



MEP Full-day 4K Evaluation: Examining 4K Classroom Pedagogy

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Executive Summary

The Madison Metropolitan School District (MMSD) began offering free, universal, half-day four-year-old kindergarten (4K) in 2011-12. Beginning in the 2021-2022 school year, MMSD began phasing in full-day 4K at select schools across the district. The Madison Education Partnership (MEP), in collaboration with the MMSD Departments of Early Learning and Research & Innovation, conducted an evaluation of the program to understand how enrolling in full-day 4K affects student learning relative to half-day 4K. In addition to assessing gains in achievement over the course of the year, we observed in classrooms and interviewed teachers to examine trends in 4K pedagogy and identify qualitative differences in instruction, time use, and culturally responsive practices across full- and half-day classrooms. In the following report, we discuss findings from the classroom observations and interviews.

Findings

Differences between full-day and half-day classrooms

- We observed twice as many culturally responsive practices in full-day classrooms compared to half-day classrooms, despite observing in the classrooms a similar amount of time; however, this difference was primarily due to a few full-day teachers who used an exceptionally high amount of culturally responsive practices compared to others.
- In full-day classrooms, we viewed more community-building or collaborative activities (e.g., murals) on display and more books that included characters representing different races, ethnicities, languages.

Instructional content, format, and materials across 4K classrooms

- Language and literacy activities were the most common instructional content
- Whole group instruction was the most common instructional format.

Culturally responsive practices across 4K classrooms

Across both full-day and half-day classrooms, the most frequently observed culturally responsive
practice was teachers' use of children's home language (31% of culturally responsive practices
observed). Culturally responsive practices were mostly observed during non-instructional periods
(e.g., meals, transitions) and/or to provide directives to children. We rarely observed culturally
responsive practices when teachers were delivering instructional content.

Teacher perspectives on full-day 4K

Teachers perceived full-day 4K as allowing more time for expansive, play-based, and hands-on
opportunities (e.g., field trips) and, because they taught fewer students in full-day, teachers felt
they could get to know students and their families better. Teachers also reported benefiting from
a more manageable workload (e.g., fewer students to assess and fewer progress reports to write).

Proposed future work and preliminary recommendations/considerations for reflection:

There are several takeaways from this work. First, program leaders and teachers should consider how they can incorporate more culturally responsive practices into instructional interactions. We primarily saw culturally responsive practices during non-instructional periods and interactions (e.g., meals, transitions). Additionally, more consideration should be given to supporting teacher engagement in desired practices and instructional formats (e.g., small groups) amid the ongoing challenges related to staffing and COVID-19. Both full-day and half-day teachers consistently named these two factors as having ongoing effects on children, teachers' relationships with children and families, and classroom routines and instruction.

There are also implications for future evaluation of 4K in MMSD. Given the pilot nature of this exploration, more classroom observations are needed to provide a more robust representation of how full-day 4K teachers may spend their time differently compared to half-day teachers and how 4K teachers, in general, incorporate culturally responsive practices into classroom instruction and activities. The described findings are based on one semester of observations and teacher interviews. The process of evaluation and resulting findings can help inform additional development of the semi-structured observation tool and coding framework, in particular. Additionally, given the emphasis on preparing students for 5K, future work can examine how the practices observed in full-day and half-day 4K differentially align with and prepare students for 5K expectations, routines, and activities.

MEP Full-day 4K Evaluation: Examining 4K Classroom Pedagogy

The goal of the classroom observations and teacher interviews were twofold:

- 1. Identify any time use and pedagogical differences between full-day and half-day classrooms.
- 2. Identify patterns in time use and pedagogy across 4K classrooms, particularly the use of culturally responsive practices.

Full-day 4K is a key equity-enhancing strategy for MMSD to address persistent gaps in opportunities and outcomes for students of color and families who are socioeconomically-disadvantaged in the district. Initial data demonstrate that MMSD succeeded in providing greater access to full-day 4K for the intended population. In 2021-2022, compared to half-day classrooms, full-day 4K classrooms included more students of color and fewer students whose parents enrolled in college. To be an effective equity strategy, 4K instruction must also support children's development and be responsive to the diverse cultural and linguistic backgrounds of the children who attend. We observed in classrooms to understand pedagogical patterns in teachers' instructional content and format, the extent to which teachers used culturally responsive practices, and pedagogical differences between full-day and half-day classrooms. We also interviewed teachers to learn about teachers' backgrounds, how teachers planned their time, their priorities and goals for 4K, and their approach to being responsive to children in their classroom. Findings from classroom observations and teacher interviews can inform our understanding of how practice is contributing to the results from child assessments.

Data Collection

This exploration supplemented an evaluation that examined differences in student learning in literacy, numeracy, and executive functioning in full-day and half-day 4K. We sampled classrooms that were typical of district make-up and size. Specifically, we selected classrooms that were racially diverse within a range that is typical of the district (i.e., between 27% and 64% Black and Hispanic) and close to the average classroom size (i.e., between 10 and 18 students). We then randomly nominated classrooms that met these criteria for participation and asked the Director of Early Learning for input on which classrooms were best poised to participate to determine our final list. Dual language immersion classrooms were not included in the sample given significant differences in teacher practice in response to the linguistic skills of the students they served. Ultimately, we observed 16 classrooms (8 half-day classrooms, 8 full-day classrooms) and interviewed 13 lead teachers. Three lead teachers were not able to be interviewed due to extenuating circumstances. 13 of the 16 classrooms that were observed also participated in the quantitative evaluation in which student achievement was assessed.

