

Research Brief

MPS teachers link preschool to better performance in Kindergarten

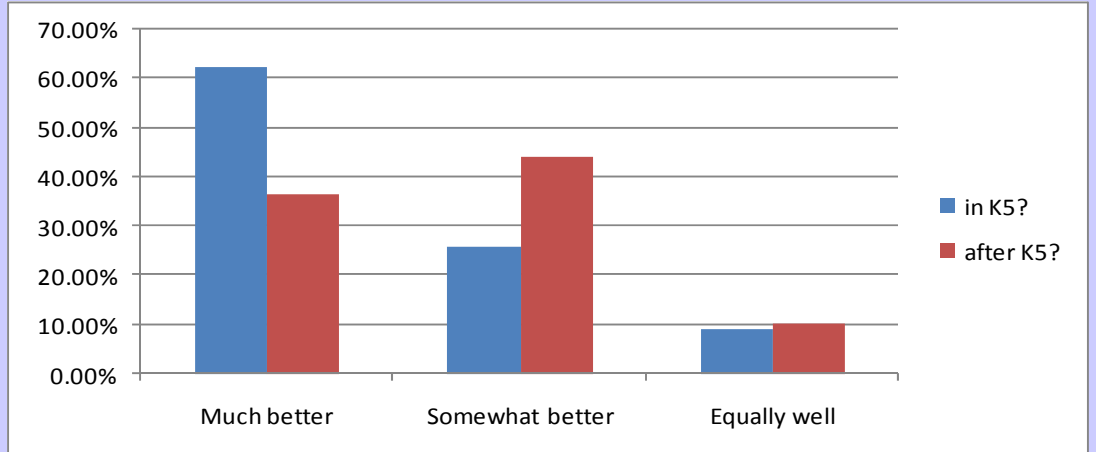
A survey of Milwaukee Kindergarten teachers finds nearly all (97%) report they can generally tell early in the school year which children attended preschool and which did not. Teachers also feel that those who attended preschool typically perform much better in Kindergarten and at least somewhat better after that (**Chart 1**).

The survey of 77 teachers of five-year-old Kindergarten (K5) in the Milwaukee public school district (MPS) also finds that most teachers (93%) feel children with preschool or four-year-old Kindergarten (K4) backgrounds are somewhat to much better prepared to enter K5 than their peers. In addition, the majority (83%) feel spending time in preschool or K4 is very important prior to entering K5. These findings hold true for teachers in schools with higher-than-average enrollments of low-income children, as well as teachers in schools with fewer low-income children.

Because of the widespread availability of K4 in MPS, nearly half (45%) of the K5 teachers surveyed report that over 80% of their 2008-2009 class had attended preschool or K4. As a result, most K5 students are prepared for Kindergarten at the time they start their K5 year, say teachers (**Chart 2**, next page). However, teachers in schools with higher levels of poverty are less likely to report high preschool participation rates (**Chart 9**, page 6).

Chart 1

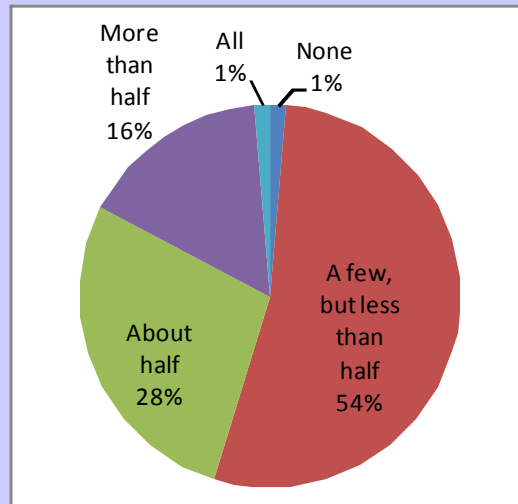
In your recent experience, do children who attend preschool or K4 typically perform much better, somewhat better, equally well, somewhat worse, or much worse (in K5/after K5) compared to children who did not attend preschool or K4?



