A STUDY OF DIFFERENTIAL PRE-K READINESS ACROSS RACIAL/SOCIOECONOMIC LINES IN EVANSTON/SKOKIE SCHOOL DISTRICT 65

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AVERY KENLY AMANDA KLEIN CHARLES NICHOLSON

PEABODY COLLEGE, VANDERBILT UNIVERSITY

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EXECUTIVE SUMMARY

Ackerman and Barnett (2005) suggest that "future academic success is dependent on being ready to learn and participate in a successful kindergarten experience" (p. 1). More importantly, a quality preschool experience has the potential to reduce gaps in achievement and the reproduction of socioeconomic inequalities that persist among disadvantaged families (Crosnoe, Purtell, Davis-Kean, Ansari, & Benner, 2016). Research has also indicated that students from low socioeconomic backgrounds are at a disadvantage, as they begin school with fewer academic skills and greater gaps in cognitive and academic competencies than their more advantaged peers (Stipek & Ryan, 1997). According to Magnuson, Meyers, Ruhm, and Waldfogel (2004), "differences in children's childhood experiences play a formative role in shaping school readiness and largely explain the skill gaps at school entry" (2004, p. 117).

The Evanston/Skokie School District 65 in Evanston, Illinois is situated in a uniquely diverse community with a host of racial, socioeconomic, linguistic identities. Consequently, the district has directed its focus on enhancing the levels of equity among its students. Recognizing gaps in achievement in its minority population, the district narrowed its scope to address the early childhood experiences among its students, particularly minorities. Despite the fact that 95% of its incoming kindergarten class had some form of preschool experience, gaps were observed in kindergarten readiness between black and white students, leading to achievement gaps in later years.

In order to improve outcomes for its disadvantaged and minority students, the district sought to better understand possible reasons for these gaps. This capstone project was designed to analyze and address both the types of services rendered by early education program providers, as well as the parents' perspectives on education, to learn about the nature and quality of the educational experiences these children have had before entering school.

To address the needs indicated by the district, the researchers developed the following project questions:

- 1. What out of school and family factors are associated with the school readiness gap?
- 2. How do pre-kindergarten and preschool program providers in the Evanston/Skokie community differ in terms of demographics and programming?

Summary of Key Findings

The stated findings are derived from a triangulation of data collected through quantitative analyses of provider surveys and existing district data, as well as qualitative interviews conducted by the team at 10 preschools in the Evanston/Skokie area. Through this process, which was grounded in the extant literature, themes emerged that address the reported project questions.

Project Question 1: Home and Family Factors

- Black and Hispanic students scored considerably lower than all other racial groups measured on the Illinois Snapshot of Early Literacy (ISEL) assessment, the district's only universal measure of kindergarten readiness. Though race and ethnicity were found to impact school readiness, ELL and IEP status appeared to have a greater effect on the readiness levels of incoming kindergarten students. A disproportionate number of black and Hispanic students were identified as special needs, with twice as many black students having an IEP as white students. Similarly, almost half of the ELL population in the district did not meet the district's criteria for readiness. Possessing an ELL and/or IEP status significantly contributed to the percentage of black and Hispanic students not meeting readiness standards.
- In sharing their expectations of the preschool experience, parents from the private preschools expressed a desire for their children to focus on social-emotional skills and good citizenship during the pre-kindergarten years that would help them become better citizens and self-manage their feelings and behaviors. Public school parents viewed preschool as a more academic experience for their children. Despite varying expectations of the preschool experience, all parents reported that their children were kindergarten ready and that their preschool prepared them effectively; in fact, there was a wide variance in actual school measures of readiness provided by the district.

Project Question 2: Programmatic and Demographic Differences in Program Providers

- Preschools feeding into District 65 approach the education of their students in a
 variety of ways. Specifically, the private schools had a largely social-emotional focus
 -- often using a play based curriculum, while the district center had a stronger focus
 on academics. Irrespective of approach to educating, all schools felt their students
 were kindergarten ready.
- The early learning programs at District 65 have a highly collaborative relationship with other district staff, leading to clear expectations of students entering kindergarten. The private schools did not have this level of clarity regarding standards and expectations, despite several ongoing district efforts to collaborate.
- The most expensive private schools have the least diversity but produce the best results on district measurements of readiness. Tuition cost was found to be one of the biggest barriers to racial and socioeconomic diversity within the preschools, with few serving students living below the poverty line or from minority groups. In contrast, the district-run JEH center has both the largest population of students in poverty and the largest minority population. Though private school parents and administrators saw diversity as an area for improvement, only one school specifically addressed its lack of diversity.

- The availability of accommodations for special needs students varied at the private schools. As a result, a disproportionate percentage of kindergarten students with IEPs had their pre-kindergarten experience at JEH due to its robust special education programming.
- While all schools respected the engagement of families, differences were noted both in practices and approach. Preschools serving wealthier families saw parents as partners and stakeholders in the educational experience of the child and the operations of the school. Schools serving lower-income students engaged these parents with a presumption that they had disadvantages that necessitated the school's support.
- The unique size, structure, services, and accountability mandates of the JEH center make comparisons to other preschool programs problematic. Serving a third of the current kindergarten students in this district, along with the highest percentages of low-income, special needs, and minority students, the JEH student population has little in common with students from the private programs that feed into the district.

Recommendations

1. Clarify and communicate kindergarten readiness standards

Conversations with district staff spoke to a more holistic definition of readiness than the ISEL test, but private preschools had an incomplete understanding of how District 65 defines school readiness. However, school staff and parents felt that their children were kindergarten ready, even though ISEL scores reflected otherwise. The district should revisit how it communicates its comprehensive view of kindergarten readiness to its stakeholders.

2. Develop programs for ELL families and students

Gaps in achievement were found among the ELL population on district measures of kindergarten readiness. The district should make it a priority to support both the curricular needs of the ELL population and their families through programming and outreach.

3. Focus on the special needs population

Minority students are overrepresented in the preschool special education population, likely contributing to the race-based school readiness gap. The district should utilize its Office of Research, Accountability, and Data to develop a report on the identification and achievement of the special needs population, particularly in the preschool years.

4. Conduct intensive community outreach with District 65 parents and local partners

A large percentage of minority students are served by home-based childcare

providers prior to kindergarten. The district should increase its understanding and support of those home-based providers through intensive and authentic community outreach and work to ensure that all families identify where students attended before kindergarten. Specifically, the district should work to address the population of students, particularly minorities, who did not have an identified preschool in the district records, or who attended informal or home-based care.

DEFINITION OF THE ISSUE

District 65 has a strong and intentional focus on equity for all students. District analyses on the performance of student subgroups highlighted differential outcomes across racial and socioeconomic lines, spurring a renewed search for ways to impact this gap and achieve equity. District 65 is focusing on school readiness as a potential point of leverage for narrowing the district's achievement gap between white students and students of color.

The district's 2015 Accountability and Achievement Report and Report on Black Student Achievement (2016) highlight the gaps between groups of students of different household income and racial/ethnic compositions. As seen in Table 1 below, only about 10% of black elementary and middle school students in District 65 were on track for college readiness in mathematics, and only 20% were on track for reading. In contrast, approximately 60% of white students were on track in mathematics, and 72% were on track in reading. On the same assessments, approximately one-third of the district's black students, but less than four percent of white students were in the lowest quartile for math and reading.

Table 1. Elementary and Middle Grades Test Performance in District 65

MAP Test Measure (Grades 3-8)	Black Students	Hispanic Students	White Students
On track for college readiness in math	10.1%	19.0%	59.8%
On track for college readiness in reading	20.1%	26.6%	72.2%
At or below the 25th percentile in math	33.9%	26.1%	3.2%
At or below the 25th percentile in reading	32.1%	28.6%	3.6%

Table 2 below highlights the disparities across racial groups in early childhood experiences. Ninety-five percent of all District 65 kindergarten students and 96% of the district's black students have attended some type of preschool or pre-kindergarten program, but the outcomes look quite different across racial groups. Specifically, only 34% of black students were deemed kindergarten ready, compared to 64% of white students.

Table 2. Pre-Kindergarten Experiences in District 65

Measure (SY 2014-2015)	Black Students	Hispanic Students	White Students
Had any pre-kindergarten experience	96.6%	94.6%	96.9%
Attended daycare	24.0%	12.9%	9.9%
Attended Head Start or preschool	70.3%	79.7%	82.2%
Ready for kindergarten (ISEL scores)	33.7%	46.5%*	63.8%

^{*}Figure is from SY 2015-2016 and represents an increase from the previous year.

With seemingly similar rates of access to early learning experiences, the team examined how the type and quality of early childhood programs that students attended differed along socioeconomic and racial lines. For example, the district found that its black students were less likely to be enrolled in private preschools, instead opting for the district's Joseph E. Hill (JEH) Center or another type of childcare setting. The district sought a better understanding of the differences in learning experiences across these preschool programs and demographic groups.

In the capstone project proposal from District 65, the stated objective was to "develop a plan for improving the kindergarten readiness levels of students in its service area, particularly low-income students of color." Using that objective and the district data as a foundation, the team developed the following project questions:

- 1. What out of school and family factors are associated with the school readiness gap?
- 2. How do pre-kindergarten and preschool program providers in the Evanston/Skokie community differ in terms of demographics and programming?

CONTEXTUAL ANALYSIS

The Evanston/Skokie Community Consolidated School District 65 (District 65) serves children from the City of Evanston and the Village of Skokie. Home to Northwestern University, the towns comprising District 65 are situated north of Chicago, Illinois, on the shore of Lake Michigan. Families from Evanston and Skokie are diverse in terms of country of origin, religious affiliation, socioeconomic status, and racial/ethnic identity. Both ends of the spectrum -- extreme poverty and extreme wealth -- are present in the cities in which District 65 students live, and this disparity is having an impact on their performance once they get to school.

Table 3 below highlights the differences between the two cities, as well as the demographic makeup of District 65

Table 3. Evanston City, Skokie Village, and District 65 Demographic Comparison

Evanston City	Skokie Village	District 65
75,282 Population	65,056 Population	7,800 Students
17.4% Black	6.4% Black	24.3% Black
10.1% Hispanic	10.5% Hispanic	19.4% Hispanic
3.9% in Poverty	11.7% in Poverty	43% FRL
\$69,347 Median Income	\$66,586 Median Income	
\$104,404 Mean Income	\$88,377 Mean Income	

Source: 2014 U.S. Census Bureau; 2016 District 65 Quick Facts

District 65 serves more than 7,800 students from pre-kindergarten through eighth grade. As seen in Table 3, the demographic makeup of the public school students in District 65 is slightly different from the populations of the towns where they live, with minorities and low-income students overrepresented in the district's schools. Additionally, twelve percent of students receive special education services, and 12% are non-native English speakers (*District Quick Facts*, 2016).

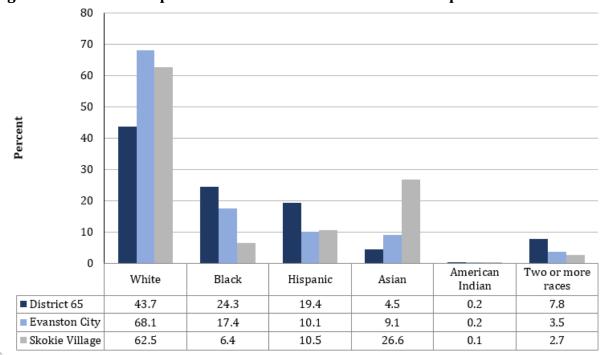


Figure 1. Racial Makeup of District 65 and the Towns that Comprise It

Source: 2014 U.S. Census Bureau; 2016 District 65 Quick Facts

Early childhood educational services have been offered by District 65 for more than 50 years. The district's Joseph E. Hill Education Center (JEH) currently houses Early Head Start, Preschool for All, and early childhood special education programs. These programs are funded through federal Head Start grants and the Illinois State Board of Education (ISBE), respectively, and these funding streams determine not only the capacity of the programs, but also the schedules, curricula, and parental supports that the school must offer. Currently, services are provided in the JEH Education Center for 67 children from birth to three years old with additional services for 337 children aged three to five (Opening of Schools Report 2016 – 2017, 2016).

Children from ages zero to five must be screened for program eligibility, based on developmental or familial risk factors. Most of students in the JEH program are from low-income families or identified as qualifying for special education services. Black and Hispanic students are represented at even greater percentages in the District 65 early childhood programs than in the district as a whole. In 2015, 36.4% of JEH students identified as Hispanic and 34.1% identified as black (Report on Black Student Achievement, 2016; Report on Hispanic Student Achievement Report, 2017).

As a district of many races and ethnicities, as well as both great wealth and great

poverty, District 65 is struggling to determine how to best meet the needs of all students and reduce the observed inequalities between groups in school readiness and later achievement.

DATA COLLECTION/METHODS

STUDY DESIGN AND LOGISTICS

Initial contact with the district was made in June of 2016 through an email exchange. The research team reached out to the Director of the Office of Research, Accountability, and Data (RAD) at District 65, so that the research questions could be refined. Over a period of roughly two months, the team had multiple telephone and email conversations with the RAD director, the director of the district's early childhood education center, and local partners such as Cradle to Career.

The research team decided that the best approach to answering the research questions would be a mixed methods design. From interviews with families and school staff in a variety of settings, survey data from schools, and administrative data from the district on the current kindergarten cohort, the team aimed to gain insight into these questions and propose recommendations that the district can implement to improve readiness and outcomes for all of its students.

The project questions lent themselves to qualitative methods; as Patton (2002) says, "qualitative methods typically produce a wealth of detailed information" that "increases the depth of understanding of the cases and situations studied" (p. 14). Patton notes that qualitative methods should be used when researchers are trying to understand people's lives and their experiences. As the first project question is looking to parse out differences between families within a single community, this approach provided the nuance needed to answer it.

Quantitative data was also collected to understand and answer aspects of both questions, allowing the team to verify and enrich the qualitative findings. The use of quantitative data to verify has a long history and helps ensure that qualitative researchers mitigate their inherent biases; this reduction of bias is especially important when the research is focused on marginalized groups. (Creswell, 2009). Triangulation of data was essential for this project because it was originally conceived based on gaps between black and white students, so the reduction of bias was especially relevant and important.

During the study time frame, the team held weekly phone calls because of the team's geographic location and to maintain focus on the project. The calls were used to update one another on individual progress and to strategically plan the next steps of the project. Whenever possible, the team met face-to-face to make critical decisions about the project, and during long periods without in-person contact, video conferencing was used. The team also had contact with their faculty advisor when clarification was necessary.

Geographic constraints also made it necessary for the team to create a secure location to hold all files with identifiable information. For secure files, the team used a university approved Box.com account.

QUALITATIVE DATA AND ANALYSIS

DOCUMENT REVIEW

The District 65 Research, Accountability, and Data department has many publicly available reports and documents that were integral to the research team's initial understanding of the district and the gaps that exist within it. The team focused primarily on the *Report on Black Student Achievement in District 65* (2016) and the *Community Assessment, 2016* that was not published at the time, but was shared with the team. These two reports, combined with U.S. Census data and the district's noted concerns, were used to develop the conceptual framework and project questions for this study.

A number of sources were used to support the qualitative and quantitative data collected by the team. School websites were used to collect descriptive information about each location and to learn more about the sites prior to visiting. At multiple site visits, the team collected documents that were specific to each school, including flyers, reports, and application packets. During the project time frame, the Research, Accountability, and Data department released the *Report on Hispanic Achievement (2017)*. This report, released after the team had completed data collection, was used to compare and triangulate findings.

The team also sought out local information sources to gain perspective on what was discussed in the interviews. Per the recommendation of contacts during the site visits, the team read two books that were written about Evanston or similar communities -- *Despite the Best Intentions*, written about the racial tensions and achievement gaps in a high school, and *Friends Disappear: The Battle for Racial Equality in Evanston*, about the structural forces that impeded the goal of integration and equality in the schools and the broader community. Local news sources also provided information about what was occurring in the district, especially in regards to issues of diversity and race relations.

