schedule, or the first boards. So, we utilize that and [are] modifying seating arrangements or [responding to] sensory needs, having places for them to go in the classroom.

That teacher was also fairly unique in explicitly saying that she and the SEA both worked with children with disabilities in her classroom and referred to it as a “joint shared responsibility.” A 5K similarly said that the cross-category special education teacher she worked with had been very helpful, explaining, “I do have, gosh, four kiddos in here with IEPs. So I work closely with the special ed teacher...So we are always working to figure out ‘how do we modify this, how do we differentiate this for those kiddos’...collaboration is key.” The teacher described learning from the special education teacher and enacting what she learned in the classroom with her SEA to better include and support children with disabilities. In sum, teachers described inconsistent opportunities to work with specialized teachers (e.g., cross-category special education teachers, multilingual teachers) and they believed that ultimately negatively affected support for children with disabilities and dual language learners. However, when classroom teachers were able to work with such teachers, they found them incredibly helpful.

Supports for children of color and children with disabilities. Given the current focus on teachers’ use of culturally responsive and inclusive practices, in line with the equity focus of 4K, we asked teachers several questions about how they supported children of color and children with disabilities, including their responsiveness to children’s different social identities and how they support the participation and development of children with disabilities. Interestingly, teachers often depended quite a bit on EAs and SEAs to support children with disabilities and were sometimes even unclear about their role supporting children with disabilities. When asked how they supported children with disabilities, teachers typically referred to what their EA, SEA, or related service providers did with them rather than naming specific practices or supports they provide. For instance, one 5K teacher explained that she had a student who was medically fragile in her room and when asked how she supported that student, she explained,

that student has an SEA or special education assistant with them at all times, and [she] is responsible for feedings, bathroom. That student also has a whole team of physical therapist, occupational therapist, speech therapist. So my role with that student is more of just sort of, I’ll do some checking in, a little reading with that student, looking over worksheets.

The teacher went on to say that she would also share worksheets and other academic materials with the student’s SEA and service providers and they would help the student. Some teachers even inferred or explicitly stated they were not primarily responsible for supporting children with disabilities in their classroom. One teacher described,

I have spent more time giving the support to the children [with significant support needs], and less time with the children who don't need that level of support. And that was the frustration where I felt like, I wasn't really truly, like, doing my job as a regular teacher.

Teachers appeared to depend significantly on others to support children with disabilities, which is concerning given the previously described staffing challenges.

Teachers also identified structural factors that influenced how they supported children of color and children with disabilities. This started with decisions about which classrooms children were placed in. For instance, in the following exchange, a 5K teacher expressed that she did not have any multilingual children in her classroom because administrators split up children who are multilingual and children who have disabilities across classrooms.

Interviewer: ...now perceiving your role for students, like multilingual students in your classroom, dual language learners. Do you have any dual language learners?

Teacher: I do not. So what they have done in the past few years is they have put all of the dual language or English language learners in one kindergarten classroom with one teacher and then the other kindergarten classrooms get the students with IEPs...distributed evenly across because there's three kindergarten classrooms.

This and similar placement decision-making processes seemed to be a way to efficiently divide up support staff. For instance, several half-day 4K teachers mentioned that children with identified disabilities were intentionally placed in their afternoon sessions. As one teacher described:

Interviewer: Was that a specific ask of the school that the PM be the special ed cluster? So that the special ed kids could -

Teacher: I haven't heard of a school where it is not.

Interviewer: Interesting. Okay.

Teacher: And I think it honestly comes down to CC [cross-category SPED teacher] coverage, to staffing.

The teacher perceived this as being common across schools, though it is a building-level decision. However, such a decision-making process does not account for the presence of multilingual children with disabilities.

5K teachers, such as the one previously quoted, more often described concentrating students who are dual language learners and students with disabilities in particular, separate classrooms compared to 4K teachers. Another teacher expressed that she typically did not have children with disabilities in her classroom but the teacher who did typically have children with disabilities placed in her classroom had requested a "break" from that and she volunteered. We observed such clustering in practice.