Semi-Structured Classroom Observations

Observations were conducted between March and June 2022 using a semi-structured observation template and protocol that was based on prior MEP work and adjusted to include observation of culturally responsive practices. This exploration served as an opportunity to pilot the observation tool. The observation template (Figures 1 and 2; full tool in Appendix A) recorded the physical classroom environment, instructional contents, instructional formats, culturally responsive materials, and culturally responsive practices. The culturally responsive materials and practices we observed for 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). Pairs of observers simultaneously observed in classrooms and completed the semi-structured observation template. Upon arrival in classrooms, observers captured a "snapshot" of the physical classroom environment and teacher and student activities by completing the culturally responsive materials checklist and a summary description of classroom activities. Then, researchers observed in classrooms and recorded meaningful teacher actions and teacher-child interactions to the template, including descriptions of: a) instructional content; b) instructional formats; and c) culturally responsive practices. Observers were in each classroom for approximately 2 hours.

Figure 1. Excerpt of Materials Checklist completed during observations

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			
Multicultural dolls, as demonstrated by skin color, hair texture, and/or clothes			
Food from diverse cultures			

Figure 2. Excerpt of Semi-Structured Observation Template

Content	Format	CRPs	Observation	
SNAPSHOT				
Content	Format	CRPs	Observation	
	SNAPSHOT	SNAPSHOT	SNAPSHOT	

After conducting an observation, each observer completed their field notes on the observation template and applied the relevant codes that denoted the types of instructional content, format, and culturally responsive practices that were observed. The research team met regularly to discuss patterns observed in classrooms. Additionally, given the pilot nature of the observation protocol, we discussed potential changes to the protocol and codes for the future.

Teacher Interviews

We interviewed lead 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, their priorities and goals for 4K, and their approach to being responsive to children in their classroom. See Appendix B for the interview protocol. Interviews lasted between 20 and 30 minutes. All 13 of the teachers who were interviewed were women; most were White women, which reflects the demographics of the early childhood teaching workforce. Some teachers were new to 4K while some had taught in 4K for over 10 years. All had taught in early childhood (PreK to third grade) for at least one year before the present evaluation.

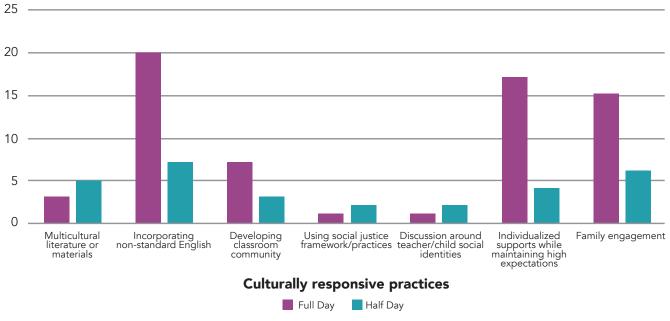
What We Learned from Observing 4K Classrooms

We used the classroom observations to understand pedagogical differences between full-day and half-day classrooms, pedagogical patterns in teachers' instructional content and format, and the extent to which teachers used culturally responsive practices and how they used them. The following sections describe findings related to these three purposes.

We Observed more than Twice as Many Culturally Responsive Practices in Full-Day Classrooms Compared to Half-Day Classrooms, but there was Great Variance Across Teachers

We observed 64 total instances of culturally responsive practices in full-day classrooms compared to 29 instances of culturally responsive practices in half-day classrooms, which is slightly more than twice as many, despite the fact that we observed all classrooms a similar amount of time (approximately 2-2.5 hours; Figure 3). However, this difference across types of classrooms was primarily driven by two full-day teachers who demonstrated a large amount of culturally responsive practices compared to other teachers; these two teachers were observed displaying 17 and 22 culturally responsive practices, respectively, compared to other full-day teachers who ranged from 2 to 8 culturally responsive practices each. Meanwhile, there was one half-day teacher who stood out as exhibiting more culturally responsive practices compared to other half-day teachers—they were recorded as demonstrating 12 culturally responsive practices compared to the other half-day teachers who ranged from 0 to 7 observed practices.

Figure 3. Number of Culturally Responsive Practices in Full Day and Half Day 4K Classrooms

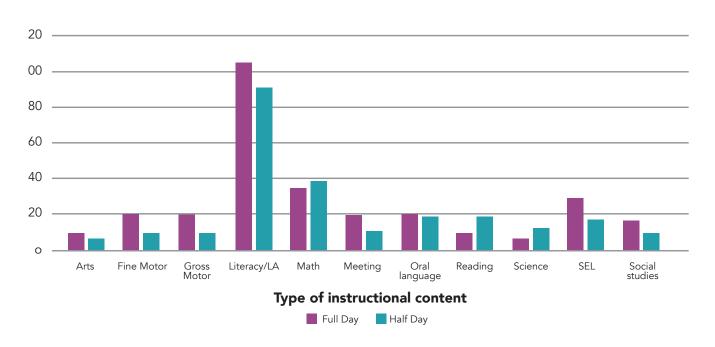


While we observed the use of non-standard English (NSE) the most in both types of classrooms (e.g., teachers speaking to children in Spanish), full-day and half-day classrooms differed in the second most common culturally responsive practice. For full-day classrooms, individualized support was the second most common culturally responsive practice (26.6% of culturally responsive practices). For half-day classrooms, evidence of family engagement (e.g., talking to children about their families or home life) was the second most common (20.7%).