This report is the latest in a series of reports investigating the link between high quality early childhood education and economic development. Longitudinal research from national experts indicates that high quality early childhood programs are likely to impart significant social, academic, and economic benefits to the children who participate, especially children of low-income families. These benefits may accrue to society more broadly over the long term as the children grow up. The purpose of this survey was to determine whether Kindergarten teachers can see a difference in students' readiness for school if they have had a high quality early childhood experience prior to starting five-year-old Kindergarten. The survey captured high quality early childhood programs by defining preschool to include four-year-old Kindergarten, Head Start, or a licensed, curriculum-based group child care center or preschool.

Chart 2

In your judgment, what share of students in your K5 class this year (2008-2009) was inadequately prepared for Kindergarten when they started school?



For a complete description of the skills included in each of the five skill groups, please see **page 8** of this brief.

Data and methodology

The online survey was conducted in February and March 2009. A list of all 300 MPS K5 teachers' school email addresses was obtained from the school district and an invitation to participate in the survey was emailed to all 300 email addresses on February 26 with a deadline of March 27.

Email reminders were sent to non-participants on March 11 and March 20, and the survey was closed to responses on March 27. The total responses received were 77, for a response rate of 26%. With this size sample, the margin of error is +/-9% at a confidence level of 90%.

The 77 teacher respondents represent 1,438 K5 students, which equal 23% of the 6,263 K5 students enrolled in MPS in 2008-2009. The 77 teacher respondents represent 51 different schools, or 42% of the 121 MPS schools offering K5.

The survey sample is fairly representative of the district's teachers and schools, while also reflecting particular expertise in early childhood education.

The 77 teacher respondents average a total of 15 years full-time teaching experience, including 10 years teaching K5 full-time, on average. The average survey respondent has been teaching at his or her current school for nine years. In comparison, the average MPS teacher in 2007-2008 had been teaching for 12 years, including 11 years in MPS.

Teacher respondents reported an average class

size of 14.9 students, including an average of 2.4 special needs students per class, or an average rate of 16% special needs, which compares to a district-wide average of 17.7% in 2007-2008.

In addition, half of the sample reports having a master's degree, with a third of those being masters in early childhood education. Half of the bachelors degrees earned by the respondents are in early childhood education.

The schools represented by the teacher respondents have an average schoolwide rate of participation in the free or reduced-price lunch program of 76%. The districtwide average participation rate for elementary schools is 80%.

Of the various schoolwide curricular or methodological specialties available in MPS, survey respondents represent schools offering bilingual education (7 schools), Comprehensive Literacy (12 schools), Direct Instruction (20), English as a second language (8), High/Scope (13), P-5 (8), Reading First (10), SAGE (45), and year-round instruction (6).

Note: Because Kindergarten teachers are only likely to know about a student's early childhood experiences in the year immediately prior to Kindergarten, we phrased the questions to ask about preschool and/or K4, but defined preschool to include high quality child care in a group setting. Quality of early childhood programming greatly impacts school readiness.

Preschool and school readiness

When asked about five skill groups children develop in early childhood, the respondent teachers feel most strongly that social and emotional development, cognition and general knowledge, and communication and language learning are very important prior to entering K5 (**Chart 3**).

These same three skill groups are felt to be the ones for which preschool provides the best preparation (**Chart 4**).

When asked to rank the five skill groups in terms of importance at entry to K5, these three skill groups are felt to be the most important (**Table 1** next

page). The teachers report these are also the top three skill groups in terms of the time they spend teaching in K5, yet in terms of how easy they are to impact during the K5 school year, guiding children’s approaches to learning is easier (**Table 1**).

Thus, teachers’ responses seem to indicate that they are relying on children to enter K5 already having made significant progress in developing these skills, which typically are the top focus of the K5 curriculum.

This may also explain why every respondent teacher feels that spending time in a preschool or K4 program before starting K5 is somewhat or very important (**Chart 5** next page).

Chart 3

Please rate how important you think it is for a child to have developed the skills in each of the following skill groups before entering K5.