INTERVIEW SITE SELECTION

To better understand which pre-kindergarten programs current District 65 students attended, the team requested data on where kindergarten students went to school the previous year. This feeder school data from the RAD office came from a parent survey of current kindergarten students, which allowed them to manually enter the name of their child's preschool. As a result, it was necessary to clean the dataset, adjusting for duplicates and misspellings. After the data had been cleaned, the list was sorted from high-to-low by how many students fed into the district's current kindergarten class from each school. Fourteen schools were represented by 10 or more current kindergarten students in the district, and the team decided to focus its qualitative efforts on those schools.

The top 14 schools were then reviewed by the team to ensure that the sample contained schools that represented various income levels, religious affiliations, and program types. This was done by a review of each program's website. The top 14 schools were then contacted to schedule appointments to interview the administrators, staff, and families. The RAD director and director of JEH were integral to this process, as they utilized their relationships with the larger network of childcare providers in Evanston to

make the initial outreach on the team's behalf. Of the 14 schools that were contacted, two declined the request for interviews and one did not respond to the request. The three schools that declined the request or did not respond were a Montessori school, a Catholic school, and a bilingual school. These schools declined because they were already part of multiple local research studies, and they did not want to overwhelm their families and staff. This is reflective of feedback the team received from its district contact, as the district is often the focus of studies by neighboring universities.

Prior to school outreach, the team decided on a minimum number of interviews for each stakeholder category. Conversations with district officials and the time constraints of the capstone project helped inform the team's target number of interviews. The goal was to interview at least one administrator at every participating school and as many teachers as possible, using a "saturation" strategy common in qualitative designs. Additionally, the team aimed to conduct six parent focus groups, two at JEH and four in schools intentionally selected to create a representative sample. When the team learned that several of the invited schools were unable to coordinate focus groups -- either due to scheduling conflicts or participation in other research studies -- the team expanded its invitation list to the entire top fourteen schools. The team consequently visited 10 schools and conducted six focus groups at five of the school sites.

INTERVIEW AND FOCUS GROUPS

Two interview protocols were developed, one for administrators and one for teachers, as well as a focus group protocol for families (see Appendix A). The protocols were created based on the conceptual framework and included questions about social and cultural capital, social reproduction, academics, and school and family specifics. All questions had a firm basis in the extant literature. The protocols were intentionally designed to have overlap in the questions asked of parents, staff, and administrators so that triangulation and verification could come from the other groups being interviewed. These protocols were reviewed and vetted by the RAD director and JEH director at District 65, as well as the research team's faculty advisor.

After each center agreed to be involved in the project, the administrators were asked to help coordinate interviews and focus groups. The team asked to speak with at least one administrator at each site, as many teachers as the center could arrange, and a focus group with four to six parents, as per the minimum number of interviews set. Some schools recruited their teachers and parents prior to the arrival of the research team, and at others, the research team approached parents and staff personally to ask them to participate.

The team traveled to Evanston in mid-November to conduct the in-person qualitative interviews and observations. Over a period of five days, the research team spoke with 61 individuals at 10 schools. The team interviewed 12 administrators, 23 teachers, and 26 parents. All 61 participants were selected using a sample of convenience.

Table 4. Interview and Focus Group Sample

School	# Administrators	# Teachers	# Parents	TOTAL
JEH	2	3	8	13
School A	1	2	4	7
School B	1	3	0	4
School C	1	1	0	2
School D	1	2	4	7
School E	1	2	0	3
School F	1	3	0	4
School G	2	3	5	10
School H	1	2	0	3
School I	1	2	5	8
TOTAL	12	23	26	61

Interviews were conducted at each school, in a quiet space that the administrator arranged for the team to use. The team was also able to observe classrooms at each site and tour the school facility. All interviews were audio recorded and uploaded to a secured cloud based storage system. Each interviewee signed a consent form and verbally agreed to be recorded.

Focus groups were used for parent interviews for two reasons. First, focus groups allowed the team to maximize parental contact within the limited time the team had in the field. Second, because of issues of privacy, the team had to rely on the school administrators to arrange parental contacts, and focus groups simplified this organizational task for school leaders. Similarly, many of the teacher and administrator interviews were conducted in pairs.

INTERVIEW DATA ANALYSIS

The first step in analyzing the interview data was to divide the data between team members. Team members were assigned interviews, including those that they did not conduct, to listen to for review. This was done to ensure that multiple people heard every interview. Due to the large number of interviewees at JEH and the study's central focus on the district-sponsored pre-kindergarten programs, all three team members listened to the JEH interviews.

Team members reviewed the audio multiple times while filling in a matrix that allowed key quotes and major themes to be organized according to the conceptual framework. The initial matrices had the concepts derived from the interview protocol along the y-axis and themes along the x-axis. The concepts were social capital, cultural capital, school characteristics, teacher background, and family specifics. All quotes that were transcribed verbatim were time stamped in the matrix so that other members of the team could review the data quickly and efficiently. Finally, each matrix had an area where observations could be entered.

As the matrices were developing, team members transcribed quotations and

comments from the audio recordings that were most relevant to the project questions. To help with this process, items were categorized by concept to allow team members to look for themes. On the third review, the team used a uniform system of color-coding on each observation listed. By color-coding each observation, new patterns emerged in the data, which prepared the team to identify different themes that were not obvious in the initial matrix and to examine themes across school sites.

For final analysis, all data was moved to one matrix, where it was assigned up to two root codes and up to three sub-codes. The root codes were aligned with the conceptual framework, but some were reached inductively from the initial coding phase. The five root codes used were social capital, cultural capital, social class, social emotional learning (SEL), and academics. As artifacts were coded, they were assigned to the most relevant of the five root codes. A second root code was attached if the concept aligned with more than one concept. For example, one administrator said:

I can tell on a tour if a parent is going to be interested in [this center]. We are play based. I think parents who value that and think that this push for early academics is not the way for children to be successful.

This particular quote was assigned both the Academics and SEL root codes, as both were relevant concepts to what the administrator was discussing.

Sub-codes were inductively created based on emergent themes from the analysis. Sixteen sub-codes were developed and used to add another layer of texture and depth to the analysis. Up to three sub-codes were applied to each artifact, based on which code or codes were most closely aligned. For example, the previous quote was sub-coded "play based" and "family," in that order.

The five root codes and 16 sub-codes created a robust coding scheme, allowing for analysis across school sites, participant roles, and conceptual buckets. By using Microsoft Excel, the data was sorted in a variety of ways that led to a deeper understanding of trends and patterns. The team primarily sorted data by school site and by the root codes, as they were reflective of the conceptual framework. For example, the team could sort all of the data by the Academics root code and then sort by school, in order to see how different locations talked about the same concept. This type of sorting led to a better understanding of the schools, the staff, and the families they serve, as well as their similarities and differences on issues important to the study.

QUANTITATIVE DATA AND ANALYSIS

Originally, the research team intended to create and disseminate surveys to families of preschool-age children to learn more about their preschool experiences and how they help their children learn at home. However, the district preferred to send surveys to families directly, to prevent families and partners from feeling overburdened with surveys from outside organizations, as District 65 is frequently the focus of educational research studies. Initially, the family survey -- to which the research team shared input and edits -- was to be distributed at the end of 2016. However, the district extended the timeline, distributing the surveys after February 2017. Consequently, the research team had to adapt the study to account for the fact that the survey data would not

be available in time for the completion of the capstone. The team did, however, receive data from a provider survey that was sent to every early learning provider within the district boundaries, including all 10 providers that the team visited. This survey provided the team with programmatic, demographic, and logistical information for each school that allowed for a better understanding of the qualitative sample and data.

Lastly, the research team requested additional administrative data from District 65, to be able to connect key concepts in the study. This dataset, provided through a district-sponsored data sharing agreement and securely housed in the team's Box.com folders, facilitated analyses of student readiness by race and preschool attended. This allowed the team to compare the district readiness data with perceptions of readiness from the interviews and to examine other patterns pertinent to the questions originally posed by the district. Through conversations with district staff, it was determined that the district's JEH program utilizes a combination of ISEL scores and Strong Start to Kindergarten Student Goals which are modeled after the Teaching Strategies GOLD standards. As ISEL scores are the only measure of kindergarten readiness that the district has that provides comparisons with out of district providers, the team used them exclusively in its analysis. ISEL scores in the data set were given as raw scores, which were converted to percentages for ease of interpretation.

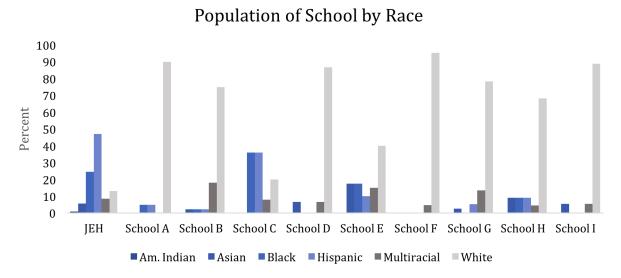
The team used analysis of variance tests (ANOVAs) and t-tests to compare means between races, students with and without an IEP, and students who were and were not English language learners. When ANOVAs produced significant results, Tukey HSD posthoc analyses were used to further understand what differences existed. Chi-square tests were used to determine if there were associations between race and cost of attendance.

DESCRIPTION OF THE SAMPLE

The team visited 10 different preschools in Evanston whose students feed into District 65 kindergarten. These schools, including JEH, represent a range of options for future District 65 parents, including a program run by a national nonprofit organization, small nursery schools, and schools with an arts focus or a nature theme. Appendix B showcases the descriptive data collected for each school in the sample.

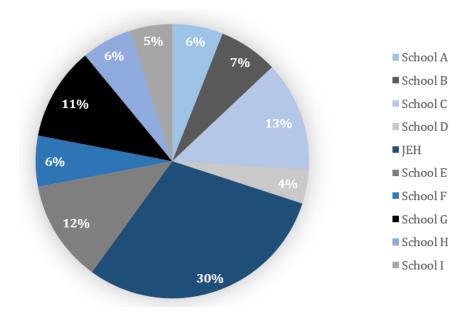
The 10 schools that the team visited had a total population of 348 students that entered kindergarten in 2016. Over half of the students were white, roughly 20% are Hispanic, 13% are black, and the remainder is made up of Asian, multiracial, and American Indian students. While white students are slightly overrepresented in the sample, black students are slightly underrepresented. However, these 10 schools are demographically comparable to the district at large. Figure 2 shows the breakdown of each school by race.

Figure 2. School Breakdown by Race



JEH is also overrepresented as a percentage of students served, representing approximately 30 percent of the sample. Despite these differences, the research team believes that this sample is appropriately representative. Figure 3 below shows the breakdown of the sample by school.

Figure 3: Percentage of students in District 65 from the schools surveyed



The schools had 41 students who were English Language Learners (ELL), or 18% of the sample. Eight percent of the population had an Individualized Education Program (IEP), and 12 students, about three percent of the sample, were both ELL and had an IEP (see Table 5). Of the 10 schools in the sample, JEH had the highest percentage of students with an IEP, ELL designation, or both in the 2016 kindergarten cohort. JEH was the only

school in the cohort that had students with both an IEP and ELL status.

Table 5. Percent IEP and ELL status by school

Tubic bil electrici una EEE status by school				
School	IEP	ELL	IEP and ELL	
JEH	12%	39%	11%	
School A	5%	0%	0%	
School B	5%	5%	0%	
School C	0%	4%	0%	
School D	0%	0%	0%	
School E	0%	13%	0%	
School F	0%	5%	0%	
School G	3%	0%	0%	
School H	0%	5%	0%	
School I	0%	0%	0%	

Hispanic students represented the highest percentage of ELL students, those with IEPs, and those with both IEPs and ELL status. Black students had the second highest percentage of students with IEPs. Notably, the percentage of black students with IEPs was 25% higher than the percentage for multiracial students and 50% higher than for white students, representing significant disproportionality in special education identification. Only two percent of black students had both an IEP and ELL status, a significantly smaller percentage than Hispanic students (see Table 6).

Table 6. Percent of Kindergarten Cohort ELLs and IEPs by Race

	Non-ELL		1	ELL
Race	No IEP	IEP	No IEP	IEP
American Indian	100%	0%	0%	0%
Asian	46%	0%	48%	5%
Black	79%	12%	7%	2%
Hispanic	40%	1%	44%	16%
Multiracial	83%	8%	8%	1%
White	91%	6%	3%	0%

The team did not have access to student-level income or poverty data, but, the provider survey offered school-level data for nine out of 10 schools that the team visited. Preschool providers could indicate the number of students at their schools living at or slightly above the poverty level. Half of the schools that the team visited serve students who live in poverty.

The survey options limited the total number of students in any given category to "greater than 50," and JEH had selected this option for the number of students living below the poverty line. Because of the imprecision of that number, the percent of students living

in poverty at JEH could not be determined. This made it difficult to run analyses or make comparisons to other schools whose poverty percentage was taken from the Provider Survey. In order to improve comparisons, a statistic of the percent of students from low-income families from the *Report on Hispanic Achievement* (2017) was used for JEH. This does not allow for a perfect comparison between schools because the report used free and reduced lunch status to indicate low-income, as opposed to poverty level, but it provides a general comparison by proxy. From this measure, JEH has the highest percentage of all the schools, with 74% of students coming from low-income families. Due to the fact that JEH has a Head Start program, whose primary qualifier is low-income status, this was not entirely surprising.

However, the other four schools had dramatically smaller percentages of their students in poverty, ranging from four to 12%. This also implies that four of the schools in the sample do not serve any children living below the poverty line.

To better analyze the differences among the schools in our sample, the team utilized two frames to guide the work. In one frame, schools were categorized into three categories of cost -- below average, average, or above average -- based on the average hourly cost for a four-year old's child care in Illinois. Schools with no fee were designated as below average cost. Average cost schools had an hourly rate between \$5 and \$6, and schools identified as above average had costs ranging between 62% and 135% higher than the statewide average. Using these categories, JEH was categorized as below average cost, schools A, C, E, and H were noted as average cost, and the remaining five, schools B, D, F, G, I, were considered high cost.

The second frame utilized when comparing the schools was based on the identification of public versus private. This categorization is supported by Crosnoe, Purtell, Davis-Kean, Ansari, & Benner (2016), who suggest that preschool "comes in many forms, including private and public. The former provides educational services for fees, whereas the latter are free or have subsidized rates and can be affiliated with public schools" (p. 602).

LIMITATIONS

As with all qualitative research, even the best safeguards did not eliminate all limitations. The variations in the interview configurations are the primary limitation. Several interviews were performed in pairs, which allowed for the possibility of one interviewee having an adverse effect on another. Participants could either withhold information because of concerns of what the other interviewee would think of what they said, or they could state agreement even if they did not truly agree. While there is no indication that this occurred in the interviews, the research team cannot be certain.

The parent focus groups also lend themselves to limitations, stemming from two different sources. The first issue with the focus groups is the relative inexperience of this research team with focus groups. While the team prepared to administer the focus groups, the lack of practice means that there is potential for the conversations to be dominated by one or two individuals, or that quieter participants may not have been able to share their thoughts and experiences. The second issue, similar to issues presented in paired interviews, is the possibility that the parents involved in the focus groups withheld information while talking in front of their peers. A review of the audio recordings indicates

that neither of these limitations were evident in the focus groups.

A third potential limitation is the school and interviewee selection. Sampling was done out of convenience. The research team did make intentional choices about which schools to target, but there was no random selection of sites or participants. To maximize the number participants, but also to respect the privacy of the families and staff, directors were asked to help arrange for interviews. It is possible that the directors only chose staff and families that would put the school in the best light or those who were most involved at the school. At a few schools that were unable to arrange the focus groups in advance, the research team spoke with families waiting at arrival and dismissal times to personally invite them to participate in the focus groups. Those interviewees pose a limitation because they could over-represent parents that were very engaged at the school, or parents that had time to participate at a moment's notice.