Language and Literacy Activities and Whole Group Instruction were Most Common

There were few pedagogical differences in full-day and half-day classrooms. Across both full-day and half-day classrooms, the most common instruction content we observed was Language and Literacy activities (35.3% of coded interactions) followed by Math (13.3% of coded interactions; Figure 4). The least common instructional content was Science in full-day classrooms (2.4%) and Art in half-day classrooms (2.7%). We observed a variety of different types of Language and Literacy activities, including naming letter sounds at the beginning of children's names, clapping out syllables, brainstorming rhyming words, and encouraging children to sound out words as they wrote.

Figure 4. Instructional Content Observed Across 4K Classrooms



The most common instructional format we observed across both full-day and half-day classrooms was Whole Group Teaching (29% of coded interactions) followed by Centers (17.5%; Figure 5). The least common instructional format we observed was small group, which was recorded as the instructional format for 4% of interactions in full-day and half-day classrooms. However, our observations of small group instruction were primarily concentrated amongst a small group of teachers—we did not observe most teachers conducting

a small group while in classrooms. We observed almost twice as many transitions in full-day classrooms (57; 17% of coded interactions) compared to half-day classrooms (30; 12% of coded interactions). It is important to note that we were only in each classroom one day; for full-day classrooms, we were typically in classrooms in the morning, so we missed afternoon activities.

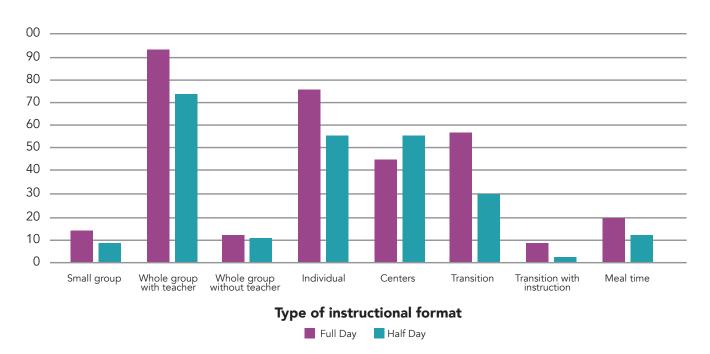


Figure 5. Instructional Formats Observed Across 4K Classrooms

The Physical Classroom Environments Reflected Great Diversity; Full-Day Classrooms Displayed More Community-Building Activities

We recorded many classroom materials (e.g., wall displays, books, art materials) that reinforced the value of diversity. Across both full-day and half-day classrooms, wall displays or signs were most common–more than 50 were observed in full-day classrooms and half-day classrooms, respectively. These included posters, labels, or signs that represented students' families or home life, showed people of different races or cultures, used a language other than English, represented culturally-meaningful tasks, reflected community-building activities, or otherwise demonstrated respect for diversity. Full-day classrooms had more community-building or collaborative activities (e.g., murals) displayed (N=12) compared to half-day classrooms (N=7), and more books that included characters representing difference races, ethnicities, languages, and/or cultures (N=22) compared to half-day classrooms (N=15).

The Use of Children's Home Language was the Most Common Culturally Responsive Practice

In general, we did not observe many instances of culturally responsive practices being used relative to the total number of interactions that were captured. For comparison, we observed 93 total instances of culturally responsive practices being used while we recorded 556 interactions containing instructional content.

Although there is no ideal ratio of culturally responsive practices used during learning activities, it is important to note that culturally responsive practices were rarely observed while teachers were delivering instructional content. Incorporating culturally responsive practices during instruction is a key way to capitalize on its benefits.

The most common culturally responsive practice was the use of non-standard English (NSE). NSE was recorded when teachers used languages other than spoken English (e.g., Spanish, American Sign Language) as well as if a teacher using vocabulary, grammar, or other communication patterns that are common in non-dominant dialects of English (e.g., African American Vernacular English). 31% of all culturally responsive practices recorded in full-day classrooms were teachers using NSE; 24.1% of culturally responsive practices in halfday classrooms were NSE. Spanish was the most common language used in these interactions. While NSE was frequent, it was primarily used for individual directives (e.g., "Siéntate [Sit down.]," "Mira [Look.]," "Manos aqui [Hands here]," "Come primero," [Eat first.]) or general reinforcement "e.g., "Muy bien." [Very good]).



There were some exceptions to this pattern where teachers used a child's home language while providing instruction. For example, the following exchange was observed:

Morning message is written in English and Spanish—"Good morning, today is Wednesday. Today is May 18, 2022"

Teacher: Remember I also wrote it in Spanish. (says the morning message in Spanish)

Child: That's Spanish.

Teacher: Look what it sounds like in Spanish: "Hoy es miercoles. Does it start with the same letter?...It is a different letter. Our Wednesday starts with /w/ /w/. What letter is that?

Multiple children: W!

Teacher: Spanish starts with a /m/ /m/

Multiple children: M!

In this example, the teacher taught children letter sounds by having them think about both English and Spanish words. Students were also able to see both languages in writing. This example is also unique because the teacher was using Spanish with the whole class, not just with one student who spoke Spanish during an individualized interaction. This helps all children value an aspect of diversity within the classroom (the languages children speak) and reinforced letter sound learning. In another example, a teacher encouraged a child who spoke English and Spanish to count a set of objects in both languages. The teacher was able to evaluate the child's counting abilities when he counted in English and then offered him an opportunity to use his home language in the classroom. Inviting children to use their home language or to teach others about their culture is a great way that teachers can demonstrate respect for a child's language and culture even if they do not know much about it.