Percent responding “very important”

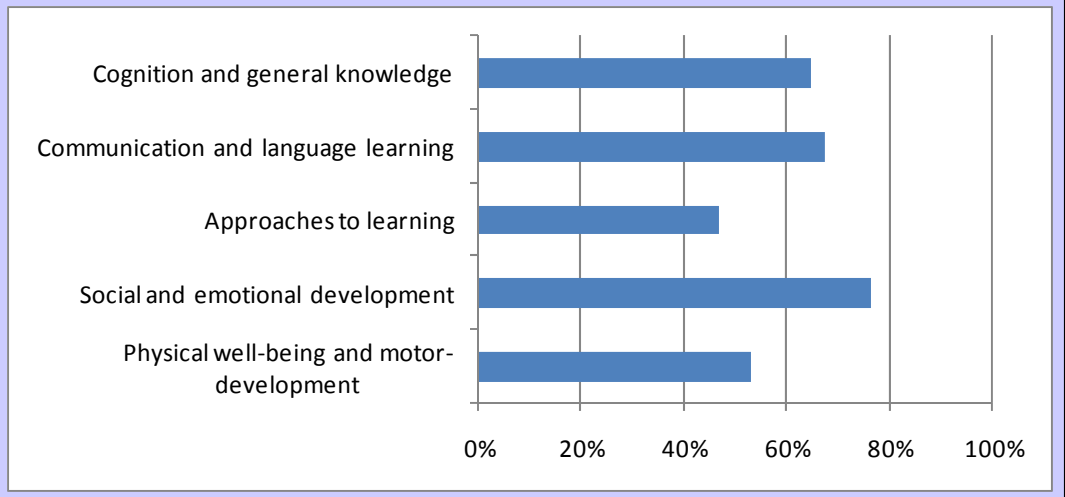


Chart 4

For each of the following types of skills, to what extent would you say that children in your classes who participated in preschool or K4 were better or worse prepared than children who did not participate in preschool or K4?

Percent responding “much better prepared”

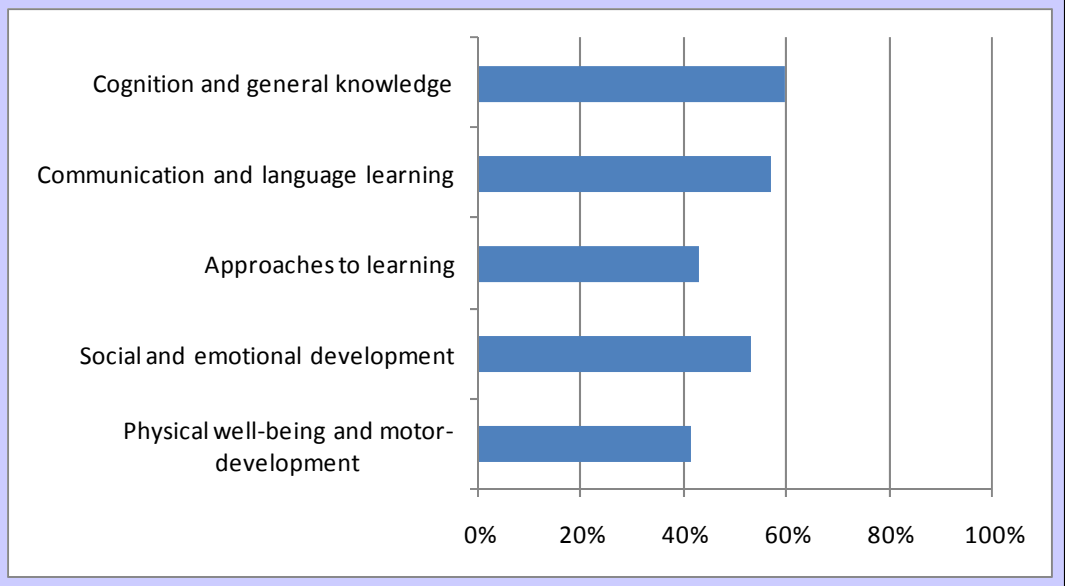


Table 1 Skill group and rank (1=most, 5=least)	Importance for entry into K5	Ease of impact during K5	Time spent teaching in K5
Social and emotional development	1	4	3
Communication and language learning	2	2	2
Cognition and general knowledge	3	2	1
Physical well-being and motor-development	4	3	5
Approaches to learning	5	1	4

