LOWELL EARLY CHILDHOOD NEEDS ASSESSMENT

Surveying the Landscape of Families' Needs – Birth to Age 8

ABSTRACT

Lowell's Early Childhood Council has a long history of collaboration and seeks to meet the needs of families in the community. This Needs Assessment seeks to identify our community's strengths and areas of opportunity in order to place families and their young children on a pathway to success.

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Community Context:

Lowell Public Schools' Early Childhood Department, as part of the Coordinated Family and Community Engagement (CFCE) Grant and in collaboration with Lowell's Early Childhood Council, began conducting a Needs Assessment in the spring of 2020 to learn more about the Early Childhood landscape in Lowell. Data obtained from the Needs Assessment and summarized below will be used to engage the community in dialogue, provide data for early childhood grants, and inform planning and programing where young children and families are served in Lowell.

In the fall of 2019, Lowell Public Schools' new Superintendent, Dr. Joel Boyd, shared the District's 5-year strategic plan, which was then adopted by the school committee in May of 2020. The 5-year plan outlined the District's Strategy and Priorities.

Core Belief:	**Fundamental Commitments:**
• A high quality education is a fundamental civil right of every child. • Teaching and Learning is the core of our work. • Parents are partners. • Sustainable school improvement requires hard and steady work over time. • Every adult in the system is accountable for the success of all students; the entire community is responsible for their success.	• Eliminate the racial, ethnic and linguistic achievement and opportunities gaps among all students. • Provide equitable funding and resources among the District's diverse schools. • Engage all families with courtesy, dignity, respect, and cultural understanding.
Strategy:	**Strategic Priority:**
• Employ differentiated levels of autonomy. • Implement systemic and instructional alignment. • Empower students and families through choice. • Ensure reciprocal accountability by all stakeholders.	• Increase access to early learning opportunities. • Increase access to high-performing seats. • Align secondary programing with post-secondary opportunities. • Leverage the rich diversity of the Lowell community to serve the interests of LPS students.

Lowell's Early Childhood Council

Lowell's Early Childhood Council (LECC) consists of over 100 members from a wide range of community organizations serving young children and their families. Lowell's Early Childhood Council promotes partnerships across agencies and organizations so that all of Lowell's families and children thrive. The Council meets monthly to share information, learn from one another, and coordinate services for families. The group provides feedback to Lowell Public Schools' Early Childhood Department on grants such as *Coordinated Family and Community Engagement* and *Commonwealth Preschool Partnership Initiative*. Lowell General Hospital provides meeting space for monthly meeting of Lowell's Early Childhood Council and, since March 2020, the group has met virtually.

Prior to the pandemic, the Council was close to developing a feasibility study to increase the number of high quality Pre-K seats in the city through collaboration with our community partners. The Council developed the surveys described below to inform the study. To develop these surveys for data collection in 2020, the Council reviewed the surveys used in 2016 to inform the Preschool Expansion Grant (PEG) and in 2017 to collect data for the Lowell's Coordinated Family and Community Engagement (CFCE) Needs Assessment published in spring of 2018.

Overview:

With feedback from the Council, the Lowell Public Schools' Early Childhood Department developed two surveys:

- The first survey, which we refer to as the Family Survey, collected data on families' needs, interests, and participation in early learning to inform strategic planning within the community for families with young children (birth to eight years old). The Family Survey was available in English, Spanish, and Portuguese and was distributed online via Lowell Public Schools' website from May 22 through September 30, 2020 during the preschool and kindergarten registration period. Note that families were not required to answer every question in the survey and, therefore, the number of responses to each question vary. **Appendix A Family Survey.**
- The second survey, which we refer to as the Program Survey, was intended to collect data on early education programs, family childcare providers, and other programs and services available to families in Lowell. Data obtained from the Program Survey will update the *Resource Manual for Lowell.* Additionally, the Early Childhood Department will use information from this survey to share referral information with families and to determine the feasibility of additional access for early learning programs that meet the needs of the community through a mixed delivery system chosen by families.

Additional data was gathered by Lowell Public Schools Early Childhood Department using a student data platform, Aspen, preschool and kindergarten registration data, CFCE monthly data reports, referral logs, parent satisfaction surveys, and attendance. Using multiple data sources provides a window into the range of services and programs Lowell families with young children (birth to eight years old) participate in or wish to access.