Another commonly observed culturally responsive practice was family engagement, which comprised 23.4% of culturally responsive practices recorded in full-day classrooms and 20.7% of culturally responsive practices recorded in half-day classrooms. Within the context of classroom practice, family engagement consists of teachers learning about children's families and home practices or applying information they know about children's families and home lives for classroom instruction, activities, and interactions. We observed teachers asking children about their families and demonstrating knowledge of children's families during a variety of interactions, though family engagement was typically recorded during Meals and Transitions. For example, an observer recorded the following exchange during lunch:

Teacher talks to another student, an Indian girl. Teacher asks how her trip was and if she's sleepy... The girl talks about her family.

Teacher: What's grandma's name? What do you call her?

Student: I say it in another language

Teacher: What do you call her?

Student: Aye

Teacher: Oh, that's nice.

The teacher both knew that the student had gone on a trip with her family and demonstrated an interest in learning more about the child's family and language. Showing such interest can help children feel a sense of belonging in the classroom, and the information that teachers learn in such interactions can support future interactions with children and their families as well as future instruction. Culturally responsive practices were most commonly observed during 1:1 interactions like this.

What We Learned from Teachers

We interviewed teachers to learn more about their backgrounds, how full-day and half-day teachers differentially planned their time, and teachers' approach to being responsive to children in their classroom. While teachers noted differences between teaching full-day 4K and half-day 4K, we did not identify differences in pedagogical approaches or perspectives between full-day and half-day teachers.

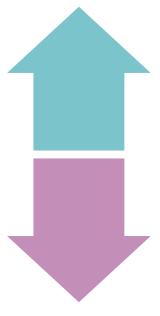
Full-Day 4K Offers Multiple Benefits for Teachers and Students

Both full-day and half-day teachers perceived full-day 4K as an opportunity to implement more learning activities and unique types of learning activities compared to half-day 4K. One full-day teacher described how she used this extra time, saying:

I think it's—it's allowed us to have more time to get out of the building. We've done walking field trips, we've delivered stuff to neighbors' doors on different things, we have a monthly walking trip to the public library. Half-day you couldn't do that. Full-day, we can do that and still do a project and still have you know other things and still have playtime in our classroom. So it feels like we can do both. It's not either or.

The teacher recalled having to make difficult decisions about how to use time in half-day and not getting to do all the types of activities that she believed were beneficial to children. However, full-day allowed creative activities that take up more time but provide children with hands-on learning opportunities. Other teachers similarly explained that, in half-day, a larger proportion of time was taken up by non-academic routines, such as meals, transition into and out of the classroom (particularly during winter time when coats and additional clothing layers were required), and recess.

Figure 1. Full-Day Benefits and Challenges



Benefits of full-day

- More opportunities for creative, hands-on learning activities
- Fewer students and families to manage relationships with
- More opportunities to tailor curriculum and instruction to a single group of children

Challenges of full-day

- Challenges of full-day
- Loss of mid-day planning time
- Fewer opportunities to co-plan or coordinate with staff

Teachers also named other benefits for fullday 4K. Notably, both half-day and full-day teachers expressed that having fewer students and families to remember information about and respond to enabled more responsive and higher-quality interactions. For instance, one half-day teacher described the challenges of trying to plan for two sets of children, saying, "So the part that I don't like about two half days is that you get going on with something in the morning and they're really invested in it. And then the afternoon is a totally different thing. So I'm constantly planning two different ways, you know what the morning kids are into versus what the afternoon kids are into." Half-day programming made it more difficult for teachers to be responsive to children's needs and interests as they tried to tailor their activities and instruction to two sets of children. Teachers also reported that having fewer children for whom to do assessments and progress reports saved time, which allowed them to be more intentional and effective.



A lack of mid-day planning and break time was one challenge that came up with full-day 4K. Teachers who previously taught half-day 4K observed that they had less time to make mid-day adjustments to the classroom schedule or activities and convene with their aides when teaching full-day 4K. A full-day 4K teacher expressed this in the following excerpt:

Interviewer: And is there anything about your schedule that you wish you could change or do differently? Teacher: I would like to have time with my SEA [Special Education Assistant].

Interviewer: Can you say more about that?

Teacher: Well, when I had half-day, the kids would go home. And then another group would come...but then they didn't come at the same time or leave at the same time. So I had time to come back, reset the room up, do what I need to do, eat. While I'm eating lunch, talk to my SEA. You know, have time to reflect, plan, adjust, you know, that kind of stuff. And I don't have that time.

Interviewer: So because your SEA starts pretty much like when the kids come, right. Yeah, you don't get any time.

Teacher: Correct.

The mid-day break between morning and afternoon sections was a valuable time for teachers, but was not possible when they taught full-day. In part, this is also related to our findings regarding staffing (see below). Because assistant teachers' and aides' schedules were based on children's schedules, they often weren't available for co-planning with teachers before and after school in the absence of a midday break that half-day 4K allowed.

Teachers Most Frequently Described using Multicultural Literature and Materials, Supporting Classroom Community, and Incorporating Child Interests in Curriculum

Full-day and half-day teachers did not differ in the culturally responsive practices they described using. Similar to our observations, teachers frequently described including multicultural books and materials in classroom libraries. Although this was not based on cultural features or specific information families shared with teachers, teachers did select books to ensure children saw themselves in the classroom. For example, a teacher reflected:

I have a student who wears a hijab. So I've tried to have a couple books on different clothing items, you know, that people wear, and I chose, like, say, My Bonnet, as one and there's another one with a girl who wears a hijab and her mom who wears a hijab... So I've tried to choose books that incorporate—that kind of reflect who they are as well.