It should also be noted the families interviewed may not be fully representative of all parents in the district. Many parents were not able to participate due to work and family constraints. Additionally, some schools chose not to participate or did not respond to our requests. Consequently, the study is lacking representation of schools with specific religious affiliations and program choices such as the Montessori curriculum. While these types of schools only make up a small portion of the schools in the district, their absence needs to be noted.

The quantitative data the team used for this project also had several limitations. The primary limitation is that both sets of data -- the provider survey and the readiness dataset -- were not collected by the team but by the district. Significantly, the readiness dataset did not have any student-level poverty markers, which limited some of the analysis and prevented the team from drawing conclusions on this basis. Additionally, because this data was collected within the district, the research team had no control over participation in the study or the ability to gather complete data. As a result, over 15% of the students in the readiness dataset lacked any information about their readiness at all. All gaps in the data are noted in analysis tables in the Appendices.

FINDINGS

The findings of this study are listed below, under the header of the corresponding project question. Family-level factors associated with the readiness gap are shared under Project Question 1, and salient school-level differences are described under Project Question 2. A description of the kindergarten readiness measure is discussed first, as this is the backbone for the quantitative findings.

MEASUREMENT OF KINDERGARTEN READINESS

Before the team could determine factors that contribute to kindergarten readiness, it was critical to understand how the concept is defined by the district. District 65 measures kindergarten readiness primarily through the results of a literacy assessment; students who are deemed kindergarten ready scored at or above the fiftieth percentile on four out of five tests on the Illinois Snapshot of Early Literacy (ISEL) (Godard, 2016). The

five tests on the ISEL are Alphabet Recognition, Story Listening, Phonemic Awareness, One-to-one Matching, and Letter Sounds, each assessing a different component of literacy. It is important to note that the ISEL test can be given in either English or Spanish. Each test contains a different number of items and required number of correct answers to score at the fiftieth percentile (see Appendix C).

Alphabet Recognition tests a student's knowledge of all twenty-six uppercase letters and twenty-eight lower case letters. The two-extra lowercase letters are variants of the letters "a" and "g" that students often see in text. Story Listening tests students on many skills including comprehension, vocabulary usage, and the ability to infer from the story. During the test, students listen to the teacher read aloud and subsequently answer questions about the story they just heard (Barr et al, 2004). Phonemic Awareness assesses students' understanding that words are made up of individual letter sounds. The test assesses the student's ability to match a word's initial sound with the correct letter, as well as the student's ability to blend letter sounds and segment words. One-to one Matching tests a student's ability to match a spoken word to the corresponding printed word and begin the reading process. The last subtest, Letter Sounds, assesses whether a student can produce the sound of the eighteen most commonly used consonants, all five short vowel sounds, and three common digraphs (Barr et al, 2004).

The data indicated that 406 students, or 58%, of the current kindergarten students in the district were kindergarten ready, based on the above criteria, and 294 students, or 42% were not.

PROJECT QUESTION 1: WHAT OUT-OF-SCHOOL AND FAMILY FACTORS ARE ASSOCIATED WITH THE SCHOOL READINESS GAP?

The administrative data obtained from the district allowed the research team to gain a better understanding of the differences that exist between families of current kindergarten students. The team was able to find evidence of associations between various groups and ISEL scores. Prior research suggests that income and poverty are family factors that affect readiness, but the team did not have access to that data on the individual level. Using the available data, the team found that the following factors were associated with whether or not a student was academically ready for kindergarten: ELL status, ethnicity, and parental expectations of the preschool experience. These findings are detailed below.

ENGLISH LANGUAGE LEARNER STATUS

"English was his third language, the mother is Romanian and the father is Hungarian." - Nursery School Teacher

The presence of Northwestern University in the catchment area for the district plays a large role in the wide variety of racial and ethnic groups represented and languages spoken at the schools in the sample and in the District 65 dataset. Multiple school administrators and staff members noted the impact that this renowned learning hub has on school composition. Most simply put, the director at School E said, "We have a lot of Northwestern families, and they tend to come from all over the world." As a result, the 10

sample schools indicated on the provider survey that they serve students who speak a total of 17 languages, including Spanish, Mandarin, Arabic, French, American Sign Language, Bulgarian, Polish, Haitian Creole, Urdu, Russian, Estonian, Japanese, Portuguese, German, Italian, Assamese, and Ukrainian.

The data that the district provided for the team included 155 students who were English Language Learners (ELL), comprising 19% of the current kindergarten class. According to District 65's *Report on Hispanic Achievement* (2017), 46.5% of ELL students are not kindergarten ready. To better understand the effects of the ELL status on achievement and readiness, the team compared the ISEL performance of ELL students with the performance of their non-ELL peers. T-tests were used to compare the means of ELL students to non-ELL students on all five ISEL tests and the ISEL composite score (see Appendix D). ELL students scored an average of 20 percentage points lower than non-ELL students on the Alphabet Recognition subtest, 28 percentage points lower on the Story Listening test, 24 percentage points lower on the Phonemic Awareness test, 20 percentage points lower on the One-to-One Matching subtest, and 17 percentage points lower on the Letter Sounds subtest. Figure 4 below highlights these differences.

ISEL Scores for ELL and Non-ELL Students 100 90 80 70 60 50 40 30 20 10 0 Letter Sounds Alphabet Story Listening Phonemic One-to-one Recognition Awareness Matching ■ELL ■ Non-ELL

Figure 4. ELL and Non-ELL Student ISEL Scores

RACE AND ETHNICITY

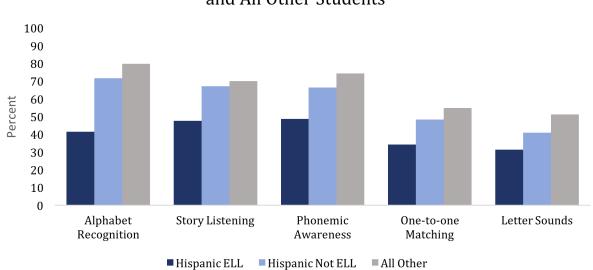
"About 12 years ago, we realized that the Hispanic population was growing and many of those families did not have any preschool experience." - Private Preschool Administrator

To determine if ISEL scores varied by race or ethnicity, the team used a series of one-way ANOVAs that compared the means of the ISEL subtests across racial groups. In the district dataset, race was divided into six categories, American Indian, Asian, black, Hispanic, multiracial, and white. The team was able to determine that there was a statistically significant association between races on all five ISEL subtests (see Appendix E1). Because significant associations were found, a post-hoc test was used to determine more specific results. Descriptive statistics revealed an association between ISEL scores and race (see Appendix E2).

Hispanic students scored lower than white and multiracial students on all five ISEL subtests and lower than Asian students on the Alphabet Recognition, One-to-One Matching, and Letter Sounds. This appears related to the finding that ELL students score significantly lower than non-ELL students, as around 60% of the Hispanic students in the dataset are also ELL students. To determine if ELL status was associated with lower ISEL scores for Hispanic students, the means of the five ISEL tests were compared for Hispanic-ELL and Hispanic non-ELL students using t-tests. There were significant differences in the mean scores of Hispanic-ELL students and Hispanic Non-ELL students on each test. Hispanic non-ELL students scored higher than their ELL counterparts by a range of nine to 30 percent on each test (see Appendix F1).

The team then tested whether or not the scores non-ELL Hispanic students were significantly different from the scores of all other students that were non-ELL. T-tests were used to compare the means of the two groups, and they showed there were still significant differences between groups (see Appendix F2). While the differences were significant, controlling for ELL status caused the gap to shrink dramatically.

Figure 5. ELL and Non-ELL Hispanic Student ISEL Scores



ISEL Scores comparing Hispanic ELL to Hispanic Non-ELL and All Other Students

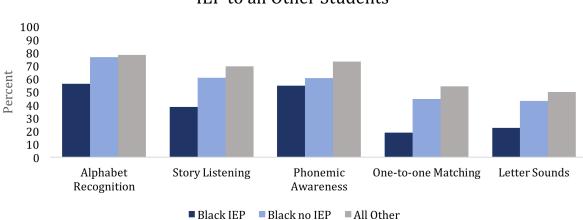
The Tukey HSD post-hoc test also showed that black students scored lower than white students on every subtest and lower than multiracial students on many subtests. A review of student-level data showed that IEP status was a major difference between black students and other students. The data shows that 13% of black students had an IEP, compared to approximately nine percent of multiracial students and six percent of white students. As a portion of the sample, the IEP status of black students was higher than all other races except Hispanic students.

Given this disproportionality in IEP status by race, the team decided to test whether having an IEP had an impact on the readiness level of black students. Similar tests were run for Hispanic students, but due to the small sample size of Hispanic students with an IEP, these results were not valid. T-tests were used to see if there were differences in

means between black students with and without an IEP, as well as between black students without an IEP and all other students. The difference between black students with and without an IEP was significant on every test except for the Phonemic Awareness subtest. The t-tests showed that black students with an IEP had lower scores than black students without an IEP (see Appendix G1).

This is further shown by comparing black students without IEPs to all other students (see Appendix G2). When controlling for IEP status, the gap between black students and all other students is reduced by a large margin. This shows that while IEP status is not the only factor causing a difference in scores, it is an important factor.

Figure 6. Black and Non-Black Student ISEL Scores



ISEL Scores comparing Black Students with and without an IEP to all Other Students

The comparison between Hispanic ELL and Hispanic non-ELL students shows a dramatic difference in test scores. On each subtest, the differences in means range from 20 points to 30 points. When ELL status is accounted for, the difference between Hispanic students and non-Hispanic students drops precipitously, to a range of three to 11 points (see Appendix H1).

The difference between black students with and without an IEP follows a similar pattern. The difference between these groups in subtest scores is between 20 and 37 points, but when IEP status is accounted for, the difference decreases to two to 14 points (see Appendix H2). However, these point values account for very few assessment questions. Using the point value of each item on a given subtest shows that while the difference in means are statistically significant, they have no practical implications for these two comparison groups.

It should also be noted that if ELL is controlled for, the percent of Hispanic students who are kindergarten ready increases from 36% to 47%. The percentage of students needing two or more skills to be kindergarten ready drops from 21% to 11% when controlling for ELL. Again, black students show a similar but smaller difference. When controlling for IEP status, the percentage of kindergarten ready black students increased from 42% to 44%, and the percentage of students needing two or more skills to be

deemed ready drops from 22% to 18%.

Race and ethnicity are student-level factors that are statistically associated with school readiness, as the two largest minority groups in the district -- black and Hispanic students -- scored considerably lower than their white, Asian, and multiracial peers on multiple subtests. The association between the ELL status of Hispanic students and test scores indicates that some of this difference in scores may be explained by ELL status. Similarly, the IEP status of black students and ISEL test scores are also associated and may contribute to the difference in scores compared to other racial groups. These differences show that the gaps between racial groups may not be as large as they first appear. However, IEP and ELL status may only explain some of the difference in scores, leaving significant differences that may be accounted for by a variety of demographic factors, including poverty, on which the team did not have student-level data to analyze.

PARENTAL EXPECTATIONS OF THE PRESCHOOL EXPERIENCE:

"For the time being, I just want them to be children, you know, childhood is such a beautiful thing." - Private Preschool Parent

Interviews revealed that private school parents generally had different expectations for their child's preschool experience than parents from the public preschool. Five of these 10 schools identified themselves as a "play based" school, either from the provider survey or interviews conducted with administrators. Private school parents spoke specifically about seeking out a play based environment for their children. The focus of parents at these schools demonstrated a greater desire for the development of citizenship, social-emotional skills, and opportunities for play, than for academic rigor. Supporting the responses from parents, school administrators suggested that parents maintained a belief that an intense focus on academics is not necessary at this age, nor does it serve as a catalyst for subsequent academic success.

Many parents noted the importance of "civility," with the hope that their children learn how to become productive members of a community. Given that for many children, preschool is their first exposure to their age-group peers, parents wanted them to learn the skills needed to positively interact with other students. This interest in citizenship superseded parents' concerns about being academically prepared for school. One parent from School D remarked, "When we talk about K readiness, we don't want them to write upper and lowercase letters -- there's time for that. Right now, we're sending our kids to preschool to be good citizens."

Parents consistently expressed their aspirations for their children to learn how to express themselves appropriately and manage their emotions. The development of social-emotional skills was viewed as a necessary component of the learning environment for parents. Teachers at School F also declared that their aims are to teach students to be independent by building confidence and to develop the social skills they will need when they are asked to do more academic tasks in later grades. Administrators at Schools A and D expressed that their parents want their children to work well in a group, enjoy going to a school, develop self-control, and have good self-help skills, in lieu of drilling academic skills at this age.

Many parents at the private schools indicated a simple desire for their child to have

opportunities for play. Confident that academics would play a large role in the future, they just wanted their "kids to be kids." As stated by one parent from School G:

They're going to be in school for the rest of their lives so why make it crazy in the early years. Let's let them enjoy, let them play. That's one of the problems I have with kindergarten and first grade, there is no play time. They are six years old, they should be playing.

In contrast, families from the public programs have a greater expectation of academic engagement for their children during the preschool years. A parent from JEH noted the desire for more instructional time at the school and even indicated a willingness to volunteer to make this happen. A second JEH parent made a surprising correlation with education and community safety, stating that, "early education is very important - this where the crime stops, this where the education starts." Interestingly, a staff member at JEH alluded to having many students who come into the program knowing their ABC's but lacking the ability to interact with other children. While some parents may be highlighting academic skills at home, social-emotional skills may be unintentionally overlooked.

Despite variability in district level kindergarten readiness scores in the sample, parents across all schools felt their children were prepared academically and socially for kindergarten. Parents noted how well their children performed once they entered the district's kindergarten classes. A parent at School G stated:

I thought they were very ready for kindergarten. I remember my middle son coming home and saying the first week of kindergarten, 'mom some kids don't know that you're supposed to sit on the carpet when the teacher says come sit on the carpet.'

These findings mirrored the desire of parents who had a primary focus on social emotional learning as opposed to academics. However, even parents with an academic focus felt their children were prepared for kindergarten. As shown in Table 7 below, these perceptions did not match the levels of readiness determined by ISEL.

Table 7. Percent of Students Kindergarten Ready and Curriculum Focus

School	Percent Kindergarten Ready	Stated Curriculum Focus
School D	87%	Creative Curriculum
School I	72%	Play Based
School A	70%	Developmentally Appropriate
School B	66%	Play Based
School G	63%	Play Based
School F	62%	Play Based
School C	56%	Creative Curriculum
School E	54%	Creative Curriculum
School H	45%	Play Based
JEH	24%	Creative Curriculum

Though having different curricular focuses, over 70% of students at Schools A, D, and I were deemed kindergarten ready as measured by ISEL scores. Between 50% and 70% at Schools B, C, E, F, and G were identified as kindergarten ready. Most notably, two schools had percentages lower than 50%. JEH, which had the lowest percent of kindergarten ready students at 24%, also had the most responses from parents favoring the academic focus provided by the school.

PROJECT QUESTION 2: HOW DO PRE-KINDERGARTEN AND PRESCHOOL PROGRAM PROVIDERS IN THE EVANSTON/SKOKIE COMMUNITY DIFFER IN TERMS OF DEMOGRAPHICS AND PROGRAMMING?

Qualitative data from observations, interviews, and relevant documents provided the foundation for understanding the differences between the ten providers in this study. Quantitative data from the district -- from both the provider survey and the readiness dataset -- allowed the team to triangulate findings discovered through the qualitative research process. The primary differences identified include: cost and funding sources; demography; parent-school relations; curriculum foci/program components; school operations, and district-school connections. These differences are discussed below.

