

## How Does Family Engagement Influence Outcomes for 4K Students?

Research in K-12 education tells us that family engagement is key to positive student outcomes, but says little about whether or how family engagement matters for younger students. In partnership with MMSD and with support from the **Madison Education Partnership** (MEP), a team of researchers from UW–Madison, led by **Dr. Alejandra Ros Pilarz** (Assistant Professor of Social Work), studied the relationship between family engagement practices and 4K student experiences.

### What did the researchers investigate?

Researchers wanted to understand how **teacher- and program-level family engagement practices** were related to **positive outcomes for students** and their families. In 2016-17, the team surveyed 4K teachers and leaders (i.e., principals and site directors) about their family engagement practices, and about 82% (124) responded. The research team then linked the survey data from 4K staff to MMSD administrative data for the students in their classrooms or programs. This allowed the researchers to investigate correlations in the data between reported family engagement practices and outcomes for students.

#### Teacher Family Engagement Practices

##### Two-way communication and collaboration, such as:

- Sharing information about what the child is learning
- Discussing parents' concerns or questions about their child

##### Parental involvement opportunities, such as:

- Inviting families to the classroom to participate in activities
- Inviting families to the school or center to meet other families

#### 4K Program Engagement Practices

**Referrals to services**, including social services and benefit programs

##### Provision of child-focused services, such as:

- Free and reduced-price meals
- Health screenings or medical care
- Mental health services for children

##### Provision of adult-focused services, such as:

- Adult education (e.g., GED, ESL classes, or continuing education), job training, career support
- Financial assistance and financial coaching
- Immigration or legal services



#### Student Outcomes

##### Student attendance

- Overall and chronic absenteeism rates

##### Early literacy skills

- Measured by PALS screening results

##### Social emotional learning

- Measured by teacher reports of prosocial behaviors

## What did the researchers learn?

- ✓ **More frequent communication with families was associated with lower rates of chronic absenteeism.**

Dr. Pilarz and her team found that a one standard deviation higher level of communication practices was associated with 19% lower odds of chronic absenteeism. But, there were no other statistically significant relationships between engagement practices and student outcomes overall among the full sample of students. *Turn to the next page Extra Credit to unpack what these statistics mean!*

- ✓ **Some family engagement practices were correlated with positive student outcomes for specific groups of students and families or type of 4K site (e.g., school-based or community-based early care and education site).**

Researchers found some positive relationships between engagement practices and student outcomes when looking at specific student and family characteristics (such as income or English language learner status) or type of 4K site (i.e., school-based or community-based early care and education [ECE] site). For example, providing program-level family support services was associated with lower chronic absenteeism and higher early literacy skills for students *only* in ECE sites; meanwhile, there was a positive association between the frequency of parental involvement opportunities and students' early literacy skills in school-based sites *only*. These findings suggest that engagement approaches may have different results depending on context.

- ✓ **Engagement practices were consistently associated with positive outcomes for students in low-income families.**

Students from low-income families benefited from family engagement practices. For these students, teachers' practices for communication and involvement were associated with lower chronic absenteeism; referrals to social services were associated with higher literacy skills; and programs' provision of adult-focused services were associated with both higher literacy skills and socioemotional skills. This suggests that enhancing family engagement efforts may be a promising equity strategy.

### How can I think about this research in my own work?



This study found that the frequency of teacher communication with families was related to lower chronic absenteeism rates for students overall. What does communication with 4K families look like in your school or early care and education center? What strategies or practices might you employ to *increase* two-way communication between teachers and families?



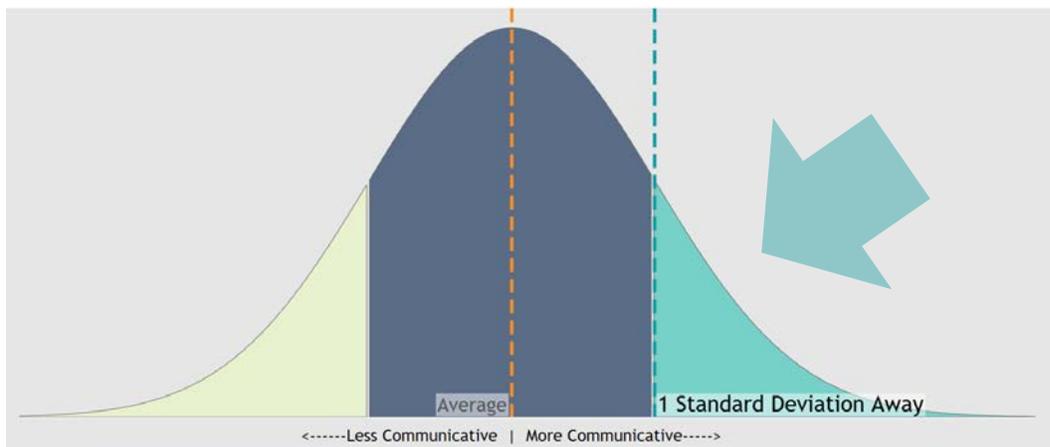
Pilarz et al.'s findings suggest that different kinds of 4K students and families benefit differently from various family engagement strategies. How, if at all, do you consider your students' and families' characteristics (including income status, race/ethnicity, and home language) in your design and implementation of family engagement strategies?

## Extra Credit: Exploring Standard Deviations

The MEP research team found that “a one standard deviation higher level of communication practices was associated with 19% lower odds of chronic absenteeism.”

...okay, but what does “a one standard deviation increase” even mean?

When researchers talk about a standard deviation increase, they are thinking about **distributions** and **distances from the average** of a population. Let's say we wanted to visualize all our 4K teachers and the frequency at which they communicate with families. We could plot this information with a normal distribution, like the graph below, that shows the number of teachers on the vertical y-axis and their communication frequency with families on the x-axis. In a normal distribution, most teachers would be concentrated around the average frequency of communication, seen in the center peak of the graph with the average denoted by the orange vertical line.



In this **normal distribution**, **68%** of all teachers are in the dark blue area, one standard deviation above or below the **average** frequency of communication. But there are a few teachers who communicate much more frequently (**16%** in this example)! They are in the lighter blue section, to the right of the **blue dotted line**. Teachers in that colored section conduct communication with families at a frequency that is **one standard deviation** higher than the **average**, and are associated with an almost 20% lower likelihood of their students being chronically absent. And, because this association was found to be **statistically significant**, that means that the relationship between teacher communication and student attendance was unlikely to be due to chance.