Including diverse books in classroom libraries was one way teachers were intentionally responsive to child identities. Several teachers cited books they got from district book lists or resource provision.

Teachers also emphasized the ways they encouraged classroom community and respect for diversity. For example, one teacher explained that she encouraged children to ask questions of each other so they could share about their culture, like what they eat and the holidays they celebrate. It was important to teachers to expose children to the cultural diversity in the classroom. One teacher reported:

I think just getting them used to hearing that not everyone celebrates Christmas. Not everyone comes from a mom and a dad. You know, some people don't even live with moms and dads. Some have two. Some have, you know, just one. So it's—I want them to feel—always like this is a safe space where whatever they say is normal. It doesn't, or they don't have to feel like 'Oh, I'm so different than someone else.'

While teachers wanted children to learn about each other, several of them viewed this as a way for children to understand that they are both similar to and different from others. They wanted children to recognize, for example, that children had different skin colors or celebrated different holidays, but they were all a part of the classroom community.

Interestingly, teachers rarely described using languages other than English as a way they were responsive to children's cultures, despite that being the most common culturally responsive practice we observed. Potentially, teachers primarily saw speaking another language or using another language in classroom labels and materials as a necessity to communicate with children, rather than a way to be responsive to children's cultural identities. When an interviewer directly asked a teacher about Spanish charts she saw in the classroom, the teacher explained:

I really tried to—like it—like he was crying. So, I tried to learn how to say like, 'We don't need to cry. It's okay.' So, on my, my closet, I also have little sticky notes of like, how to get dressed and things like that. So I can just go back and remember that.

The teacher described using Spanish as a way to give the child directives and comfort, which aligns with the primary ways we observed languages other than English being used in classrooms.

Staffing and COVID-19 Have Been Ongoing Challenges for 4K Teachers

Staffing was consistently cited as a barrier to teachers achieving their goals for 4K and implementing desired activities. Staffing challenges included teachers not having enough people in the classroom, not having consistent help in the classroom (e.g., they had to share an assistant teacher/aide or their assigned aide was frequently absent), and not having someone else in the classroom for enough hours or key times during the day. In the following excerpt, a teacher immediately named the need for another classroom staff person before the interviewer even finished asking the question about what she needed to achieve her goals.

Interviewer: Okay. What would you need to feel like you had—

Teacher: An extra person

Interviewer: Another full time person?

Teacher: Yes.

Interviewer: Like an SEA [Special Education Assistant] or—

Teacher: Yes. Interviewer: Okay.

Teacher: Because she's not even here the whole time. She comes in, she comes in at eight and leaves at

10:40. And then I'm by myself.

This teacher had a part-time aide in the classroom, but emphasized that she needed someone there full-time. During classroom observations, in addition to teachers who were by themselves full-time, there were multiple teachers who shared an assistant teacher or aide with another classroom who was only in their classroom certain days of the week or for certain amounts of time. While teachers collaborated to try to help each other and spread support staff across classrooms, there were several instances during observations when an assistant teacher or aide had to abruptly leave a classroom because of an issue in another classroom they were supporting.



In interviews, teachers described staffing inconsistency and inadequate staffing (both permanent staff and substitutes when staff were sick or had to quarantine for COVID) as negatively impacting their ability to support children's learning, complete assessments, and efficiently complete classroom routines. For example, multiple teachers said they were not able to do small groups because they did not consistently have someone else in the classroom to manage student behaviors or help other students while they focused on a small group, which may, in part, explain why we observed so few small groups. In the following exchange, a teacher cited staffing shortages as a barrier to her achieving her goals. This teacher worked closely with another 4K teacher in her school to share staff and coordinate schedules. However, that meant that when any staff were absent, both classrooms had trouble implementing the typical activities and routines.

Interviewer: Yeah. Things that make it more difficult for you to meet those like social emotional, or—Teacher: I would, I would say the staffing issues. Lack of the, what should be like the expected supports, due to a lack of staffing. You know, we've had days where we've had two people out and you know, like my aid was out and I was out sick. And now there's just two people running classes on. So it's like, are you going to hit all your key things? No, you're just going to get through the day and make sure everybody's safe, safe and fed and yeah, like get what you can, but you're not, you know, nobody's pulling a [small] group...

Interviewer: Right. So having those opportunities to work in small groups or one on one with kids seems like that's really important. And if you don't have the staffing.

Teacher: It makes it a lot more challenging. Yeah. Can you do it? Probably. Yeah, but it ...it's harder if you don't have a second adult definitely—just passing out lunches because of the way we're having it. You know, like everybody has to sit in their own spot and I can't just –'Okay kids, you go get all your food yourself.' It doesn't work great.