While teachers agree about the value of preschool and K4 with regard to the skills needed and developed in K5, when it comes to the relationship between a student’s prior preschool experience and his or her behavior in Kindergarten, teachers’ opinions are more mixed.

Chart 6 shows that over 70% of the surveyed teachers feel children with preschool or K4 experience are more likely to be able to interact appropriately in K5. Yet when asked whether these same children are likely to enter K5 with behavior problems, 40% feel they are just as likely as children without preschool experience to misbehave.

It is critical to note that there are no statistically significant differences in teachers’ opinions on the importance of preschool or K4 between teachers in schools with above-average concentrations of low-income students and those in schools with fewer low-income students. Nor are there any statistically significant differences in opinion between teachers with early childhood education degrees and teachers with general education degrees, or among teachers with more or less teaching experience.

Chart 5

How important do you think it is for children to spend time in a preschool or K4 program before they start K5? Very important, somewhat important, not at all important, or not sure?

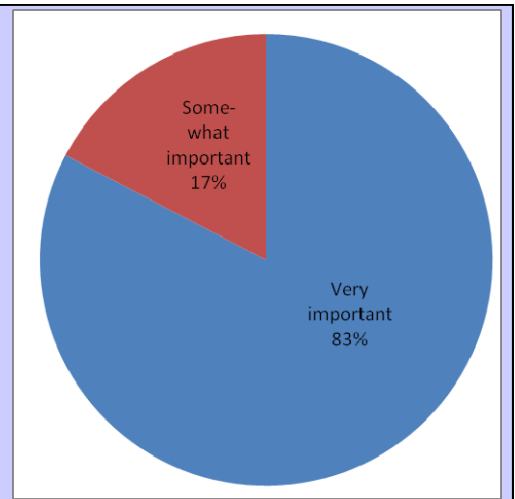
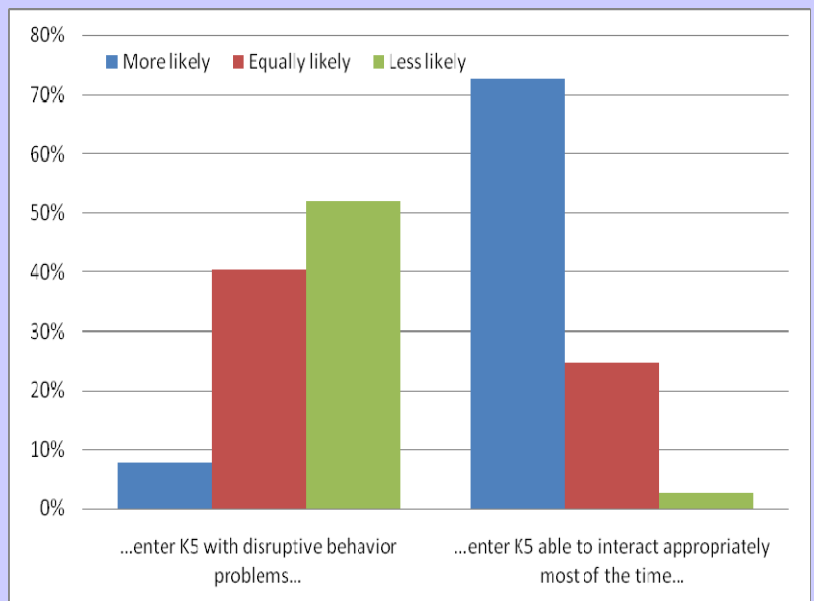


Chart 6

In your recent experience, is a child who attended preschool or K4 more, less, or equally likely to ... compared to a child who did not attend preschool or K4?