APPROACH TO EDUCATING

"We don't believe in children sitting down doing worksheets, which we believe are meaningless" - Private Preschool Administrator

Given its funding sources -- state and federal grants -- JEH is more formalized in its approach to education than the private schools interviewed. The close association with the rest of the district and mandates for the Head Start program provide the school with accountability factors not present in the private schools. The programs housed at JEH, such as Head Start, also come with a research-based curriculum that is required for implementation and accountability. This structure creates an environment where academics serve as a key driver for the services provided to students, overshadowing the focus on social-emotional learning that the private schools exhibited. Though there is a desire for the integration of social skills, one JEH teacher noted that they "must teach academic and social skills together all day."

A play-based focus was emphasized across all private schools from teachers, administrators, and families. These schools lacked a formal instructional mandate requiring students to learn academics, so they were able to preference the development of social skills. However, this focus on play did not preclude all academic instruction. Teachers alluded to the infusion of learning through play. In one instance, teachers at School E remarked, that the students, "get to play all day, they just happen to learn." This idea was confirmed by administrators at School C, where their "focus is on incorporating academics, not teaching academics."

Like the parents interviewed, a large majority of teachers felt that social skills were needed in order for their students to be academically successful. Teachers at School F stated that they "work very hard to teach the social skills that they need to succeed when they're expected to do more academic tasks." An administrator at School I clearly stated

their focus commenting that, the "school is most worried about preparing kids for kindergarten socially." Teachers expressed the idea that due to the age of their students, a focus on academics was not appropriate and/or beneficial until they gained these appropriate social skills. Many teachers felt the need to meet students at their level and work upward in the development of their academic and social skills. Differentiation based on cognitive level seemed to be the priority at many schools.

From the provider survey, JEH was the only school from the sample to specifically indicate the sole use of the Creative Curriculum as an instructional resource. In interviews, JEH staff also reported that the district has collaboratively created kindergarten readiness goals to create a continuum of what children need to know from pre-k to kindergarten. In contrast, there was a very loose implementation of the Creative Curriculum at three private schools in the sample, and the rest had no set curriculum at all. A number of schools opted to plan their units based on the interests of the children.

Teachers at all schools believed that students improved greatly from the time they entered their respective schools until the time they left. Both academic and social skills were noted as areas where students improved. Teachers at School C stated, "kids don't come in prepared but are more so after participation in the three-year program." At JEH, staff noted big improvements in readiness from when their children entered into the program to when they left.

Likely as a result of these improvements in achievement, teachers and administrators throughout the schools interviewed felt that students were prepared once they transitioned to kindergarten. The perception of readiness at many of the private schools was related to social-emotional and self-advocacy skills. At the private schools, it appears that preparing students academically for kindergarten is secondary to developing students' self-control. These findings were in conflict with data provided by the district regarding kindergarten readiness. Given that the district uses ISEL scores as its marker of kindergarten readiness, there may be contrasting perceptions of how readiness is defined by the district and the schools surveyed.

Schools A, B, and E reported hearing statements from kindergarten teachers indicating that the children from their respective schools were well prepared or even over prepared for district kindergarten programs. An even more declarative proclamation was made by an administrator at School F, who shared that 99% of their children were ready for kindergarten. If defined by ISEL scores, this statement would be inaccurate, as only 62% of the kindergarten students from this school are reported as ready. Furthermore, no school from the sample had over 87% of students in the current kindergarten class identified as kindergarten ready by ISEL scores.

DIVERSITY

"Look at the women at the table, it's not diverse, we're not diverse." - Private Preschool Parent

During the site visits conducted, the lack of racial diversity was striking at the private schools. The team noted seeing few, if any, Hispanic or black students, parents, or teachers at the private schools, but the focus groups at JEH were representative of multiple racial and ethnic groups. Conversations about diversity were a common thread throughout

the interviews conducted. At JEH, the level of diversity was celebrated, but at almost every private school, diversity was mentioned as an area in which the school needed to improve.

When asked about growth areas for the school, a teacher at one of the private schools said, "More diversity. It comes and goes, and it is really based on Northwestern families. We have talked year after year about how to engage more with the community of Evanston. There is a really diverse population." However, only one of the private schools studied had any specific programs in place to address the issue. This particular school placed a special emphasis on its Hispanic students, with an array of programs and support for families.

While all interviewees expressed the importance of a diverse learning environment, the reasons for this importance differed. For some families, especially multiracial families, diversity at the school took on a level of personal importance. One private school parent, a white woman, told the team that her son was multiracial, and she did not want him to be the only non-white student. A parent at another school shared this sentiment:

I think diversity would definitely enhance certain things for our family. Our current child here is a biological child and is Caucasian, but our other two children are black. [We would like] him having other students that look more like his siblings, however we haven't found it anywhere in Evanston. It is very divided in terms of communities.

Other parents valued diverse classrooms as a means of exposure for their children. One parent explained that diversity and inclusiveness were important because after prekindergarten, students are going to be in schools where they encounter different people. Specifically, she thought the schools should do more to address equity and racial justice, since "half of [her] daughter's District 65 class is in a minority group." She encouraged the school to, "make books more culturally relevant" and include "more discussion of others." The administrator at a different school echoed this:

We are working on diversity, not necessarily the diversity of our families necessarily, but working that into the program more. It's just the nature of our program that we tend to not have a super diverse population, and so in that, you need to be more purposeful about what you're planning and books that you're using.

At the same time, multiple parents had high praise for the diversity at JEH. One focus group participant said, "They're sending a message out to this community that we involve and love all people, and this is what I like about it." Other parents in the JEH focus groups were excited about the level of diversity to which their children were exposed, noting that this environment was much more diverse than the private schools they had previously attended.

SPECIAL NEEDS POPULATION

"It's hard to find a regular preschool that welcomes children with special needs; that let alone supports them and supports them at the school's expense" - Private Preschool

Administrator

Just under 10% of the district's students receive special education services, and the special education population in our sample comprised over eight percent of this subgroup. The schools in the sample varied greatly in the number and types of special needs they accommodated. Approximately one-third of the students with IEPs attended JEH prior to kindergarten. Alternately, on the provider survey, two schools – Schools F and H – indicated that they do not serve students with special needs at all; this was confirmed by the kindergarten readiness dataset, which showed that none of the students in the District 65 kindergarten class with IEPs attended these schools. Four other schools – Schools C, D, E, and I – served zero percent of the district's kindergarten special needs population.

These four schools did indicate on the provider survey that they serve students with special needs – ranging from speech and language disorders and developmental delays to emotional disabilities, but it is important to note that these incidences were reflective of their current preschool students, not the class of students included in the readiness dataset. Still, these differences in services were evident from the interviews with school staff and administrators as well. Teachers at School I shared that:

We don't, as a school, generally have kids coming in with pre-documented special needs. It is not through design, there is another school that does that. [A different] preschool does that, so parents know that is the place you go to if you have a child with Down syndrome or Asperger's. In our school, we have had kids who go to kindergarten with an IEP, and we try and help parents with that.

Narratives about available services in the district were consistent across interviews and data sources. JEH was seen as a "one stop shop" for special services for its own students and for those from private schools who may need screenings or itinerant services. School B was another option for families of students with disabilities or additional needs. These two institutions work in partnership, often jointly serving families to provide daylong educational services to children with special needs.

These differences in special education services play an important role in the readiness gap across schools. As noted previously, black students with an IEP scored significantly lower on ISEL tests than their non-IEP counterparts. T-tests comparing the means of students with and without an IEP on the ISEL subtests showed similar results (see Appendix I). With JEH having served a quarter of the special needs population in the current kindergarten class, its rates of kindergarten readiness are naturally much lower than those of other institutions who served few, if any, students requiring additional educational services. The distinction of having an IEP is important for overall rates at JEH as well; when only general education students were analyzed, 42% were kindergarten ready, compared to the school's overall average of 24%, which did not appear to reflect the quality of instruction at the center, based on interviews and observations. This adjusted figure, while still lower than rates at other schools, is far closer to the average.

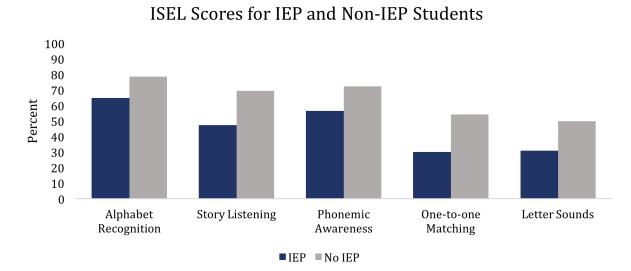


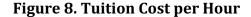
Figure 7. IEP and Non-IEP Student ISEL Scores

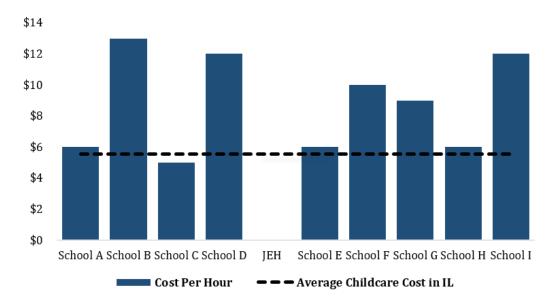
COST AND FUNDING SOURCES

"We had a bunch of families come to us in August looking to enroll that needed the financial assistance, all the money was already gone." - Private Preschool Administrator

According to the Economic Policy Institute (EPI) (2016), the average cost of childcare for four year olds in the state of Illinois is \$797 per month, based on a 36-hour week. Using this average number of hours to extrapolate to the number of hours in a month, it can be determined that the average hourly cost for childcare in Illinois is \$5.53 (Gould & Cooke, 2015).

Similarly, to determine the cost per hour of the schools in the sample, the team visited the website of each school to find the amount charged for tuition. The number of hours that children are in service was calculated for each school based on the information provided on the website. Schools reported tuition and hours per week, month, semester, or year. Using the calendars on the school websites, the research team was able to drill down to the number of hours children were in school each week. As many of the schools had a minimum and maximum number of days that children could attend -- two days per week versus five days per week -- the maximum number of hours was used for each school. Consequently, the cost per hour calculated in Figure 8 below is what parents would pay for their child to attend the full program at each school. Four schools have costs that are close to the average, one being \$5 and three being \$6. The other five schools have costs that are between 62% and 135% higher than the statewide average.





As a result, cost may be the biggest barrier to diversity at the private schools. Multiple administrators and teachers candidly discussed the issues of cost and its effects on diversity. One administrator explained it by saying, "Cost is an issue, and that is something [the school has] been working on, in terms of finding ways to fund more families coming here." The quotation in the header shares a similar situation from another school.

A chi squared test confirmed that there is a statistically significant relationship between race and cost of attendance, $^2(10, N = 348) = 131.37$, p<.001. Over 65% of black students, Hispanic students, and Asian students in the sample attended less expensive or free schools, while 82% of white students attended above-average schools.

SCHOOLS' PERCEPTION OF PARENTS

"I feel like all the children when they come in are going to be successful just because of the kind of families we have here." - Nursery School Administrators

Qualitative interviews demonstrated that all schools in the sample work diligently to engage and support the families of the children they serve. Upon comparing the evidence across schools, it became clear that schools were approaching their family engagement work from different perspectives. A pattern emerged between the engagement attitudes and practices at preschool programs serving lower-income families and those at more affluent preschools. Schools serving wealthier populations clearly conveyed the respect they have for parents at their school, viewing them as equal partners in the education of their children, stakeholders at the school, and potential employees in the future. Most of the schools serving lower-income populations showed the same level of respect towards families, but they appeared to view the families they serve as people to be uplifted instead of an asset to be leveraged.

Schools serving lower-income families appeared to view parents from a service orientation, helping to ensure that families are stable and know how to properly advocate for their children. However, the attitudes about parents from low-income communities tended to differ by school. The staff and administrators at one school in particular, School C, seemed to hold a deficit-based view about the families that they serve. In addressing the fact that many of their families have experienced poverty, trauma, and their own negative experiences in education, many of the interview responses at this school indicated that these disadvantages have had a seemingly fixed impact on their ability to support their children; this administrator talked about their parents being angry, not knowing how to engage with the school, and having low expectations for education. She elaborates:

Asking what their expectations are is hard also because a lot of our parents think, think that work is worksheets and flashcards. "Why aren't we doing worksheets? Why aren't we doing flash cards?" And we have to go through that whole explanation as to why we don't do that. And so we are constantly educating parents, and educating children, but that's a good thing because I heard someone at a conference say that a good early learning center starts with a good adult learning center. The more we can engage with the parents and explain to them what we are doing, the better.

The administrator and teachers contrasted these intentionally educationally enriching events with ordinary parent-child interactions at home. They discussed offering parent workshops to "break parenting cycles" and how they serve as second mothers to their students. A teacher from this school specifically said, "A Day in the Classroom helps us have a bird's eye view into the parents, what kind of parents they are."

Alternately, at JEH, there are four Family Service Coordinators who serve as case managers, making sure that families receive a proper intake into the program, addressing crises as they arise, and providing wrap-around services as needed by each family. Although this level of service is a requirement of the Head Start program, JEH embraced this model and made it meaningful for their school community. Their services were described as, "very individualized, tailored to all students and families as individuals," and focused on "true care of each family from every aspect involved." JEH also has numerous opportunities for parent involvement, leadership, and advocacy, and they work to ensure that parents take advantage of those opportunities. These efforts appear to be working, as one parent explained that, "For our own class, the farm trip was so oversubscribed with parents, they actually let us draw names out of a hat -- parents want to be involved."

Staff at more affluent schools were clear that they viewed their school's parents as more educated and informed than other parents in the community and that these differences have a positive impact on their students' development. Similar to the quotation at the top of this section, a teacher from School A said, "With this school and the area it's in, parents speak up mostly and they have a lot of prior knowledge and information that parents in a lower income area might not have." These schools express their respect for and trust in their families by opening their doors for parents to freely participate and volunteer during the school day, without any type of training or formal process. The administrator at School F said, "Parents are free to come in and play in the room. We have room parents and volunteers. If they have fun interesting jobs, they are free to share.

Parents might be in the school fundraising, making copies, etc."

At least four schools in the sample noted that parents from the school have often progressed to becoming staff members, board members, or leaders. The directors of Schools D, G, and I were all current or former parents at the schools in which they worked. The administrators at School B plainly stated that, "When we've had to hire new teaching staff, our best way is to look for either current parents or past parents... they understand our culture, they understand what we are trying to do, they understand the mission... they've already drunk the Kool-Aid." This trend suggested a level of social capital that was not present in the schools in our sample serving lower-income families.

LEVEL OF FORMALITY

"It's different when it's privately owned, like a business versus state funded." - Public Preschool Parent

Qualitative observations of JEH indicate a highly-structured program, which may be due in part to its size, parental differences, and accountability requirements. Parents spoke of the procedures being very formal, with one using the phrase "constant accountability." During site observations, researchers observed a distinctly organized check in process for children that was not seen at the private schools. One parent in particular noted differences between their daughter's previous private school and JEH, stating that, the "private school was more cuddly and personal but not most constructive for their needs."

As a provider of Early Head Start, Head Start and Preschool for All, JEH receives federal grants and state funds that require strict policies and procedures which must be followed with high levels of fidelity. The Center also offers early childhood special education services which are mandated by law for those students who qualify (*Community Assessment, 2016*; *Report on Black Student Achievement in District 65, 2016*). Given the multitude of programs and services available to Evanston/Skokie families, JEH naturally has policies and procedures that the other schools in our sample are absolved from.

Compounding the challenge of meeting the needs of such a high number of students served, JEH staff noted the difficulty of coordinating eight different transition times with kids and parents that are linked to the time requirements associated with multiple programs and funding streams; additionally, every teacher at JEH has two sections of classes -- a morning class and an afternoon class. JEH Staff discussed the need to streamline applications, services, and program hours to reduce the observable variation, so it appears that there is "one program and one curriculum." However, they were not yet able to reduce the number of transitions due to federal and state mandates for program hours. To support the vast and diverse number of students present, the Center has a robust group of collaborators including the Family Support Specialists, who also assist with the intake process, placement, and wraparound services; and other personnel such as dentists, nutritionists, and the Ronald McDonald Care Mobile, which provide medical services for children at the center.