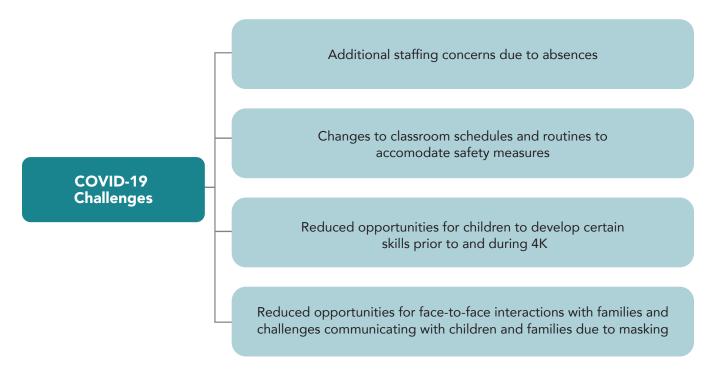
When staff were absent, the teacher explained that both classrooms would run with fewer adults—or even just a single adult—and they would struggle with completing the basic classroom routines, such as meals, as well as important instructional opportunities, such as small groups and individualized instruction. Notably, while this teacher only led the classroom by herself and experienced these challenges when staff were absent, a few teachers were always by themselves due to an assistant teacher leaving and that position not being re-filled. Again, some teachers were able to work together to share support staff if they did not have a dedicated assistant teacher.

The COVID-19 pandemic has also presented several ongoing challenges for teachers. Full-day and half-day teachers did not differ in the reported effects of COVID-19. Both types of teachers described three primary ongoing challenges: 1) changes to the classroom schedule and routines to accommodate COVID safety measures; 2) reduced opportunities for children to develop certain skills prior to and during 4K; and 3) reduced opportunities for face-to-face interactions with families and the negative impact of masks on communication with both children and families (e.g., not being able to fully see facial expressions). The first two challenges, in particular, affected both full-day and half-day teachers' time use as well as perceived child outcomes.

Teachers described restructuring their schedule and routines as well as changing their classroom environment in undesirable ways to accommodate COVID safety measures. When asked how her current classroom differed from prior years, one teacher immediately cited COVID, saying:

I'd say COVID [is] still playing a role in it, you know. We can't have meals together like we used to. So I miss that time a lot. Where we used to snack together—in the morning group would be breakfast, the afternoon would be lunch—because they did a lot of socializing, and that, so I think that's a big part of it. Just keeping up with all the cleaning...the best you can to keep it healthy and safe for the kids that's eaten up a lot of time. While teachers configured their classrooms in innovative ways to align with safety measures (e.g., all children have to be facing the same way when masks are off during mealtimes; children have to be spaced out more around the classroom), that meant less socialization than in the past. Additionally, teachers explained that new requirements, like additional cleaning protocols, while necessary, took up time that they would typically use for other activities.

Figure 3. Ongoing COVID-19 Challenges



Teachers were also concerned about the impact of COVID on children's development and behavior because it meant many of them had fewer structured care and schooling experiences prior to, or outside of, 4K. Multiple teachers believed children were exhibiting more behavioral concerns because of this and that made it difficult for them to teach certain aspects of their desired curriculum. One teacher explained:

This year is a lot harder, because in a way the kids have not been in any—I mean, even some have not been in daycares because of COVID. And it took—so it literally took two quarters for me to say 'you know what I think we're going to be okay.' So behavior was getting in a way...You know, and as I said before, it's more important for me to teach them the social stuff before the other things.

Like many teachers, this teacher prioritized behavioral supports and social-emotional development in 4K and considered them to be foundational for other types of learning. However, because children had missed certain early experiences due to COVID, she believed she had to work harder to address those areas at the expense of academic learning. Teachers described not being able to teach certain skills or implement typical activities they've used in the past because they believed children were not ready to engage with them.

Additional findings regarding teachers' 4K goals and practices

Given the focused nature of this evaluation, we primarily examined ways teachers described differences in time use and pedagogy between full-day and half-day 4K as well as teachers' use of culturally responsive practices. However, several other patterns emerged regarding teachers' goals for 4K and how they approached instructional planning and communication with



families. When describing their goals for 4K, both full-day and half-day teachers often prioritized children learning typical school routines and expectations as well as school becoming a place that children like to be. At the same time, many teachers expressed concern about children learning key academic and behavioral skills in preparation for Kindergarten. Being able to use curriculum in flexible ways helped teachers achieve these goals. Teachers described strategically choosing when and how to use Creative Curriculum studies and Second Step lessons and materials, incorporating supplemental activities, and adjusting the classroom schedule.

Additionally, we asked teachers how they got to know children and families in order to be responsive to the various identities and backgrounds of children in their classrooms. Teachers described a number of practices they used to communicate with families, including Ready-Set-Go Conferences (parent-teacher conferences at the beginning of the school year), weekly newsletters, phone calls and text messages (through their personal number or a Google Voice number), online photo sharing, and home visits. However, teachers primarily used these communication efforts to share information with families about 4K expectations, goals, and activities as well as discuss how children were progressing throughout the school year. We rarely heard from teachers about how they used information they learned from families in subsequent curriculum planning and pedagogy. More information about these findings can be found in Appendix C.

Limitations

There are several limitations of the study design. First, we visited a limited number of classrooms compared to the total number of full-day and half-day sections that the district offers. Additionally, we were not in classrooms for an extended period of time and were only in classrooms during the last few months of the school year, from March through June 2022. This means we missed activities that may have taken place during the beginning of the school year when teachers may be doing more activities to get to know families and provide children with a sense of belonging in their new classroom. Although we asked teachers how they learned about families and were responsive to children, we were not able to observe how practices may shift over the course of the school year. Additionally, this analysis was based on limited observations in classrooms (one 2 to 2.5 hour visit, almost always in the morning for full-day classrooms). Although we tried to visit classrooms a second time, we were only able to visit three classrooms a second time before the end of the school year. The findings reported here are only based on the first classroom visits since most classrooms were not visited a second time. Therefore, we may have missed activities that were not implemented daily or were implemented in the afternoon in full-day classrooms. We asked teachers about their daily schedule and were able to learn about when and why they engaged in some activities less often (e.g., small groups), but the relatively short time in classrooms likely impacted our findings, including our estimates of how much time teachers spend engaged in different types of instructional content and formats.