Teachers also seemed to employ practice approaches that were responsive to one aspect of a child's identity or support needs (e.g., them being labeled as having a disability) at the expense of being responsive to their other identities (e.g., them being a multilingual learner). For instance, when asked how she supported multilingual children in her classroom, one teacher explained, "So [I have] one ESL student, but she also has an IEP. And so those needs typically trump her language needs right now because we're working so much

on her communication skills.” It is interesting that the teacher differentiated “language” needs (i.e., the students’ status as a multilingual learner) from “communication” needs (i.e., the students’ disability-related support needs). Yet, both are related and should be taken into account to effectively support a student. Thus, single-identity approaches seemed to possibly trickle down from building-level placement decisions to classroom-level practice decisions.

Final Thoughts and Next Steps

This evaluation offered an opportunity to continue exploring how children’s experiences may differ in full-day and half-day 4K. We particularly built on last year’s evaluation in that we were able to observe classrooms across the school year, at multiple time points, and intentionally observed at different times of the day. Additionally, we intentionally examined teachers’ use of inclusive practices supporting children with disabilities as well as culturally responsive practices. Finally, this exploration examined practices in 5K, allowing an initial look at ways the unique features or practices in 5K may influence continued gains or fade out effects following 4K. The evaluation was conducted in close collaboration with the MMSD Department of Early Learning to ensure the information gathered helps MMSD make informed decisions about supporting equitable, high-quality early learning programming.

Already, the district has partnered with the evaluation team to translate findings from this evaluation to practice. In particular, culturally responsive and inclusive practices were featured heavily during the summer professional development conference organized by MMSD and Pyramid Model professional development has begun in order to empower 4K teachers and staff to build relationships with children and families, support children’s social-emotional development, and prevent and address challenging behavior. Additionally, time has been allotted for full-day 4K teachers to collaborate with one another as they transition from half-day to full-day programming. Continuing these efforts can help address some of the opportunities for growth revealed in the present evaluation.

The findings from this evaluation point to several additional possibilities for strengthening teachers’ use of culturally responsive and inclusive practices, maximizing children’s learning in 4K, and ensuring 5K classrooms are prepared to continue supporting children’s learning and development in responsive ways. Given that full-day 4K teachers demonstrated more individualized supports than half-day teachers, half-day teachers may benefit from professional development or supports that facilitate their use of individualized supports. Such efforts should be cognizant that half-day teachers serve more children (across their two sections) and have less time with the children than full-day 4K teachers. Thus, they may benefit from information about options for individualized supports that fit in that specific context.

While full-day classrooms demonstrated higher levels of individualized supports, they also were observed engaging in whole group teaching more. Whole group instruction is potentially a less effective instructional format for certain types of learning and thus overreliance on that format could contribute to the quantitative assessment finding that full-day and half-day classrooms did not differ in child outcomes, despite the additional classroom time in full-day sections. For instance, several studies have found that teachers tend to employ lower quality instructional strategies during whole group activities compared to other activity formats (e.g., disproportionate use of closed-ended questions; Bustamante et al., 2018; Deng et al., 2023; Kook & Greenfield, 2020), and that higher instructional support quality ratings are associated with less time

spent in whole group (e.g., Nores et al., 2022). Moreover, Cutler and colleagues (2023) recently found that classrooms in which children made greater language gains over the course of the year spent less time in whole group activities than classrooms in which children made smaller language gains, particularly in the Fall semester. The authors asserted that this difference may be because large group activities are often rote- and recitation-based (e.g., brief greetings, counting dates on the calendar), which we observed in the present evaluation. While beneficial, such activities reflect less linguistically-complex interactions and contain few opportunities for children to engage in linguistically-rich exchanges or back-and-forth conversation. Thus, full-day 4K teachers may benefit from supports that enable them to effectively engage in other instructional formats more. We observed more small group instruction in both half-day and full-day 4K classrooms this year compared to last year, but continuing to increase the use of small groups could be one way to best utilize the additional time in full-day classrooms. Given the similarly high prevalence of whole group instruction in 5K and significantly smaller amount of Centers time in 5K, district leadership may also consider how the new language arts curriculum can be differentiated to allow for more small group, play-based, and hands-on learning opportunities. Such opportunities could address other aspects of classroom quality, as measured by the CLASS, as well as address some 5K teachers' concerns about their ability to adhere to the curriculum while being responsive to children. For instance, teachers would potentially be able to be more responsive to children's expressions, abilities, and support needs, and could provide more advanced concept development opportunities (e.g., encouraging higher-order thinking). Such efforts could be critical for 5K to effectively capitalize the growth children experience in 4K, particularly any potential unique benefits of full-day 4K.