Measuring school readiness among K5 students

Of the teacher respondents, 86% indicate they formally assess students' readiness for K5 at the start of the school year. **Table 2** shows the frequency with which teachers report assessing each skill group.

The purpose for assessing students at the beginning of the year varies, but most (97%) of the teachers giving assessments say they do so in order to monitor children's progress. Other reasons include identification of struggling students (93%), planning individualized instruction for students (91%), planning curriculum for the entire class (80%), assigning children into instructional groups by achievement level (64%), and informing parents about their child's readiness for K5 (62%). A minority of teachers (41%) report using start-of-school assessments to recommend students for special education programs.

Chart 7 shows that teachers disagree, for the most part, with an assertion that at least half of their most recent K5 class was *inadequately* prepared for Kindergarten in each of the five skill groups.

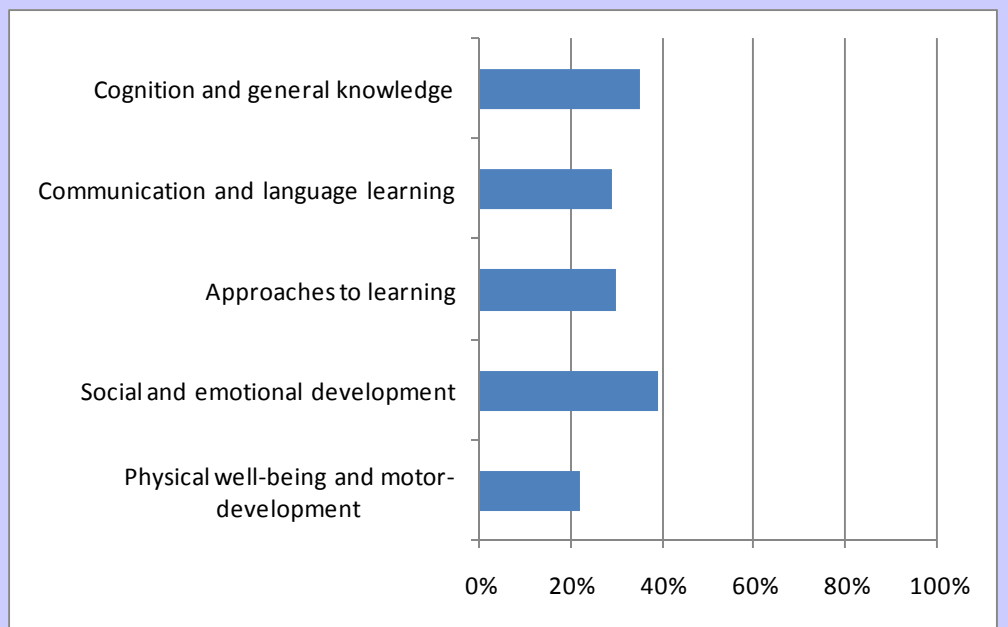
Skill Group	% of teachers assessing
Cognition and general knowledge	84%
Communication and language usage	73%
Approaches to learning	31%
Physical well-being and motor development	27%
Social and emotional development	22%
None of the above	3%

Notwithstanding the perception that most of their 2008-2009 class was adequately prepared for K5, the degree of readiness varies slightly by skill group, according to the teachers. The skill group that reflects the least amount of readiness in **Chart 7** is social and emotional development. This is especially noteworthy, as the respondent teachers generally feel that this skill group is both the most important for entry into K5 and the most difficult to impact during K5 (**Table 1**).

Chart 7

Please give your best estimate of the share of your K5 students this year that was inadequately prepared for Kindergarten in each of the skill groups listed below when they started school. Of this year's class: none; a few, but less than half; about half; more than half; all; not sure.

Percent responding about half, more than half, or all.