What's Next?

This exploration offered an opportunity to pilot the observation protocol and coding framework that was used. Throughout the data collection and analysis process, the research team discussed ways to adjust the protocol for future use. We plan to make changes to the observation protocol and framework for future use in response to our findings and discussions with the district regarding 4K evaluation priorities and goals. Additionally, we will continue to work closely with the Departments of Early Learning and Research & Innovation to discuss how MMSD may understand these findings and what they may mean for teacher supports and programming decisions. Using funding from UW-Madison and MMSD, we are planning a second year of the evaluation that will include both 4K and 5K classrooms, offering a more expansive look into the ways teachers are responsive to children and families, how 4K instructional programming can prepare children for 5K, and the ways 5K programming can build on the foundation that 4K offers. As MMSD continues to invest in 4K as an equity-enhancing initiative, it is important that evaluation considers both student growth and how children are experiencing early learning classrooms, including how teachers are being responsive to children' and families' cultural identities and backgrounds. As many teachers espoused, 4K is an important time for children to feel welcomed at school and begin their journey as a learner who values the diversity around them.



Want to know more about MEP and 4K?

Here's a comprehensive list of our previous early education work.

References

- Aronson, B., & Laughter, J. (2016). The theory and practice of culturally relevant education: A synthesis of research across content areas. *Review of Educational Research*, 86(1), 163–206. https://doi.org/10.3102/0034654315582066
- Bennett, S. V., Gunn, A. A., Gayle-Evans, G., Barrera, E. S., & Leung, C. B. (2018). Culturally responsive literacy practices in an early childhood community. *Early Childhood Education Journal*, 46(2), 241–248. https://doi.org/10.1007/s10643-017-0839-9
- Gay, G. (2010). Culturally responsive teaching: Theory, research, and practice (2nd ed.). New York, NY: Teachers College Press.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491. https://doi.org/10.3102/00028312032003465
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. *Harvard Educational Review*, 84(1), 74–84.

Appendices

Appendix A: Semi-Structured Observation Protocol

Culturally-Responsive Practices Classroom 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			

What to look for:	None	1-2 Examples	3+ Examples
Dress-up clothes from diverse cultures			
Multicultural dolls, as demonstrated by skin color, hair texture, and/or clothes			
Food from diverse cultures			
Dress-up clothes from diverse cultures			
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: • 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 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) 			

Observation Template

Time	Content	Format	CRPs	Observation		
	SNAPSHOT					
	C		CDD			
Time	Content	Format	CRPs	Observation		

Content: **A** Arts; **FM** Fine Motor; **GM** Gross Motor; **L** Literacy; **LA** Language Arts; **M** Math; **MT** Meeting; **MIX** Mixed Content; **N** None; **OL** Oral Language; **R** Reading; **SC** Science; **SEL** Social Emotional Development; **SS** Social Studies

Format: **WG** Whole Group; **WGT** Whole Group Teacher; **SGT** Small Group with Teacher; **SG** Small Group; **SGTC** Small Group Teacher Center, **SGC** Small Group Center, **Ind** Individual; Centers; **TRN** Transition; **TRNI** Transition with Instruction, **Meal**, **Out**, **B**athroom

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

Appendix B: Interview Protocol

Background:

• Can you describe the classroom you were previously teaching in, such as grade-level and the diversity of the classroom in terms of disability and racial and linguistic backgrounds?

Instructional time:

- Can you describe your goals for student learning and development?
- 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.
- Is there anything you wish you could change about your schedule? What? Why?

Culturally responsive pedagogy:

- What are some of the ways that you get to know your students? (at the beginning of the year and throughout the year).
- 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 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?

Any questions based on observation.

Appendix C: Additional Findings Regarding Teachers' 4K Goals and Practices

Several patterns emerged regarding teachers' goals for 4K and the ways they approached instructional planning and communication with families. Although not directly related to the current evaluation purposes, teachers' perspectives on these issues can inform future support for 4K. We review these findings here.

Teachers Emphasized the Importance of Children Becoming Acculturated to School and were Sensitive to the Need to Support Children's Transition to Kindergarten

When describing their goals for 4K, both full-day and half-day teachers often emphasized the importance of children learning school routines and expectations as well as school becoming a place they like to be. For example, when asked what their goals are for 4K, one teacher responded:

I really want them to learn how to be at school and...what that looks like, what that means and how they can benefit from it and not just something that they go to. Because part of the reason I became a teacher for earlier childhood education is because that love of learning starts when you're super young...

Because 4K is many children's first formal school experience, teachers expressed that it is an important time for children to learn "how to do school," as another teacher described it, and to have a positive first experience that makes them want to continue coming to school and learning. As demonstrated by the above teacher's response, these two goals were also often connected whereby becoming familiar with school was perceived as important for children to be comfortable there.