Teachers also described several staffing challenges that impacted their ability to be responsive to children with disabilities and multilingual children. Namely, teachers described inconsistency in the EAs and SEAs assigned to their classroom and challenges accessing or collaborating with cross-category special education teachers and teachers for dual language learners. The district might consider how they allocate EAs and SEAs to address perceived shortages and provide desired consistency, when possible. Special education teacher and ESL teacher allocation may also need to be reconsidered to ensure adequate coverage that allows for teacher collaboration and consultation time. Notably, while clustering children into certain classrooms based on their disability or language status appeared to be one way to address staffing, particularly in 5K, teachers still expressed concerns with that and it did not appear to account for the placement of multilingual children with disabilities. Accounting for professional collaboration time when making staff allocation decisions and encouraging such collaboration may be critical to ensure general education teachers understand their essential role in supporting children with disabilities and multilingual children and are equipped to carry out that role effectively. This could be particularly important for children with disabilities and multilingual children to be able to continue growth trajectories in 5K.

This evaluation represents only snapshots of classroom activities in a select sample of MMSD classrooms. Discussions about how to continue improving early learning opportunities for MMSD's youngest students are ongoing. In combination with the quantitative evaluation examining children's assessment scores, information from classroom observations and teacher interviews can inform decisions about program- and classroom-level supports that can help the district continue its journey towards greater equity for Madison's children and families.

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Appendices

Appendix A: Semi-Structured Observation Tool Culturally-Responsive Practices Classroom Materials Checklist

What to look for:	None	1-2 Examples	3+ Examples
Wall Displays			
Representations of students' families and/or home life			
Images representing people of different races, ethnicities, and/or cultures			
Images (accurately) representing culturally-meaningful tasks in non-appropriative ways (e.g., cultural ceremonies or events, such as Chinese New Year)			
Examples of community-building or collaborative activities (e.g., murals)			
Classroom expectations emphasizing respect for others			
Labels, signs, or displays in languages other than English			
Dress up/Dramatic Play Area			
Multicultural dolls, as demonstrated by skin color, hair texture, and/or clothes			
Food from diverse cultures			
Dress-up clothes from diverse cultures			

What to look for:	None	1-2 Examples	3+ Examples
Art Area			
Varied skin tones in art materials			
Diverse tools, materials, or means for open-ended artistic creation (e.g., blank paper, multiple types of writing/drawing tools)			
Library/Book Area			
Texts that include characters representing different races, ethnicities, languages, and/or cultures (may or may not be explicitly addressed in the book)			
Texts encouraging appreciation and/or value for diversity, including but not limited to: <ul style="list-style-type: none"> • Multicultural activities or foods • Encouraging positive perspectives about the identities and/or features of children/communities of color • Fairy tales or similar stories that are specific to non-US/European cultures or that have been adapted to reflect communities of color 			
Texts addressing social justice themes <ul style="list-style-type: none"> • Historically-important people of color and their contributions (e.g., Ruby Bridges, MLK) • Events or activities reflecting injustice and/or the ways people fight injustice (e.g., Native boarding schools, school segregation/integration, marching or advocating against injustice) 			

Checklist Notes/Reflections (e.g., clarifications, wonderings, description of any good examples of the above):

Time	Content	Format	CRPs	Observation
	SNAPSHOT			
Time	Content	Format	CRPs	Observation