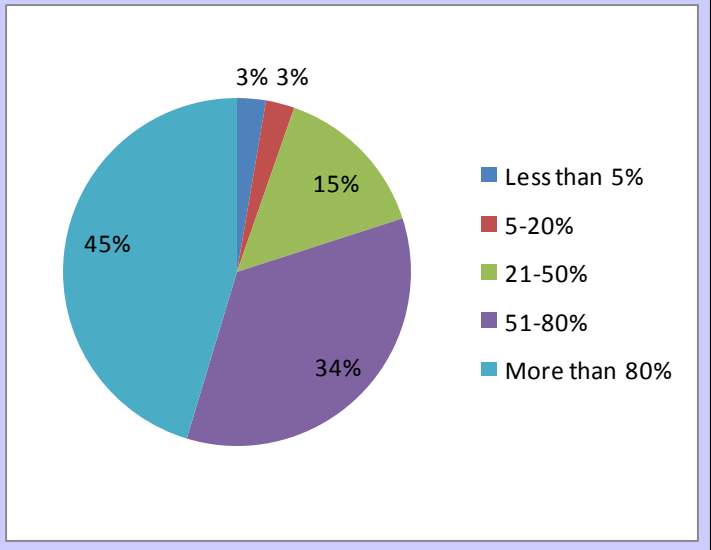
In addition, when asked whether they agree that teaching social skills should be a primary part of the K5 curriculum, 56% of respondent teachers strongly agreed and less than half (40%) agreed with the statement, "I spend more time than I would like to teaching social skills."

Cognition and general knowledge, the skill group covering academic content, also reflects a relative lack of readiness in **Chart 7**. This lack of readiness may not be terribly troubling, however, as the respondent teachers rank cognition and general knowledge third of the five skill groups in terms of importance. Also, when asked whether teaching academic content should be a primary part of the K5 curriculum, less than half (43%) strongly agreed. It is clear, however, that Kindergarten teachers are spending much of their teaching time on academic content. Cognition and general knowledge ranks first among the skill groups for time spent teaching in K5 (**Table 1**), and 66% of respondent teachers agree with the statement, "I spend more class time than I would like to teaching academic skills."

To measure whether the general perception of adequate school readiness in the 2008-2009 K5 class was possibly related to the prior preschool or K4 experiences of these students, we also asked teachers to cite the percentage of their 2008-2009 K5 students who had attended preschool or K4. **Chart 8** shows that 79% of respondent teachers had classrooms this most recent year in which more than half of the students had attended preschool or K4.

Chart 8

In your estimate, what percentage of your pupils entering K5 this year (2008-2009) had attended preschool or K4? Less than 5%, between 5% and 20%, between 21% and 50%, between 51% and 80%, more than 80%, or not sure?

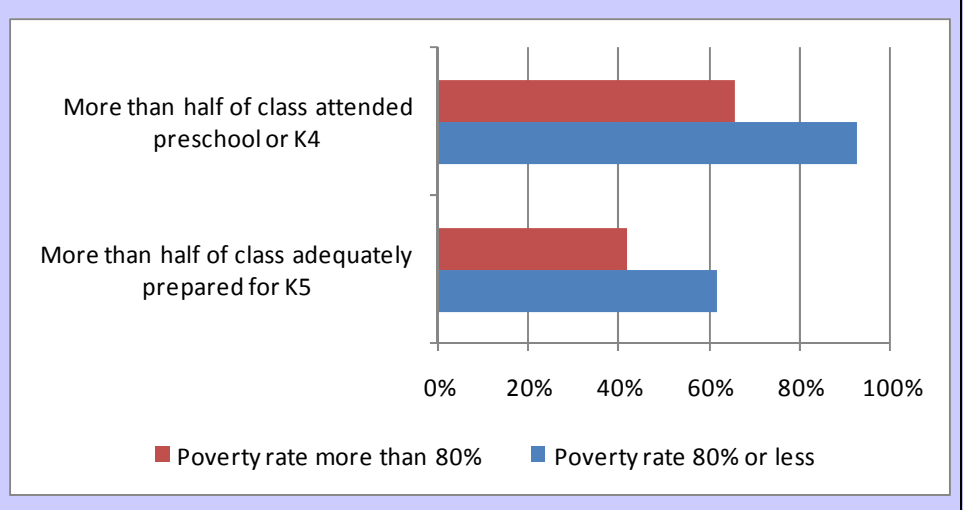


In addition, teachers who report that at least half of their 2008-2009 K5 class had attended preschool or K4 were slightly more likely to report that less than half of their class was *inadequately* prepared for K5, although the difference is not statistically significant.