At the same time, many teachers expressed concern about children learning key academic and behavioral skills. Teachers named development of these skills as goals for their 4K instruction and also identified them when discussing what children would need to know and do in Kindergarten. Some teachers noted specific skills and routines that they felt they had to teach children in order to prepare them for Kindergarten. For example, another teacher explained:

...they're gonna leave me, which is sad that they're gonna leave, but also, then they leave the play, and they leave a lot of the things that I wish would follow them...So I want them to know that...you know, when we have like center time, we need to do our centers, because this is something that you're going to be doing in kindergarten. So I want them to also know that it's not—everything isn't what I want to do. 'When I come to school, I get to choose everything throughout the day.' No. We're doing our, you know, our carpet time...

The teacher described several elements she perceived as being valued in Kindergarten that she felt she needed to prepare children for, despite disagreeing with some of them, including having fewer play-based opportunities and participating in classroom routines and activities without much choice. As demonstrated by this quote, teachers sometimes acknowledged that they disagreed with what they believed children would be expected to know and do in Kindergarten, but felt they had to prepare them for it nonetheless. Thus, teachers' notions of school (or Kindergarten) readiness informed their goals and practice.

Curricular Flexibility was Important for 4K Teachers

Teachers frequently described curricular flexibility as a contributor to their ability to achieve their instructional goals. Flexibility included being able to choose when and how to use Creative Curriculum studies and Second Step lessons and materials, incorporate supplemental activities, and adjust the classroom schedule. For example, one teacher said:

But then there's also academic stuff that, you know, I have to pull into it, Creative Curriculum...So I do something called Zoo Phonics. So it's an animal, and it's a movement with the sound. And so they all know and we do it all. And they all know the sound and the motion, and they totally learn their sounds like that. And they love it.

Teachers described supplementing Creative Curriculum and Second Step with activities they had experience implementing that they believed to be effective and/or enjoyable for children in their classroom. Flexibility to incorporate instructional components outside of the core boxed curriculum enabled teachers to respond to child interests and needs while achieving desired outcomes. In another example, a teacher explained:

There's no cookie cutter curriculum. And I'm glad for that, because it keeps me on my toes. But like, we have second step for social emotional, which has foundational, you know, skills in learning. So we use those we use the picture cards, the puppets, I don't do it every day. But then we build on it...So I usually use a lot of the language provided in there. But also, you know, each child is so different and unique, like trying to figure out, you know, where they're at...

As this teacher explained, the core curricula provided to teachers (i.e., Creative Curriculum, Second Step) were viewed as starting points that teachers could use as a foundation and then build on to be more responsive to the specific children in their classroom. Another teacher described using the provided curriculum for some areas of learning but focusing on "teachable moments" to meet children where they are and teach certain skills in more applied ways (e.g., sharing, recognizing, and managing emotions).

Finally, curricular flexibility was important for teachers to feel a sense of agency in their classrooms. This seemed to contribute to teachers' satisfaction with their work.

Interviewer: Yeah. Is there anything that you wish you could change about that schedule? Or you do differently?

Teacher: No, because I feel like if I wanted to change something, I have the power to do that.

Flexibility helped teachers feel like they were able to do their jobs effectively and had control over what happened in their classroom.

Teachers Consistently Reported Communicating with Families was Important; They Primarily Focused on Family Notification and **Relationship-Building**

During interviews, we asked teachers how they got to know children and families and how they tried to be responsive to various child and family identities and backgrounds. Teachers' approaches to being culturally responsive were directly tied to their views on what it meant to be culturally responsive. This was particularly evident in how teachers gathered information about families and how they described using said information. There were no consistent patterns that differentiated full-day and half-day teachers' approaches to communicating with families.

First, teachers universally believed that communicating with families was important and they used a number of practices to do so. Teachers most commonly described Ready-Set-Go Conferences (parent-teacher conferences at the beginning of the school year) as a key opportunity to

Figure 4. Teacher Strategies for Communicating with Families



initially learn about children and families and talk with families about 4K and their classroom. One teacher described said conferences by saying:

[T]he focus of my conferences this year, for sure, showing off the room and where they've been. But also more of the social emotional stuff, like how they feel their kid is doing in school and how they feel the kid is feel[ing] about school, and then how I kind of see those things as well

Teachers wanted families to learn about 4K expectations, goals, and experiences early on and also wanted to understand how families viewed their children's abilities and support needs. Teachers also described communicating with families through weekly newsletters, phone calls and text messages (through their personal number or a Google number), online photo sharing, and home visits. However, these communication efforts were primarily focused on notifying families about what was happening in the classroom and discussing how their children were progressing rather than learning about families' cultural identities, preferences, and values.

Teachers were open to children and families telling them about their culture and home life and wanted families to feel comfortable sharing with them. However, several teachers were hesitant to directly ask families more personal questions. One teacher explained that she would just ask families questions about things children brought up in class, such as, "Did you want to share anything about that? Or is this true?," explaining that "[W]e're trying not to pry." These teachers worried that families may perceive teachers asking questions as invasive, so they believed they were being responsive by not asking families about their home life. It is important to point out this difference in how teachers may define or approach culturally responsive practice—some teachers felt they were being responsive by asking questions about families while others felt they were being responsive by not asking questions about families.

Teachers primarily described using information about children and families to broadly build relationships with them or address issues with students when challenges occurred. As one teacher described, "I do ask families...if you have a kid [who] has a rough day, let me know. You don't even need to give me the details...but just say treat them with tenderness TLC." Several other teachers described talking with families when children exhibited undesirable behaviors, such as taking toys from the classroom.

We rarely heard from teachers about how they used information they learned from families in subsequent curriculum planning and pedagogy. However, two half-day teachers did describe incorporating family cultural celebrations into classroom activities (i.e., Diwali, Chinese New Year).



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