Content: **A** Arts; **FM** Fine Motor; **GM** Gross Motor; **L** Language & Literacy; **M** Math; **MT** Meeting; **MIX** Mixed Content; **N** None; **R** Reading; **SC** Science; **SEL** Social Emotional Development; **SS** Social Studies
 Format: **WG** Whole Group; **WGT** Whole Group Teacher; **SG** Small Group without Teacher; **SGT** Small Group with Teacher, **Ind** Individual;
 Centers; **TRN** Transition; **TRNI** Transition with Instruction, Meal, Out, Bathroom
 CRPs: **MLM** Multicultural literature and/or materials; **NSE** Incorporating Non-Standard English; **CC** Developing Classroom Community; **SJ** Using Social Justice Framework/Practices to discuss/address marginalization (e.g., anti-bias ed); **SI** Discussion around Teacher or Child Social Identities (e.g., race, gender, linguistic); **IS** Individualized Supports while Maintaining High Expectations; **FE** Evidence of Family Engagement or Incorporating Home Practices

Researcher Reflections (Field Notes -wonderings/questions for the teacher, missed opportunities, the aftermath of any recorded conversations/interactions):

Appendix B: Sample Interview Protocols

Round 1 4K Teacher Interview Protocol

Background:

- How long have you taught 4K and what, if anything, did you teach previously?
 - Can you describe the makeup of your previous classrooms, including race/ethnicity, language, and disability?

Instructional goals and time:

- Can you describe your primary goals for student learning and development in 4K?
 - What helps you accomplish those goals?
 - What makes it more difficult?

Do you feel like you have too little time in the day for 4K, too much time, or about the right amount? Why?

- Walk me through your daily schedule.
 - If you taught full-day 4K last year, have you changed your schedule from last year? How?
 - * Why did you make those changes?
 - Is there anything you wish you could change about your schedule? What? Why?

Culturally responsive & inclusive pedagogy:

- What are some of the ways that you get to know your students? (at the beginning of the year and throughout the year).
 - [IF NOT MENTIONED]: How do you engage with families to learn about them and their children?
- Can you describe your process for choosing the topics you cover in class?
- Can you describe how you decide what materials you make available in your classroom?
- Tell me about your experiences working with students with disabilities in your classroom being inclusive of students with disabilities.
 - We often refer to inclusive practices, or practices that help children with disabilities access to the curriculum and support their participation in class activities. What aspects of including students with disabilities are going well in your classroom?
 - What challenges do you experience when it comes to being inclusive of students with disabilities?
 - How do you make sure they have access to the curriculum? Can you give me an example?
 - How do you support their individualized goals? Can you give me an example?
 - Tell me about your experiences being responsive to students' different cultural backgrounds or identities in your teaching
 - What is going well?
 - What challenges do you encounter?
 - Can you give me an example of how you do this in your practice?

Questions derived from observation (e.g., Can you tell me how you chose _____ text I saw you using?)

5K Teacher Interview Protocol

Background:

- How long have you taught 5K and what, if anything, did you teach previously?
- Can you describe the make up of your previous classrooms, including race/ethnicity, language, and disability?

Instructional goals and time:

- What skills, knowledge, or abilities do you expect students to come into 5K with?
- Can you describe your primary goals for student learning and development?
 - What helps you accomplish those goals? What makes it more difficult?
- Walk me through your daily schedule.
 - Is there anything you wish you could change about your schedule? What? Why?

Culturally responsive & inclusive pedagogy:

- What are some of the ways that you get to know your students? (at the beginning of the year and throughout the year).
 - How do you engage with families to learn about them and their children?
- Can you describe your process for choosing the topics you cover in class?
- Can you describe how you decide what materials you make available in your classroom?
- Tell me about your experiences being inclusive of students with disabilities.
 - How do you make sure they have access to the curriculum? Can you give me an example?
 - How do you support their individualized goals? Can you give me an example?
 - What is going well?
 - What challenges do you encounter?
- Tell me about your experiences being responsive to students' different cultural backgrounds or identities in your teaching?
 - What is going well?
 - What challenges do you encounter?
 - Can you give me an example of how you do this in your practice?

Questions derived from observation. (e.g., Can you tell me how you chose _____ text I saw you using?)