As a comparison, many of the other preschools were not as rigid in their operations and had a notably close-knit, family feel. Teachers at School A proudly spoke of their environment, stating that, "when you walk into this school, you're greeted right away, you're not just standing aimlessly in the hallway finding out where to go." An

administrator at School G proclaimed, "I think when people come for the tour, they really get a sense of the community and what a nice environment it is here because they can see the kids in action and the teachers in action."

DISTRICT 65 RELATIONSHIP

"We are friendly with one another, we work together happily, but we don't really have a collaboration." - Private Preschool Administrator on the relationship with District 65

A natural and cohesive relationship between District 65 kindergarten and early learning programs has been forged through a shared commitment to providing quality early childhood education (ECE) to families in Evanston and Skokie. Located in the same building as the district's central office, the JEH Center has a much clearer understanding than its private school peers of the district's goals and expectations of the experience and skills needed to be deemed kindergarten ready. Through the observations and interviews conducted, it was apparent that there was a collaborative nature to the work at JEH and an investment by district personnel to ensure that programs and students were thriving.

JEH staff shared that the Kindergarten Readiness goals were established to create a continuum of what children should know as they progress from pre-kindergarten to kindergarten. Interviews revealed that these goals were created collaboratively with preschool and kindergarten teachers at the district; one interviewee noted how this effort, "shows the importance of ECE being district-led." It was also noted by JEH staff that district content experts were available to help families and teachers where needed, such as providing mentorship to new teachers. It is clear that JEH is an integral part of the district and fundamental to its goal of achieving equity for all students.

Contrary to the coordinated and synergistic relationship between JEH and the district, there exists a more loosely coupled connection between the district and the private schools surveyed. "It's ebbed and flowed over the years," remarked one private school administrator. Though district leaders describe the relationships with local private preschools as collaborative, referring to them as partners instead of competitors, interviews revealed that many of the private schools had a different perception of this relationship.

Many private school educators were not well-versed or aware of the kindergarten curriculum. At a few schools, staff members noted that that their knowledge of district kindergarten requirements came primarily from being a district parent, not due to their professional roles. A teacher at School F stated, "We don't get anything from the district regarding the kindergarten curriculum. What we know about the curriculum comes from our own experience with our own children who attended school in the district." Other teachers indicated that they were not knowledgeable about the kindergarten curriculum at all.

It appeared that information regarding kindergarten readiness was shared with the providers at some point through Kindergarten Readiness Forms. These were designed to send information from the current teacher to the receiving teacher about their new students; however, the procedural nature of the forms and bureaucratic process of dissemination appeared to quell their intended use. Many administrators indicated that despite having their teachers complete the forms and send them to the district, they never

made it to the intended teacher. As stated by a School G administrator:

Historically, that form never got to where it needed to go. They were in paper format. They were in the district office, somebody there would then send them to all of the elementary schools, then the principals were supposed to get them to the teachers, and truthfully it was a system that was broken...ultimately, nothing ever came of it and so we stopped doing it.

Although it was evident that the private providers had little information about the district's view of kindergarten expectations, readiness, or curriculum, all providers felt that their children were ready for kindergarten and reported receiving positive feedback regarding their progress. This may be a function of the faith that all families expressed in their respective preschools and their belief that District 65 is a high functioning, high quality school district that will help meet their children's needs in kindergarten and beyond.

As stated by a teacher at School H, "Most families choose the public schools and many families move to Evanston for the schools." One grandparent at JEH expressed a similar sentiment and a commitment to the district, stating that she sent her seven children to District 65, remaining in Evanston solely so her grandchildren could attend the schools as well. Another parent at School A professed her gratitude for having observed her children excel both academically and socially in the district. Despite the disparity seen in the relationship between the district and the private providers, a common theme was espoused regarding the quality of the district itself and the outcomes produced for its students.

DISCUSSION

The project questions sought to identify both school-based and family-level factors that impact the kindergarten readiness gap observed in District 65. Through on-site observations and interviews at local preschools, as well as analysis of administrative and survey data, it became clear that individual-level differences, such as having a disability or being a non-native English speaker, may have an even more profound impact on the gap. Interviews revealed that across schools, parents were sometimes approached and engaged in different ways based on these individual or family factors, with some families being hailed as assets and others requiring supports and services. Finally, because District 65 measures readiness primarily in the form of literacy assessments, it does not account for students' numeracy or social-emotional skills, the latter of which was found to be a prominent theme across preschool curricula in the sample. These observations have been framed in the form of key takeaways, connected to extant literature. Each of the takeaways is detailed below.

TAKEAWAY 1: FOCUSING ON RACE WHEN ANALYZING READINESS GAPS OVERSHADOWS OTHER MORE IMPACTFUL CONFOUNDING FACTORS.

Lewis and Diamond (2015) wrote that, "...race cannot be the cause of achievement or the lack of achievement" because "race is a social and political category" (p.4). Though their text is recent, these conclusions have been drawn for decades. The 1966 Equality of Educational Opportunity Report noted as well that the achievement gap between racial groups is not caused by race, but rather affects races. However, despite knowing that race cannot cause differential achievement, wide gaps still exist. The district's *Report on Black Student Achievement* (2016) and *Hispanic Student Achievement Report* (2017) both show achievement or readiness gaps for their respective populations. Knowing that the focus of this capstone was on the readiness gaps existing in District 65 allowed the team to focus on its potential factors. The team focused its analysis on variables in which there were distinct differences between groups.

Initial analyses from the readiness dataset showed that while both Hispanic and black students scored lower than other racial groups on the ISEL tests, these groups of students were also far more likely to have a significant learning challenge than their peers. The team discovered a disproportionate number of Hispanic students who were designated as English Language Learners, as well as much higher rates of special education identification among black and Hispanic students. These designations were found to have an association with test scores and levels of readiness. However, non-ELL Hispanic students and black students without an IEP performed comparably to students of other racial groups, causing the team to focus on these designations requiring additional learning supports as potential factors of the readiness gaps.

Another source of disproportionality in the sample was the socioeconomic distribution across the 10 schools, as 74% of students living in poverty attended the public preschool; the other nine schools had 12% or less of their population in poverty. Coming from an impoverished background has long been connected to learning outcomes, but Isaacs (2012) highlights the significant nature of these connections, stating that, "Differences by race/ethnicity, immigrant status, family structure, maternal age at birth, and maternal physical health are initially large ... However, these differences reduce to insignificant levels after controlling for income and other confounding factors" (p. 9). The team noted similar effects in District 65; when controlling for ELL or IEP status, the gaps between Hispanic and black students and their peers decreased dramatically. Although the team did not have access to student-level poverty data, there is reason to believe that along with ELL and special education designations, poverty plays a critical role in readiness gaps.

ENGLISH LANGUAGE LEARNERS

The difference the team found between ELL and non-ELL students' kindergarten readiness is in line with research that has been conducted on ELL students and achievement. Previous research in Utah has found that 30 percent of the state's Hispanic students were not fluent enough in English to be tested upon entering kindergarten (Reardon & Galindo, 2006). Research has also found that ELL students in general are likely to score lower on standardized tests, especially in subjects that place high demands on language usage (Echevarria, Short, & Powers, 2006; Abedi, 2004).

The Threshold Hypothesis says that there are thresholds that ELL students must pass if they want to obtain the benefits of their second language. Until students surpass the

lower threshold, they are at a disadvantage in school (Cummins, 1979). Ardesheva, Tretter, and Kinny (2012) believe that those disadvantages "are likely to be mitigated once bilinguals reach the lower level threshold—that is, once they develop substantial literacy skills in the language of instruction" (p. 774).

However, Yoshikawa, et al. (2013) suggest that the second language does not need to be the sole language of instruction. They write, "There is emerging research that preschool programs that systematically integrate both the children's home language and English language development promote achievement in the home language as well as English language development" (p. 12). Similarly, Goldenberg, Hicks, and Lit (2013) wrote that, "In addition to promoting bilingual language and literacy skills, utilization of the home language can also have psychological and social benefits that immersion in a second language cannot offer" (p. 27).

This literature is relevant to the conversation about supporting English Language Learners in District 65. As noted, JEH has a much larger share of the ELL population than any other early childhood education program in the district. Given this team's analysis, the large difference in test scores between ELL and non-ELL students in the sample likely indicates that the high number of ELL students at JEH contributes to the readiness gap between JEH and other schools. However, JEH is also the only school in the sample to require that their teachers have an English as a Second Language (ESOL) certification endorsement and to have a fully bilingual Spanish instructional program, so the level of supports there is higher than at other schools. Another school in the sample did have a group to help Hispanic mothers who do not speak English work with their children and navigate the educational system, but this was not a daily instructional program for children.

This team found it important to examine the influence of families of ELL students. A side effect of a high ELL population is that there are many parents who do not speak English. Parents who do not speak English struggle to help their children improve academically because they themselves cannot access the materials their children bring home (Gandara & Zarate, 2014). Researchers have also found that children from households where parents do not speak English or are not strong English speakers have lower levels of school readiness (Magnuson, Lahaie, & Waldfogel, 2006). Interestingly, in comparing JEH to the other schools with ELL students, JEH is the only one that did not mention the presence of Northwestern University families -- who presumably have at least some English fluency in order to study or work at the university.

Researchers have found that parents reading to their children helps them learn the structure of language and grammar rules. At the prekindergarten level, joint reading helps develop emergent reading skills (Bus, Van Ijzendoorn, & Pellegrini, 1995). If parents cannot read to their child in English, then those students have a hard time surpassing the minimum language threshold that is necessary for them to perform at a high level in school. This in turn lowers achievement levels because the student cannot access the content they need to learn. Abedi (2004) found that even if a student has the knowledge and skills to perform well on a test, they are "not likely to demonstrate this knowledge effectively if she or he cannot interpret the vocabulary and linguistic structures of the test."

While non-native English speakers may have lower levels of school readiness than their English-speaking peers, it is important to note that early childhood education is very

beneficial to ELL students. Evidence from a national study indicates that children of immigrants benefit from school as much as native-born children (Yoshikawa et al., 2013, p. 12). A different study of Oklahoma prekindergarten programs shows that Hispanic ELL children benefit more from early childhood education than non-ELL students (Bassok, 2010, p. 1829).

STUDENTS WITH SPECIAL NEEDS

While JEH offers high-quality and comprehensive services for the district's youngest students with special needs, interviews with private preschool providers highlighted the relative lack of other options for families whose children need services. Consequently, it was not surprising to find that JEH had served an overwhelming proportion of the special needs population in the current kindergarten class. Buell, Hallam, and Gamel-McCormick (1999), citing other prior research, write that:

...in the area of early childhood, separate personnel preparation programs train early childhood educators and early childhood special educators reinforcing separate service delivery systems that are segregated and, in many cases, duplicative ... This results in two distinct early childhood systems that have their own curricular goals and pedagogy ... not only is this situation inefficient, it is also considered by some to be an unethical waste of resources and efforts. (p. 144)

What was unexpected for the research team was the discovery of race-based disproportionality in special education identification at such a young age. In an analysis of the black-white achievement gap in a similar community, Lewis and Diamond (2015) write, "...contemporary racial patterns are supported by structural inequalities, institutional practices, and racial ideologies that mutually reinforce each other but appear to be largely 'nonracial'" (p. 54). This account suggests that biases towards certain racial groups have inadvertently manifested into the daily work of schools and therefore, the differential treatment and outcomes of minority students, even though the people working in schools often advocate for all students and for equal treatment. They continue, "It is, we argue, in the daily interaction among school policy, everyday practice, and racial ideology that contradictions emerge between good intentions and school outcomes" (p. 64).

Regarding students with special needs, Mann, McCartney, and Park (2007), state that, "differences in expectations for children's behavior may also contribute to variation in remedial and special education service referral" (p. 274). Further research in District 65 needs to address these root causes, such as the differential treatment of students based on race, to determine if they play a role in the disproportionality of special education identification among minority students.

STUDENTS IN POVERTY

Studying the readiness levels of children coming from low-income families, Isaacs (2012) highlights the vast disparities between students of different backgrounds, noting that, "School readiness rises to 86% for children born into households with income above \$100,000, and falls to 42% for children who are persistently poor" (p. 3). This observation

is particularly relevant for the Evanston/Skokie communities, with large populations of families who are in poverty and families with great wealth. Further research is needed on the district level to determine if District 65 students follow the pattern Isaacs identified, but numerous studies have shown the reasons for this disparity.

Per Magnuson, Meyers, Ruhm, and Waldfogel (2004), "differences in children's childhood experiences play a formative role in shaping school readiness and largely explain the skill gaps at school entry" (p. 117). Stipek and Ryan (1997) found that children from lower socioeconomic backgrounds start school disadvantaged because they have developed fewer academic skills than their wealthier peers. Bassok (2016) discusses how even when comparing children's readiness and performance across different types of preschool experiences, family background characteristics still account for most of the differences noted between students. Sigler (2016), however, puts this issue into the most dire terms:

One aspect of school readiness is to prepare children academically for kindergarten, but it should also include meeting a child's basic needs from a very early age. When these basic needs – food, shelter, clothing, and safety – are met, a child can develop healthy social, emotional, and cognitive skills that are also essential to school readiness, allowing children to be prepared to acquire the academic skills. (p. 38)

For many families in the District 65 community, these are very real concerns. For example, the *Report on Hispanic Student Achievement* (2017) notes that Hispanic students are 75% more likely to live in low income housing. Similarly, the *Report on Black Student Achievement* (2016) states that:

"...black students participating in preschool are more likely to do so in a District 65 program than their white peers. This is largely due to the income disparity between black and white families, as District 65 pre-k programs primarily serve children living in low-income households." (p. 5).

Knowing that many of the early learners in District 65 are affected by their socioeconomic status, more research is needed to connect their individual-level background data on and level of kindergarten readiness.

BARRIERS TO DIVERSITY

It may be possible that with student-level family and demographic data, as well as information about ELL and IEP status, the readiness gap in District 65 can be completely explained. This, however, does not alleviate disproportionate representation of certain racial groups in particular schools or in special service programs. Understanding the gap also does not mitigate the barriers that exist for many minority families to access many of Evanston's private preschools.

This study has shown that the schools that cost the most also perform the best on ISEL measures and levels of readiness; these schools are also the least racially diverse schools in the sample. The private schools studied offer few services for students with

special needs or for those who speak another language, and their ability to provide financial aid appears limited. Financial constraints and language differences are two of the reasons cited by Bassok, et al. (2016) for variance in child care quality and type. Due to disparities in incomes between races within Evanston and Skokie, it is unlikely that without tuition assistance, many minority families could afford to send their children to schools that cost two to three times more than the average cost of childcare. As a result, high costs and lack of service provision at the private preschools exacerbate the clustering of minorities and students with special learning needs at JEH.

There is much research highlighting the benefits of diversity in settings outside of the PK-12 school environment. In work environments, it has been shown to increase productivity (Lagace, 2004), and in education, diversity is associated with better outcomes and civic engagement (Wells, et al., 2005; Bowman, 2011). Wells, et al. (2005) found that students who had attended high schools that were racially diverse were more likely to embrace cross-cultural friendships and feel more comfortable as a racial minority in a group; they were also less likely to fear members of other racial groups or revert to harmful stereotypes.