Chart 9

The relationship between the rate of poverty in the school and the number of K5 students attending preschool or prepared for K5, according to their teachers.

Poverty is measured by the percent of a school's students eligible for free or reduced-price lunch. The average poverty rate in MPS elementary schools is 80%.



There is a statistically significant relationship between preschool or K4 attendance and income (**Chart 9**). Teachers in schools having higher percentages of low-income students (as measured by the percent of students eligible for free or reduced-price lunch) are less likely to report the majority of their K5 students attended preschool or K4. In addition, teachers in these schools are also less likely to report that the majority of their 2008-2009 K5 class was ready for Kindergarten (**Chart 9**).

These significant relationships between poverty and preschool/K4 attendance and between poverty and school readiness are particularly important in a district such as MPS in which the majority of students are low-income.

Conclusion

The teachers' responses reflected in **Table 1** and **Chart 7** indicate that most children in MPS are entering K5 having the requisite skills in terms of physical ability and adequately developed approaches to learning—skill groups that are among the easiest to impact. In addition, teachers report spending less time teaching those skills.

However, the skills that are more difficult to impact, and which K5 teachers spend the most time teaching, are the skills that students are more likely to lack upon entering K5: social/emotional development and cognition/general knowledge. MPS K5 teachers also tell us that of these two skill groups, they would prefer to spend more time teaching social and emotional skills.

Teachers feel that high quality early childhood education can help children get ready for school in these hard-to-impact skill groups (**Chart 4**) and believe the effects last through K5 and beyond (**Chart 1**).

MPS Kindergarten teachers clearly feel strongly that K5 students who have been exposed to high quality early childhood programs are more likely to do better in Kindergarten, and possibly even beyond. The survey results also clearly indicate that

K5 teachers are able to tell which of their students have attended high quality early childhood programs in the year prior to starting K5.

Finally, MPS teachers report that the time and effort they spend teaching certain skills in K5 can be impacted by the prior early childhood experiences of their students and feel these experience are very important for success in K5.

Because there appear to be links between poverty and preschool opportunities and between poverty and school readiness (**Chart 9**), there are implications for public policy. Policy areas of concern include issues of accessibility and affordability of high quality early childhood education for low-income families, as well as the quality of programs currently available and affordable to these families.

In light of the likely connection between the quality of the early childhood experience and academic achievement in elementary school, policies to enhance the quality of early childhood education in Milwaukee may be an appropriate response by policymakers seeking to improve academic performance in MPS.

Skill Group Definitions

Communication and language usage includes:

- Having expressive abilities, like telling about a story or experience when asked.
- Recognizing letters of the alphabet.
- Writing own first name.
- Recognizing rhyming words.
- Engaging with books.

Cognition and general knowledge includes:

- Engaging in imaginative play.
- Counting ten objects correctly.
- Recognizing basic colors and shapes.

Physical well-being and motor development includes:

- Using small objects like paintbrushes and crayons.

- Having general coordination on the playground (running, kicking, climbing).
- Performing self-care and self-help tasks (eating, washing hands).

Social and emotional development includes:

- Conversing with and seeking help from adults.
- Expressing wants and needs verbally.
- Sharing, taking turns, and cooperating with peers.

Approaches to learning includes:

- Being curious and eager about learning (trying new activities, asking questions).
- Staying focused and paying attention during activities.
- Following one- and two-step directions.
- Participating in group activities.

For more findings from the Public Policy Forum's research on high quality early childhood education and its impacts on regional economic development, please visit the Forum's website:

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