Round 3

4K Teacher Interview Protocol

Instructional Planning and Time

- Last time we asked you to describe your daily schedule. How did you determine your daily schedule?
 - Follow-Up: Did you use the sample schedule to determine your daily schedule? Do you view the sample schedule as helpful or not and why?
- Are there ways you use student interests and family backgrounds during your instructional planning?
 - Follow-up: Can you provide a few examples?
- What do you see as the focus or general goal of small groups? What do you see as the focus or general goal of large groups or circle time?
 - Follow-Up: What are some example activities you do during small groups?
- HALF-DAY TEACHERS ONLY: Are there ways you differentiate your curriculum between morning and afternoon sections based on children’s interests and cultural backgrounds or identities?

Being Responsive to Children’s Abilities and Identities

- We learned from our first interviews that teachers often initially meet families and get to know them during Ready-Set-Goal Conferences. Beyond those, how do you sustain relationships with families and continue to get to know them throughout the school year? What has helped that and what has made it more difficult?
 - Follow-Up: Do you feel that you’ve been able to get to know all of your students and their families enough throughout the school year?
 - Follow-Up: Are there families you feel like you haven’t been able to get to know well or have been difficult to get to know? How do you try to address them?
- What do you think are the top three priorities for being responsive to children?
 - Follow-up/clarification: When trying to be responsive to children, what qualities or information do you focus on?
- Can you describe your role in supporting students with disabilities?
- Can you describe your role supporting multilingual students or dual language learners?

Closing

- If you were talking to a new 4K teacher, what are the two things you would tell them are most important for supporting students with disabilities in the classroom?
- What advice would you give another 4K teacher about being responsive to children’s social identities and cultural backgrounds?
- FULL-DAY TEACHERS ONLY: What advice would you give a half-day teacher about transitioning to full-day 4K?
- FULL-DAY TEACHERS ONLY: What have you found most rewarding about the transition from half-day to full-day 4K? What have you found most challenging?
- As you know, one of the goals of 4K is to support students’ socioemotional growth. If you could make one change to 4K programming to support that goal, what would it be?
- Another goal for 4K is to support students’ academic content knowledge, including early literacy and math skills. If you could make one change to 4K programming to support that goal, what would it be?

5K Teacher Interview Protocol

Instructional Planning and Time

- Are there ways you use student interests and family backgrounds during your instructional planning?
 - Follow-up: Can you provide a few examples?
- In what areas or ways do you feel like you have agency or autonomy in your instruction?
 - Follow-up: What activities, lessons, or materials do you develop on your own?

Being Responsive to Children's Abilities and Identities

- We learned from our first interviews that teachers often initially meet families and get to know them during Ready-Set-Goal Conferences. Beyond those, how do you sustain relationships with families and continue to get to know them throughout the school year? What has helped that and what has made it more difficult?
 - Follow-Up: Do you feel that you've been able to get to know all of your students and their families enough throughout the school year?
 - Follow-Up: Are there families you feel like you haven't been able to get to know well or have been difficult to get to know? How do you try to address them?
- What do you think are the top three priorities for being responsive to children?
 - Follow-up/clarification: When trying to be responsive to children, what qualities or information do you focus on?
- Can you describe your role in supporting students with disabilities?
- Can you describe your role supporting multilingual students or dual language learners?
- Have you observed differences in students who attended full-day 4K compared to half-day 4K? What are those differences?
 - Follow-up/alternative (e.g., if they say they don't know who attended full-day vs. half-day): Do you think students who attended full-day 4K would differ from students who attended half-day 4K? In what ways?

Closing

- What advice would you give a 4K teacher about supporting students' preparation for 5K?
 - Follow-Up: Would your advice differ for a full-day 4K and half-day 4K teacher? In what way?
 - Further Follow-Up: It's ok if you don't know the differences between full-day and half-day 4K. What do you perceive as the potential differences?
 - Probe: Are there things you would suggest be changed in 4K to better support students' socioemotional growth?
 - Probe: Are there things you would suggest be changed in 4K to better support students' academic content knowledge, including early literacy and math skills?



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