Diversity research in PK-12 education often focuses on the structural reasons, like tracking, that true diversity does not exist in learning environments. This is very much aligned to the dynamics observed within District 65. Diversity was discussed by the majority of people interviewed as something that the private schools desired and wanted to increase, which appears incongruous with the observations that the team made and other statements from interviewees. Lewis and Diamond (2015), studying a similar community, also grappled with this contradiction between what is expressed and what is done at schools regarding diversity. They write:

... embracing diversity allows those who express support for it to feel as if they are living out their ideals—supporting, welcoming, and engaging the differences that exists in a multicultural metropolis—even as they are largely avoiding dealing with the complicated racial reality of which they are a part. (p. 374)

TAKEAWAY 2: EXPECTATIONS OF PARENTS AND SCHOOLS DIFFER ACROSS CONTEXTS

Mann, McCartney, and Park (2007) write:

Entry into school marks a period of remarkable transition for children, their families, and their teachers ... It is a time of changing social roles, ... when children experience new academic and social expectations and parents ensure that their children are ready to meet those challenges. (p. 273).

This quote encompasses the different groups involved in a child beginning his or her school career. Importantly, teachers, parents, and the child all have their own expectations about their roles in the schooling process, how they will be treated, and what supports they might receive. In this study, the team determined that the expectations of schools and parents not only played an important role in the support services offered and the approach to engaging families, but that these services and approaches differed along lines

of race and class.

PARENTAL EXPECTATIONS OF THE PRESCHOOL EXPERIENCE

A consistent theme from interviews with parents across all schools was a perception that their children were prepared academically and socially for kindergarten. Notwithstanding the reported kindergarten readiness scores, parents held the common belief that their child's preschool prepared them with the skills necessary for kindergarten. These feelings were shared equally with teachers and administrators, who reflected on anecdotal remarks from past parents and district teachers regarding the readiness of their former students. These findings are supported by prior research, as Bassok, et al. (2016), state that "74 percent of parents give their child's provider an overall rating of either "perfect" or "excellent" (p. 28). Even though just under one-quarter of JEH students were reported as kindergarten ready, parents similarly expressed commendations about the school. This is in line with research that indicates that parents with lower levels of education often over-estimate the quality of services of their school (Bassok, et al., 2016).

Another possible explanation for the disparity in kindergarten readiness scores among the schools surveyed are the parental expectations regarding the preschool experience in general. Ackerman and Barnett (2005), in reviewing existing research on parental viewpoints regarding readiness, found variations based on socioeconomic status and educational backgrounds. In one study, parents without a high school diploma rated counting to 20 and knowing the alphabet as important skills needed for kindergarten at a much higher level than parents with a college degree. In a separate study, Head Start parents viewed knowledge of letters, colors, and counting as essential readiness skills at a much higher rate than other parents in the study. These parental viewpoints highlighted from extant research are consistent with the findings in this study, that lower-income families prioritize academics in kindergarten readiness.

Whereas public school parents from our sample wanted the school to provide more academic instruction for their children, private school parents expressed a greater desire for play based experiences that lessened the focus on academics. In particular, private school parents mentioned the hope that through the preschool experience, their children would learn citizenship, self-regulation, and social-emotional skills that would later facilitate greater academic achievement. These skills, which are congruent with the traits needed to succeed in mainstream society, provide children at the private schools with cultural capital, fostering the tools needed to succeed in school. As stated by Delgado-Gaitan (1991), "Parents who are knowledgeable about the school's expectations and the way in which the school operates are better advocates for their children than parents who lack such skills" (p. 21). As this pattern is replicated in future years of school, disadvantaged children without these skills are subject to face persisting inequalities, impeding their opportunities to succeed academically (Bourdieu, 1973; MacLeod, 1995).

SCHOOL'S PERCEPTION OF PARENTS

The dichotomy observed in the sample between seeing parents either as equal partners and resources or as families to be served is well supported by extant literature.

Lightfoot (2004) explains the exact phenomenon the research team observed:

... middle-class parents are seen as overflowing containers, whose involvement in schools is to be valued, but must be constrained in quantity. They are contrasted with low-income, urban parents who speak English as a second language and who are portrayed as empty containers, which need to be filled before they can give anything of value to the schools or to their own offspring. (p. 93)

Similarly, Lewis and Diamond (2015) wrote, "Institutions like schools are also more likely to respond to such parents [college educated, higher income] because of the resources these parents bring to bear on the institution" (p. 149). Lightfoot addresses the fact that this binary approach to engagement ignores the assets and resources that low-income and diverse families bring to a school community and their children's education.

Importantly, Lightfoot (2004) notes that these views of low-income or diverse families are often not coming with intentions of malice or ill-will but instead hopes for social justice and equity; it is argued that, "these parents are seen as wanting to give to their children but being capable of such giving only if their emptiness is filled by the program organizers" (p. 102). Most of the staff and administrators interviewed for this study felt that they were working to eliminate barriers and provide supports to those who needed them, but there was still an implicit assumption that they, as educators, had knowledge that their parent population did not and that it was their responsibility to share that information with families so that their children could succeed.

Lewis and Diamond (2015) write, "whether you feel respected, welcomed, and/or treated well not only shapes social relations but also influences motivation, performance, and learning" (p. 212). It is important for the schools studied to think about how their own perceptions and biases affect how they engage with families and students, as their interactions can have a lasting and meaningful effect on student and family success.

HOW PERCEPTIONS OF PARENTS CONTRIBUTE TO DISPROPORTIONALITY

These differing perspectives on and from parents are reflective of the primary concepts underlying this study - social capital, cultural capital, and social reproduction. Social capital, as originally defined by Coleman (1988), is a theory about relationships and the types of people and networks to which a person or family has access. Social networks provide information about and connections to different opportunities for success, such as where to look for a job or what school is perceived to be best. These types of networks tend to vary along socioeconomic lines, with wealthier, more educated families benefiting from stronger social capital. Across the interviews conducted within private preschools across District 65, the influence of strong social capital was palpable. Frequent stories in multiple schools about how families heard about the school through friends or neighbors, or how a few of the program directors were former parents at the school, demonstrated the intense positive connections present within the upper echelons of this community. In contrast, staff and families were often drawn to JEH for different reasons, including service provision or low cost.

Cultural capital, as defined by Bourdieu, focuses on class-based cultural characteristics within families, particularly as they pertain to education. MacLeod (1995),

defines cultural capital as "the general cultural background, knowledge, disposition, and skills that are passed down from one generation to the next" (p. 13). In this study, cultural capital was evident in many of the private school families, who expressed few concerns about their child's educational progress, knowing that they would learn at home as well as at school. Another example of cultural capital was found at JEH, in the grandmother who expressed her core belief about education being the key to success and a way to avoid negative outcomes like crime.

Social reproduction theory explains that certain forms of cultural capital may not be aligned to the educational values of the school. As previously mentioned, when the cultural capital instilled in certain students differs in some way from mainstream values, these children often face challenges adjusting to the school environment (MacLeod, 1995). As the school continues to reward behaviors and perspectives that are in line with the mainstream culture and penalize others, students and families begin to feel that they do not belong, and achievement and engagement suffer. An example of social reproduction in this study is the binary perceptions of parents and resultant approaches to engaging them; families whose values are in line with the school's values are rewarded through trust, opportunities to participate, and even employment. Families whose values are misaligned are seen, as evidenced by the comments from School C, as less competent and less valuable to the functioning of the school.

Given the lack of diversity within preschools across the Evanston area, there is little opportunity for these social networks and cultural values to be shared with families unlike themselves. Social reproduction occurs and potentially harmful perceptions persist when school staff, students, and families lack the opportunity to meaningfully interact with those from outside of the mainstream culture. As long as the private schools continue to require high-cost tuition and few financial supports, it is likely that the public schools will have disproportionate representation of those outside of the mainstream culture, and the process of social reproduction will continue.

TAKEAWAY 3: DISTRICT MEASURE OF READINESS EXCLUDES KEY SKILLS AND COMPETENCIES

District 65 currently has a broad definition of kindergarten readiness to determine the skills its students possess upon entering school, but its universal measure of readiness is narrow. Utilizing only a literacy assessment reduces the likelihood that all students and skills are analyzed in a holistic way. Due to the variety of instructional approaches observed in the Evanston community preschools, it is important to note that critical skill categories, such as social-emotional and mathematical skills, are being disregarded entirely in measuring readiness. Additionally, the district's relationships with other preschool providers has an impact on the way and which the official information on readiness is received, shared, and internalized.

DISTRICT 65 RELATIONSHIP WITH PRIVATE PROVIDERS

Though there has been a long-standing relationship between the district and the private providers, findings indicate that there is less cohesion than may be believed by the district. Weick (1976) describes systems like these as being loosely coupled, whereby

there are events and associations that are intertwined but still separate, preserving their own identity. Maintaining a loosely coupled relationship with the district allows the private providers to lower the prospect that they will have to respond to unpredictable changes by the district, localize their functions and make decisions regarding their own program without consulting with District 65, preserve their own unique identity and character, and further their sense of autonomy and self-efficacy. The private schools in our sample each had its own distinct culture and philosophies that possibly limit the influence of district initiatives, further exacerbating the loosely coupled system observed.

Conversely, the district based JEH program exhibited a highly functional working relationship with fellow district personnel on all levels. As a function of this association, JEH staff had a much clearer understanding of district expectations, standards, and definitions regarding kindergarten readiness than the private schools studied. As a district that is highly valued among all parents in the sample, research supports the establishment of a collaborative relationship between districts and all providers. Fain and Contreras (2016) contend that:

"Districts play an important role in the successful transition of children to elementary school. This includes working in partnership with early childhood providers and choosing effective policies for incoming families, such as drop-off and pick-up policies, access to teachers, opportunities for families to engage with the school and their child's classroom, and cafeteria experiences, to name a few. At the district level, it is important to have open communication channels with major partners as well as a designated contact person for transition issues. Allowing for school-to-school and teacher-to-teacher collaborations is critical, as this is where much of the work takes place" (p. 26).

Establishing a better working partnership may require the district to expand its own outlook on how information is transferred from the district to other providers, as well as to the public. When the private providers exhibited support through the completion of the kindergarten readiness forms, they later expressed dismay that organizational processes limited the effectiveness and reach of the forms. Consequently, this was seen by many providers as an onerous activity that perhaps infringed upon their time and yielded little benefit. Creating value and coherence will allow the private providers to maintain their identities as independent schools, while still working towards the same mission as the district in which their students will eventually enroll.

APPROACH TO EDUCATING

The schools in the sample displayed a variety of different perspectives on early childhood education, along a spectrum from fully play based to a strong focus on academics. Although preschool approaches and curricula can vary extensively from site to site, prior research supports the importance of quality preschool experiences and their relationship to the acquisition of school readiness skills (Yoshikawa et al., 2013). Importantly, Isaacs (2012) suggests that the assorted array of programs such as Head Start, private nursery schools, public pre-k programs, and center based programs create variability not just in type, but also in the quality of services provided.

Though academic components of kindergarten readiness have been correlated with subsequent school performance, Reardon and Portilla (2015) suggest that the focus on educational and social inequality overshadows other characteristics of readiness, including social, emotional, and behavioral skills. The differences in approach to education observed in this study are consistent with findings from Bassok, et al., (2016), who found that within the formal care sector, Head Start and pre-kindergarten programs "report reading books more frequently and are more likely to indicate they do reading and mathematics activities every day, follow a written curriculum, and have a computer" (p. 17). Considering that programs such as the district's Head Start program are primarily available for low-income families, the academic focus reported is in part a function of the program's established curriculum, but also a way to address the socioeconomic inequalities present in the population served.

The lack of a strictly prescribed academic curriculum among many of the private schools in this sample allowed for the observation of activities focused on the development of social skills and the ability to learn through exploration. The research team observed children at the private schools participating in a variety of self-directed, cooperative activities in which they learned to solve problems and work well with peers. Opportunities for play provide chances for children to learn self-control, cooperation, and socialization skills that are needed as they progress through school (Samuelsson & Carlsson, 2008).

The play based focus observed across many of the private school programs is also noted to have benefits associated with academic achievement. Coolahan, Fantuzzo, Mendez, and McDermott (2000) exalt the academic benefits of learning through play, stating that, "learning is facilitated when children are able to meet expectations for appropriate classroom behavior such as following directions, cooperating with peers and adults, and containing frustration in the face of difficult tasks or unsatisfied desires" (p. 459). Without the social, emotional, and regulatory skills that can be developed through play, it is difficult for children to progress academically; upon school entry, children are required to comply with rules, maintain and regulate their own behavior, and establish positive relationships with peers and teachers. Prior research has shown that children from lower-income homes have fewer opportunities to fully develop many of the social-emotional skills needed upon school entry; consequently, their ability to engage appropriately in the learning environment may be more challenging and lead to academic lethargy (Bierman, et al., 2008; Isaacs, 2012; Reardon & Portilla, 2015).

Associated with five of the schools in this study, including JEH, the Creative Curriculum was the only comprehensive, research-based curriculum reported in interviews. The curriculum uses both small and large group activities to promote child-centered learning through project based investigations (Bierman, et al., 2008). Yet according to the What Works Clearinghouse (2013), "the Creative Curriculum for Preschool, Fourth Edition, was found to have no discernible effects on oral language, print knowledge, phonological processing, or math for preschool children" (p. 1). This finding is in line with the variance in ISEL scores from the district's dataset, which appears to have no observable pattern associated with kindergarten readiness and curricular focus.

It must be noted that there were varying levels of fidelity in regards of the use of the Creative Curriculum among our sample schools. For example, one school stated the following, "We use the Creative Curriculum by Teaching Strategies. We are a play based preschool, and our teachers use observations of the children and the early learning standards to help plan their daily curriculum." Another school stated that they used "Creative Curriculum for lesson planning, supplemented with CATCH and Big Ideas for Math," while a third school declared that the curriculum was "loosely" followed. Of the five schools indicating use of the Creative Curriculum, JEH and School E were the only sites that appeared to use it with fidelity.

DISTRICT DEFINITION OF READINESS

Given the variety of schools and approaches to education, the overwhelming sentiment from administrators, teachers, and parents indicating that their children were kindergarten ready reinforces an incongruent idea of readiness from the district and the private schools surveyed. The importance of kindergarten readiness is not in dispute, as there is a general agreement regarding its relationship to a child's later academic success. Although a greater focus has been placed on the relevance of the preschool experience and the need for extending opportunities especially for those students who are disadvantaged, there is a lack of consistency in how readiness is defined. The insufficient definition of what it means to be kindergarten ready allows for varying conceptions of what the preschool experience should be and ultimately what children should be learning (Ackerman and Barnett, 2005).

Current definitions of readiness seek to compare a child's skills, behaviors, and knowledge acquired to a standard established by a school or district. These standards often neglect some of the developmental and behavioral skills that are a foundational piece of academic success. Isaacs (2012) explains that readiness should be measured by looking at not only math and reading skills, but also physical health and "behavioral measures drawn from kindergarten teacher reports (learning-related behaviors, such as paying attention, and externalizing or problem behaviors, such as disrupting others)" (p. 4). Reardon and Portilla (2015) write:

... Although academic readiness at kindergarten entry is critical in predicting school performance in later grades and has long played a dominant role in research on educational and social inequality, other dimensions of readiness, such as social, motor, emotional, and behavioral skills, also affect academic achievement and educational success. (p. 5)

Remarkably, the lack of a consistent definition of readiness has not diminished the number of assessments available for kindergarten readiness. According to Prakash, West, and Denton (2003), who reviewed data from the Early Childhood Longitudinal Study – Kindergarten Class of 1998-1999, "61 percent of schools administer entrance or placement tests prior to kindergarten" (p. 2). Given the widespread use, it is important to ensure that these assessments are valid and reliable when seeking to make policy and/or placement decisions.

Research indicates that the use of assessments such as the ISEL may not be entirely appropriate as a measure of readiness due to their lack of predictive validity (Shepard & Smith, 1988). From a meta-analysis of relevant research conducted by Ackerman and Barnett (2005):

...49 of 70 longitudinal studies concluded that preschool school readiness screenings predicted only about 24 percent of the variability in children's kindergarten and/or Grade 1 academic and cognitive competency, and 7 percent of the variability in their social/ behavioral competency. (p. 6)

Other studies that were noted to have correlations between kindergarten readiness assessment scores and future academic outcomes were limited, due to small sample sizes and homogeneous populations.

Consequently, the extant literature suggests that interpretations of kindergarten readiness data from District 65 must be done with caution. While the original capstone purpose was to better understand the gaps in readiness across student subgroups, it is possible that the observed gaps might not be based on valid measurements. This serves as a limitation to any assertions made from the readiness data received from the district.

PROBLEMS COMPARING JEH TO OTHER SCHOOLS

The consensus that preschool experience improves social and academic outcomes for children has heightened the focus on establishing policies to expand the opportunities for participation, especially for children from low-income families. The result has yielded greater pre-k enrollments and a plethora of publicly and privately funded early childhood programs. Structurally, this growth has produced a set of piecemealed policies and disjointed organizational structures at every level --federal, state, and local-- that has caused a great deal of variation in program type (Bassok, et al., 2016; Gomez, 2016).

Kirp (2007) suggests that federally funded programs surreptitiously become narrowly structured in their operations and procedures, as they adhere to pressures of accountability. Subsequently, matters such as curricular focus, behavioral approaches, and check-in procedures become highly prescribed. Separate from the majority of the private schools from our sample, JEH as a provider of Early Head Start, Head Start and Preschool for All has numerous, and often conflicting, accountability standards that must be strictly followed for each program. As a result of the mandates placed on its preschool programs, there is an inherent level of formality distinctly different from the private schools observed.

One immediate takeaway both from the data collected and the site observations was the disparity in size between JEH and the private programs. Making up a third of the students in the sample, the sheer size of JEH creates a need for more systematic procedures. While most of the private schools studied serve no more than 100 students in total, JEH serves approximately 400 students daily, creating a need for stricter procedures for management and safety reasons. Barnett, Frede, Mobasher, and Mohr (1988) suggest that it may be difficult for large scale state programs to produce similar effects to those in smaller programs. Given the variety of programs offered, the diverse student population served, and the size of the student body, it may be unreasonable and unfair to make certain correlations with some of the smaller private schools. Though some comparisons in functions may not be appropriate, the level of formality that results from serving a larger, more diverse population like the one at JEH may be a worthy tradeoff for the expansion of access for those children most in need.

CONCLUSION

This capstone project began with a common question in an uncommon setting -- in a wealthy, high-performing district with an explicit focus on student equity, why were minority students performing significantly lower than their white peers, even before they entered school? Understanding that it was critical to examine where students were enrolled before they entered kindergarten, this project sought to take a comparative look at preschool and prekindergarten options in the Evanston and Skokie communities. The role of the family in school readiness was also central to this study, as the research team interviewed over 20 families and inquired from school staff about the levels and types of family engagement and support efforts occurring within the sample schools.

Over 60 interviews were conducted at 10 of the preschools that were most highly represented in the current District 65 kindergarten class. This qualitative data, supplemented by provider survey results and a student-level administrative dataset from District 65, helped shed light on the differences between providers and families that were most pertinent to the readiness gap. It became clear that there was a distinct divide between where diverse families -- racially, ethnically, socioeconomically, and linguistically -- and where wealthier white families sent their children to preschool, and schools fitting the latter qualification boasted the highest readiness scores. Yet upon closer examination, the team found that common categories such as race or class were in fact masking the more direct causes of the readiness gap.

Students receiving special education services or those deemed as English Language Learners were found to be significantly less likely than their peers to be kindergarten ready, consistently performing lower on the ISEL tests than their peers in general education or who were not ELL. When these factors were controlled for in analyses, their peers -- of all racial groups -- performed comparably with the norm. Further analysis revealed that children with particular learning needs were highly overrepresented within their own racial groups -- with more black children having IEPs than any other racial group except Hispanic students, who were also more likely to be deemed ELL -- as well as within their school communities. JEH serves the vast majority of students from low-income, minority, and linguistically diverse families, as well as those with special needs. The district will need to examine this disproportionality of certain groups at such a young age in order to fully understand the academic gaps it is highlighting in kindergarten and beyond.

This study also found that other local preschool providers have little to no formal knowledge of the district's kindergarten readiness standards or what is expected of their children once they matriculate. This lack of understanding from the community at large, compounded by the different approaches to early childhood education found across the providers studied, led to an overestimation by educators and families of the level of readiness of their students. A further complication is the fact that District 65's universal evaluation of kindergarten readiness is measured only through a literacy assessment that research shows may not be the most valid or reliable metric. The district should revisit its tools for measuring readiness, as well as how it communicates this concept, to ensure that

all future District 65 students are on the path to social and academic success before they arrive.

RECOMMENDATIONS

The original focus of this project was to determine how the district could improve its pre-kindergarten programs to increase outcomes for all students. After analyzing the data collected and reviewing the extant literature on pre-kindergarten programs, some notable details emerged regarding the district-run JEH program. JEH and the district have a harmonious relationship that extends from the central office personnel to the teachers in each program. There appeared to be a genuine feeling that staff truly believed in their work and had a desire to support all children in the program. Still, there are structural barriers and mandates that limit the ability to make wholesale changes, especially in the Head Start and Preschool for All programs. Moreover, JEH is incredibly different from any of the other providers servicing the Evanston/Skokie community; this difference makes comparisons tenuous at best. Within this context, the research team expanded its focus, to provide recommendations that the district can reasonably utilize.

1. Clarify the district's comprehensive definition of kindergarten readiness and work to disseminate this definition to providers and parents.

The ISEL test was the primary tool utilized by the district to denote kindergarten readiness of its students. With the assessment's reliance on literacy, other critical skillsets are not considered, such as numeracy, self-regulation, and interpersonal skills. The exclusive focus on literacy overshadows the development of social-emotional skills, which research has indicated as necessary for later academic achievement, leading some schools to narrow instruction to only those areas being assessed. Existing research shows that the current assessment tools used by District 65 to determine kindergarten readiness are not sufficient to adequately determine which children are ready for school.

Though the district has codified its standards of kindergarten readiness, it was clear from the interviews with private preschool administrators and staff that this definition was not clearly communicated to other providers servicing future district students. The district must better communicate to both providers and parents how it determines if students are kindergarten ready, the importance of readiness in relation to future student outcomes, and how they can work to support students in their preschool years. The existing directors' workgroup would be an ideal forum for this type of conversation, but preschool and kindergarten teachers should also play an integral role. The collaborative should also research other assessments that can better measure all of the concepts and skills in the readiness definition.

To optimize the transition from pre-kindergarten to kindergarten, the district must develop systems to effectively relay these new measures to its educators in the preschools and the district, future district parents, and other stakeholders throughout the community. Evanston is rich with community partners, such as Northwestern University,

Evanston Cradle to Career, and the public library system; these influential institutions could help share the message with families of all backgrounds about how to prepare their children for school and what resources exist to support them in doing so.

2. Identify strategies to address ELL curricular needs and provide support for providers and non-English speaking families in helping their children develop readiness skills.

Quantitative data revealed a need to address issues related to the achievement levels among the ELL students currently in kindergarten. Of the 19% of students identified as ELL, almost half were designated as not kindergarten ready. Additionally, the relationship between ELL status and readiness was statistically significant, with ELL students scoring markedly lower in each area of the ISEL test used to signify kindergarten readiness. The gaps in readiness identified by the research team and the district among ELL students are in part a function of language development and family support. Until ELL students are able to become proficient in their second language, they are at a consistent disadvantage in comparison to their peers. Parents with limited English fluency may not be able to help their children develop certain readiness skills if they are unable to utilize the resources and materials provided by the school.

To combat these barriers, the district must identify strategies or programs that can serve the needs of the ELL preschool population. These strategies should be chosen with the input of those providers with robust ELL populations, and they should integrate both home language and English language development. Given the great influence that families play in the early development of children, it is incumbent on the district to assist non-English speaking families in helping their children develop readiness skills. The district should establish a program for these families to help them access information and resources that will support their children in acquiring the readiness skills needed for kindergarten.

Though JEH was the only program to have teachers with ESOL certification and a bilingual Spanish program, its students continue to struggle in demonstrating proficiency on the ISEL assessment. Once an approach is selected, an appropriate and consistent level of professional development must accompany the program to ensure there is fidelity of implementation and greater support for bilingual student success.

3. Conduct a comprehensive research report on the special populations in the preschools and childcare providers that service the district.

The district has an active and functional research department that produces regular reports to enhance the district's programs, schools, and student performance. Three of these reports -- the *Community Assessment, 2016, Report on Black Student Achievement* (2016), and the *Report on Hispanic Student Achievement* (2017) -- were critical to this study in providing context for the self-identified needs and focus areas of the district. Though there is an emphasis on addressing achievement gaps and a push to achieve equity for all students, the findings of this study indicate that the special education population, particularly in early childhood, is one that merits focused attention around these goals.

Data collected revealed several trends among the special needs population that

require further study. First, a disproportionate amount of young minority students are receiving special education services. Provided that these identifications are being made at an early age, it is important to ensure that these students are not over-identified based on differential treatments or unintentional bias. Second, for students with an IEP, there is a statistically significant negative relationship between ISEL scores and identifications of readiness. Given this finding, the district must ensure that these students receive the accommodations and modifications needed to meet the kindergarten readiness standards, allowing them to perform among their non-disabled peers in the inclusion setting once they enter kindergarten.

Third, approximately 25% of students with IEPs entering kindergarten attended JEH, comprising 86% of students with special needs from the 10 schools studied. Given the high percentage of special needs students served in the programs at JEH, it is essential to address the disparities observed in the kindergarten readiness scores and the possible over-representation of minority students. Taking into account these factors, it is recommended that the district conduct a comprehensive study on the preschool special needs population with emphasis on minority representation, kindergarten readiness, and services provided through JEH.

4. Conduct intensive community outreach with District 65 parents and local partners to better understand the home-based childcare community in Evanston/Skokie.

One limitation of this study both through observations of the private programs in the sample and in the data received from the district was the amplified absence of children of color. As stated in the *Report on Black Student Achievement* (2016), "Two times more Black students had a daycare center or home daycare as the site of their pre-k experience" (p. 6). Similarly, fewer Hispanic students have had a formalized preschool experience. Given the fact that 95% of the district's students have some pre-kindergarten experience, the district must identify the home-based daycare centers that serve students in the district, particularly minorities, to assess their quality and share district communications.

As the district asks families to identify their child's previous educational setting, there is some data on the formal home-based providers. The district should prioritize outreach to these small-scale providers, incorporate them into conversations about readiness, and work to reach out to the families that utilize them. For those families who did not identify a specific provider, the district may need to follow up to learn more about the type of care received. It is recommended that the district first reach out to these families of current kindergarten students, to potentially identify providers who are currently serving incoming District 65 students. This way, outreach for the purposes of information-sharing, shared supports, and relationship-building can be conducted in advance of their current students entering school.

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APPENDIX A

Interview Protocols and Focus Group Script

Interview Protocol

Introduction:	
Good (time of day), I am	, a doctoral student at Vanderbilt University's Peabody
College of Education and Human	Development. Today we are doing interviews about
prekindergarten students and the	eir experiences in the Evanston/Skokie school district. Your
participation in this interview is	voluntary and you do not have to answer any questions that make
you uncomfortable or you do not	want to answer for any reason. We will do everything in our
power to ensure your answers an	re anonymous. The procedures we will use to ensure your privacy
include, but are not limited to, us	sing randomly generated numbers to identify you, storing all data
on a secure, approved server, and	d destroying the data after the project is published. Are there any
questions before we begin?	

Interview Protocol for Teachers

Background

- How long have you taught at this school?
- How did you decide to teach at this location?
- What is your position at this school? Are you teaching full-time or part-time?
- What do you enjoy about teaching Pre-k? What are some challenges of teaching Pre-K?
- Do you find yourself doing work that does not appear in your job description?
- Do any of your students have documented special needs that may require accommodations or modifications?
- Are any of your students non-native English speakers?
- What is your highest level of education?
 - o If they do not have a degree: Does your school/district offer a way for you to obtain higher levels of education?
- Have you taken any professional development courses within the past year? Is professional development a requirement of your job at this school?

School Specifics

- What is the daily routine at the school?
- About how many hours in a typical week do you spend teaching academics? Social skills?
- During your most recent week of teaching, how many students did you teach?what is the total number of students in the class you taught?
- What do you think are some strengths of this school?
- What are some areas of growth for this school?

Social/Cultural Capital

- Describe the ways in which parents become part of their child's experience at this school?
- How do parents advocate for their children?

- How do parents communicate their expectations for learning?
- In what ways does the school educate parents about educational support at home, etc.
- What about this school do that you think is attractive or a selling point for parents when deciding where to send their kids?
- Are students academically prepared to learn once arriving to school? What information are you expecting them to know?
- How well are children prepared socially to interact with others? (When they enter? When they leave?)
- How does your school approach behavior issues? How frequently do these come up?
- Is student tardiness and/or absenteeism a problem?
- How would you describe the health of the students you teach?
- Do students wear uniforms at your school? How would you describe your students' appearance (dress, grooming, etc.)
- As teachers what do you do to teach your students about different cultures? Does the school have any programs that revolve around cultural inclusiveness? Are families involved in these efforts?

Social Reproduction

- How does your classroom prepare your students for future learning? How do you talk to your students about Kindergarten, what they can expect, and what they need to know?
- How familiar are you with the Kindergarten curriculum for the district so that you can better prepare your students?
- What are the school's expectations for student behavior?
- What type of events/local sites does the school take students to? Do you have any community partnerships?
- What forms of enrichment activities are provided to students (i.e. art, music, horticulture)?

Interview Protocol for School Admins/Directors

Background

- How long have you worked at this school?
- How did you decide to work at this location?
- What are the primary duties of your position? Are there any other duties beyond your primary position? Can you describe those extra duties?
- Walk me through a day at your school. What are the routines and activities?

Social/Cultural Capital

- Does your school have a particular focus or affiliation? (religion, subject area, etc.)?
- Do students wear uniforms at your school?

Family Engagement/Background

- How do parents advocate for their children?
- How do parents communicate their expectations for learning?
- In what ways does the school educate parents about educational support at home, etc.
- What about this school do that you think is attractive or a selling point for parents when deciding where to send their kids?
- What needs have families expressed to you or your staff? Do you offer any programs to help alleviate those needs or empower parents?
- Do you provide suggestions about how parents can help their children at home? Are there parent programs at the school designed to give educational information to the families

served?

School Readiness

- When students enroll at your school, about what percentage of them do you think are academically ready for Pre-K? What information are you expecting them to know? About what percentage are ready for Kindergarten when they leave?
- How well are children prepared socially to interact with others? (When they enter? When they leave?)
- How does your school approach behavior issues? How frequently do these come up?
- How would you describe student attendance at your school? Do most students attend regularly and on time?
- How would you describe the health of the students at this school?

Social Reproduction

- What curriculum is used at the school? Who makes that decision?
- How does your school prepare your students for future learning?
- How would you describe the rules and structure of the school regarding students? teachers?
- What type of events does the school take students to? Do you have any community partnerships?
- What forms of enrichment activities are provided to students (i.e. art, music, horticulture)?

School Specifics

- Do you require your teachers to have specific teaching credentials? If so, what are the requirements?
- Do teachers receive feedback on their instruction? How frequently?
- Does your school offer any professional development courses for teachers and staff?
- What do you think are some strengths of this school?
- What are some areas of growth for this school?
- Where do most of your students attend Kindergarten? Do you have a relationship with District 65?

Focus Group Script

Introduction:

Good (time of day), We are conducting this focus group to learn more about prekindergarten students and their experiences in the Evanston/Skokie school district. Your participation in this focus group is voluntary and you do not have to answer any questions that make you uncomfortable or you do not want to answer for any reason. We will do everything in our power to ensure your answers are anonymous. The procedures we will use to ensure your privacy include, but are not limited to, using randomly generated numbers to identify you, storing all data on a secure, approved server, and destroying the data after the project is published. Are there any questions before we begin?

Family Background (Demographics, Social/Cultural Capital)

- Let's start by going around and giving your name and your relationship to the child that attends this pre-kindergarten program.
 - Do you have any other children that have gone through a pre-kindergarten program here? (If not, what are some differences between that/those program/s and this one?)
 - Do your family members and neighbors have children who attend a pre-k program

here? What kind?

We are interested in learning about your experiences with your child's pre-kindergarten program, so take a moment and think about the interactions you have had with the schools, teachers, administrators, etc.

- How would you describe those experiences?
- When you thought about your overall experiences at your child's school, what programs and actions were particularly positive?
 - Which one were negative?
- What were some of the reasons you chose to enroll your child in pre-kindergarten at all?
- What factors did you consider when you were choosing your child's pre-kindergarten? *Possible followups include asking about people who chose based on reviews, word of mouth, convenience, etc.*
- Are you satisfied with your child's pre-kindergarten program?
 - Is there anything you wish your school provided? Is there anything you wish your school could help you with?
- Raise your hand if you are actively involved at your child's school (attending events, volunteering, etc.)? Tell me about your involvement.
- What are some ways the school could better engage families?
- In what ways will pre-kindergarten affect your child's long term education?
- So far, what would you say has been the biggest impact of pre-kindergarten on your child?
 - What are your expectations of the pre-kindergarten program your child is enrolled in?
 - We need to listen for trends so that we can follow up.

As part of our work with the district we are attempting to understand the entire academic picture of local pre-kindergarten programs. To that end we would like to ask about how your child's school and home life interact.

- Does your child's pre-kindergarten program do anything to help you enrich your child at home?
- Does your child's teacher have any at home activities that they require? Homework?
- What things do you do at home that you consider learning activities for your child?
- Are there programs either within the school or within the city that are available to further your child's education, and if so which ones do you use? (We could probe by mentioning museums, libraries, art galleries, etc.)
 - Is there anything that stands in the way of you accessing these programs?
- What kinds of routines do you have in your home around getting ready for school or learning? (Ie. Homework time, bath time, then bedtime)
- Raise your hand if your child uses the internet outside of school?
 - Tell me a little about their internet usage?

We are coming to the close of this session, I want to ask you to think back to your own educational experiences.

- Describe your personal educational experiences. How far did you go in school? Have your own experiences with school impacted how you engage with your child's education?
- What are your expectations for your child's education? How far do you expect them to go in

school?

• Finally, if there is one thing that you could change to make your child's school better what would it be?

Thank you for your time and participation.

APPENDIX B

Sample Descriptive Data

School Name	Total Enroll ment	Type of Aid	Serve Students with Special Needs?	Type of Special Needs	Serve ESOL Students ?	Languages Spoken at Home	Number of Students Whose Income is Equal to or Below 100% of the Federal Poverty Guideline (FPG)	Percent of Students Whose Income is Equal to or Below 100% of the Federal Poverty Guideline (FPG)
School A	76	Scholarships	Yes	Speech/Language, Emotional Disability	Yes	Spanish, Mandarin, Arabic	0	0%
School B	199	Scholarships	Yes	Speech/Language, Vision, Developmental Delay, Autism, Other Physical Impairment, ADHD, Down Syndrome, Neurological Disorder	Yes	Spanish, French, ASL, Mandarin, Bulgarian	14	7%
School C	108	Child Care Assistance Program	Yes	Speech/Language, Vision, Developmental Delay	Yes	Spanish, Polish	13	12%
School D	71	Scholarship through Fundraising	Yes	Speech/Language	No	m	m	m
Joseph E. Hill Center (JEH)	300+	Federal Head Start grants, State Preschool for All funds	Yes	Speech/Language, Hearing, Vision, SLD, Autism, Developmental Delay, Emotional Disability, Other Physical Impairment, Other Health Impairment	Yes	Spanish, French, ASL, Haitian Creole, Mandarin, Urdu, Arabic	>50	m
School E	m	Scholarship	Yes	Developmental Delay, Emotional Disability, Other Physical Impairment	Yes	Spanish, French, Mandarin, Urdu	m	m
School F	91	Scholarship Fund (at most 25%)	No	N/A	Yes	Russian, Estonian	0	0%
School G	152	Partial Tuition Assistance	Yes	Speech/Language, Vision, SLD, Autism, Developmental Delay, Emotional Disability	Yes	Spanish, French, Mandarin, Urdu, Arabic, Polish, Japanese, German, Portuguese, Italian, Assamese	0	0%
School H	71	Financial Assistance - case by case basis	No	N/A	Yes	Spanish, Mandarin, Arabic, Russian	5	7%
School I	67	Scholarship	Yes	Speech/Language, Developmental Delay	Yes	Spanish, Mandarin, Arabic, Japanese, Russian, Ukrainian	3	4%

Source: District 65 Provider Survey; Note: m represents data missing

APPENDIX C

ISEL Number of Items and 50th Percentile

Table 1. ISEL Test Items and Fiftieth Percentile

	Number of Items	50th Percentile Score (Percent)
Alphabet Recognition	54	65
Story Listening	21	66
Phonemic Awareness	10	60
One-to-one Matching	9	44
Letter Sounds	26	35

APPENDIX D

Language Spoken at Home Statistical Tests

Table 1. T-tests comparing ISEL sub-test scores for ELL and Non-ELL students.

	Students									
		ELL			Non-ELI					
Sub-Test	M	SD	n	M	SD	n	t	df		
Alphabet Recognition ^a	59.83	34.46	86	79.85	24.02	656.00	6.86***	740		
Story Listening ^b	35.96	18.88	127	72.14	18.52	646.00	14.64***	771		
Phonemic Awareness ^c	51.40	24.20	138	75.00	25.60	654.00	9.93***	790		
One-to-one Matching ^d	35.67	29.00	141	55.56	32.56	651.00	6.7***	790		
Letter Sounds ^e	34.27	27.31	135	51.12	27.92	641.00	6.39***	774		

Missing: a. 85 b. 54 c. 35 d. 35 e. 51

^{*}p<.05 **p<.01 ***p<.001

APPENDIX E

Race/Ethnicity Statistical Tests

 $Table\ 1.\ ANOVAs\ Testing\ the\ Differences\ Between\ Race\ on\ the\ ISEL\ Sub-tests$

Sub-test	Source	df	SS	MS	F
Alphabet Recognition ^a	Between	5	33858.21	6771.64	10.48***
	Within	736	475706.45	188.47	
Story Listening ^b	Between	5	57485.56	11497.11	28.11***
	Within	767	313750.35	409.06	
Phonemic Awareness ^c	Between	5	87522.73	17504.55	28.35***
	Within	786	485258.58	617.37	
One-to-one Matching ^d	Between	5	62905.35	12581.07	12.5***
	Within	786	791257.10	1006.69	
Letter Sounds ^e	Between	5	54310.24	10862.05	14.53***
	Within	770	575623.71	747.56	

Missing: a. 85 b. 54 c. 35 d. 35 e. 51

^{*}p<.05 **p<.01 ***p<.001

Table 2. Means, Standard Deviation, and Tukey HSD results for Each ISEL Test by Race

Subtest		American Indian (1)	Asian (2)	Black (3)	Hispanic (4)	Multiracial (5)	White (6)
Alphabet	Mean	98.15	83.15	73.98	61.85	79.07	81.81
Recognition	SD	2.61	24.06	28.87	31.96	24.50	22.20
	n	2	52	147	93	99	349
	Tukey	ns	4	4,6	2,3,5,6	4	3,4
Story	Mean	85.71	59.05	58.14	56.57	73.81	75.19
Story Listening	SD	6.67	28.24	21.81	22.95	18.29	17.38
	n	2	50	141	137	98	345
	Tukey	ns	5,6	5,6	5,6	2,3,4	2,3,4
DI .	Mean	75	67.4	60	56.1	76.5	80.6
Phonemic Awareness	SD	7.1	30.9	28.2	25.2	24.2	22.6
	n	2	50	141	137	98	345
	Tukey	ns	6	5,6	5,6	3,4	2,3,4
One-to-One	Mean	61.11	60.89	41.56	40.11	53.33	59.89
Matching	SD	23.56	33.33	32.67	30.44	34.00	31.00
	n	2	50	144	150	99	377
	Tukey	ns	3,4	2,5,6	2,5,6	3,4	3,4
	Mean	73.08	52.31	40.65	35.27	50.85	55.62
Letter Sounds	SD	10.88	31.00	28.42	28.15	28.35	25.69
	n	2	45	146	148	98	3.37
	Tukey	ns	4	5,6	2,5,6	3,4	3,4

Note: The numbers in parentheses are used to show significant differences on Post-Hoc test. All differences are significant at the p<.05 level.

APPENDIX F

Hispanic ELL and Hispanic Non-ELL Statistical Tests

Table 1. T-tests comparing ISEL sub-test scores for Hispanic ELL Students and Hispanic Non-ELL students.

	Hispanic Students									
	No	on-ELL			ELL					
-	М	SD	n	M	SD	n	t	df		
Alphabet Recognition ^a	71.57	27.45	63	41.42	31.52	30	4.72***	91		
Story										
Listening ^b	67.04	20.46	63	47.62	21.22	74	5.43***	135		
Phonemic										
Awareness ^c	66.35	26.72	63	48.62	21.25	87	4.52***	148		
One-to-one										
Matchingd	48.32	32.37	63	34.23	27.70	87	2.86**	148		
Letter Sounds ^e	40.82	28.68	62	31.26	27.21	86	2.06*	146		

Missing: a. 61 b. 17 c. 4 d. 4 e. 6

^{*}p<.05 **p<.01 ***p<.001

Table 2. T-tests comparing ISEL sub-test scores for Hispanic ELL Students and Hispanic Non-ELL students.

	Hispanic					Others			
	M	SD	n	_	M	SD	n	t	df
Alphabet Recognition ^a	71.57	27.45	63		80.77	31.52	593	2.89**	654
Story Listening ^b	67.04	20.46	63		72.68	21.22	583	2.29*	644
Phonemic Awareness ^c	66.35	26.72	63		75.92	21.25	591	2.83**	652
One-to-one Matching ^d	48.32	32.37	63		56.39	27.70	588	1.87	649
Letter Soundse	40.82	28.68	62		52.20	27.21	578	3.07**	639

Missing: a. 61 b. 17 c. 4 d. 4 e. 6

^{*}p<.05 **p<.01 ***p<.001

APPENDIX G

Black IEP and Black Non-IEP Statistical Tests

Table 1. T-tests comparing ISEL sub-test scores for Black students with and without IEPs.

			Black St	udents				
		No IEP			IEP			
	M	SD	n	M	SD	n	t	df
Alphabet Recognition ^a	76.63	26.01	128	56.24	9.20	19	2.95**	145
Story Listening ^b	60.79	19.33	124	38.66	28.82	17	4.15***	139
Phonemic Awareness ^c	60.70	28.29	128	54.71	27.41	17	0.82	143
One-to-one Matching ^d	44.53	32.37	127	19.00	6.01	17	3.12**	142
Letter Sounds ^e	43.18	27.96	128	22.65	25.54	18	2.95**	144

Missing: a. 10 b. 16 c. 12 d. 13 e. 11

^{*}p<.05 **p<.01 ***p<.001

Table 2. T-tests comparing ISEL sub-test scores for Black students without IEPs and all other students.

Students Black-No IEP Other Students M SD n M SD n t df									
	Bla	Black-No IEP				ner Studen			
	M	SD	n		M	SD	n	– t	df
Alphabet Recognition ^a	76.63	26.01	128		79.09	26.01	555	1.01	681
Story Listening ^b	60.79	19.33	124		71.45	20.07	579	5.40***	701
Phonemic Awareness ^c	60.70	28.29	128		74.81	25.64	592	5.54***	718
One-to-one Matching ^d	44.53	32.37	127		56.32	53.78	593	3.77***	718
Letter Sounds ^e	43.18	27.96	128		51.47	27.58	575	3.07**	701

Missing: a. 62 b. 42 c. 25 d. 25 e. 42

^{*}p<.05 **p<.01 ***p<.001

Table 3. ANOVAs Testing the Differences Between Black, Multiracial, and White students on the ISEL Subtests

Test	Source	df	SS	MS	F
Alphabet Recognition ^a	Between	2	2677.99	1338.99	.09
	Within	573	316339.28	552.08	
Story Listening ^b	Between	2	19420	9710	30.03***
	Within	564	182373.74	323.36	
Phonemic Awareness ^c	Between	2	37648.68	18829.34	32.40***
	Within	570	331303.97	581.24	
One-to-one Matching ^d	Between	2	22490.91	11245.45	11.08***
	Within	570	578475.20	1014.87	
Letter Sounds ^e	Between	2	14489.59	7244.79	10.17***
	Within	560	399071.01	712.63	

Missing: a. 38 b. 47 c. 41 d. 41 e. 51

^{*}p<.05 **p<.01 ***p<.001

Table 4. Means, Standard Deviation, and Tukey HSD results for Each ISEL Test by Race

Cultivat		Dlack (1)	Multi-Racial	White (2)
Subtest		Black (1)	(2)	White (3)
Alphabet Recognition	Mean	76.62	79.07	81.82
	SD	26.01	24.50	22.20
	n	128	99	349
	Tukey	ns	ns	ns
Story Listening	Mean	60.79	74.00	75.17
	SD	19.32	18.27	17.39
	n	124	98	345
	Tukey	2,3	1	1
Phonemic Awareness	Mean	60.70	76.46	80.75
	SD	28.29	23.22	22.64
	n	128	99	346
	Tukey	2,3	1	1
One-to-One Matching	Mean	44.53	53.31	59.91
	SD	32.48	34.01	30.99
	n	127	99	347
	Tukey	2,3	1	1
Letter Sounds	Mean	43.18	50.86	55.62
	SD	27.96	28.34	25.70
	n	128	98	337
	Tukey	3	ns	1

Note: The numbers in parentheses are used to show significant differences on Post-Hoc test All differences are significant at the p<.05 level.

APPENDIX H

Difference in Means and Number of Test Items

Table 1. Difference in Means and Number of Questions Between Hispanic ELL Students, Hispanic Students Non-ELL, and All Others

	Hispanic El	LL and All Others	Hispanic Non-ELL and All Others		
Subtest	Means	Questions	Means	Questions	
Alphabet Recognition	29	16	8	4	
Story Listening	22	5	3	1	
Phonemic Awareness	25	3	8	1	
One-to-one Matching	21	2	6	1	
Letter Sounds	20	5	11	3	

Table 2. Difference in Means and Number of Questions Between Black IEP, Black Non-IEP Students, and All Others

	Black Students with IEP and All Others		Black Students Non-IEP and All Others		
Subtest	Means	Questions	Means	Questions	
Alphabet Recognition	23	12	2	1	
Story Listening	33	7	10	2	
Phonemic Awareness	20	2	14	1	
One-to-one Matching	37	3	11	1	
Letter Sounds	28	7	8	2	

APPENDIX I

Difference in Means and Number of Test Items

Table 1. T-tests comparing ISEL sub-test scores for students with and without an IEP

Students								
	IEP				No IEP			
Sub-Test	Μ	SD	n	Μ	SD	n	t	df
Alphabet Recognition ^a	64.91	34.45	59	78.62	25.13	683	3.89***	740
Story Listening ^b Phonemic	47.46	27.07	70	69.57	20.34	703	8.28***	771
Awareness ^c One-to-one	56.67	25.34	72	72.31	26.66	720	4.77***	790
Matchingd	30.24	30.31	72	54.24	32.33	720	6.04***	790
Letter Sounds ^e	30.92	29.57	73	49.96	27.81	703	5.53***	774

Missing: a. 85 b. 54 c. 35 d. 35 e. 51

^{*}p<.05 **p<.01 ***p<.001