In 2019, the Council was an active participant in the Hospital's *2019 Community Needs Assessment*. The report drew upon the *Healthy People 2020* framework to gauge Lowell's social determinants of health. The Institute of Medicine (2002) defines social determinants of health as conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life risks and outcomes. Social, economic, and physical conditions in neighborhoods, workplaces, and schools impact outcomes. Data on social determinants of health are integrated into this report where relevant. We acknowledge that inequities in social determinants of health exist in the social construct (race, ethnicity, gender, age, socioeconomic) and we aspire to improve the health and educational outcomes of all children in the community.

Limitations of This Report

The Family Survey was distributed in English, Spanish, and Portuguese. Translating the Family Survey into all languages spoken in Lowell, such Arabic, Khmer, Lao, Swahili, and Vietnamese, to reflect the full diversity of the community would have been cost-prohibitive.

While demographic information was not collected from parents completing the survey, we believe the data reflect the diversity of families registering for preschool or kindergarten programs in Lowell Public Schools.

The Program Survey intended to collect information on programs, capacity, and staffing in early education programs throughout the city. Due to the pandemic the survey was not distributed in spring 2020. In December 2020, the survey was sent to licensed Department of Early Education and Care (EEC) programs and Council members' programs. Due to incomplete data, the authors are unable to include program level information in this report. Therefore, the authors intend to work with the Council to develop a separate report in collaboration with community partners to ensure the accuracy of program information.

Demographics of the Community

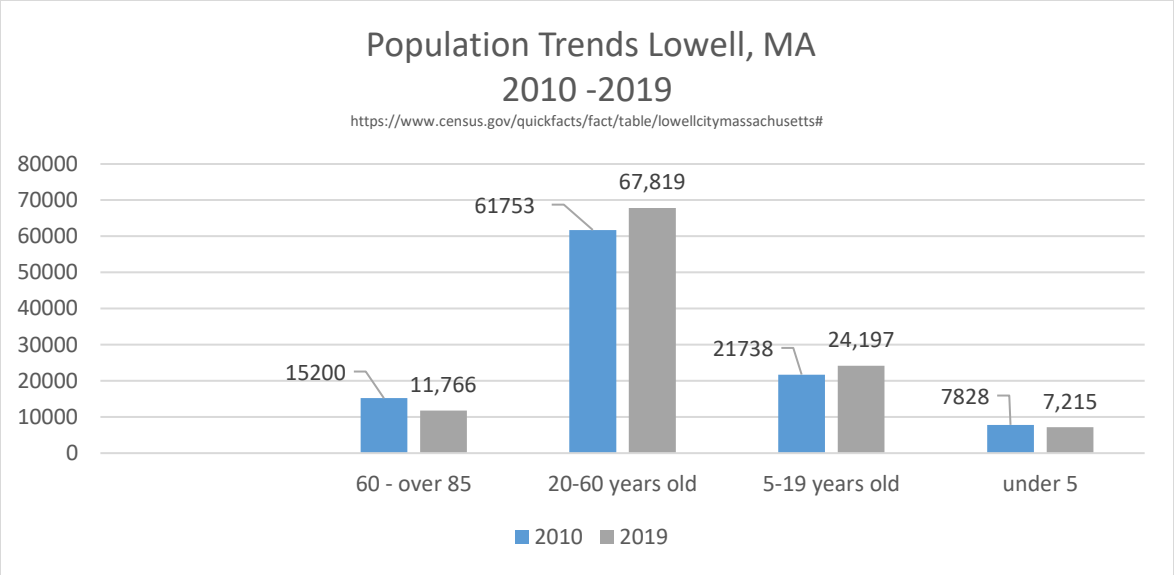
Lowell is an urban city and is home to the United States' second largest Cambodian–American population. Lowell houses two institutions of higher education, the University of Massachusetts Lowell and Middlesex Community College, which contribute to the fabric of the community through research, culture, sports, and other civic activities.

As of October 2020, the Greater Lowell Workforce Board reported an 8% unemployment rate in the city. According to the Massachusetts Department of Employment and Training as of 2016, the largest distribution of labor in Lowell consists of Education, Health, and Social Services (28%), followed by Professional and Business Services (11.4%).

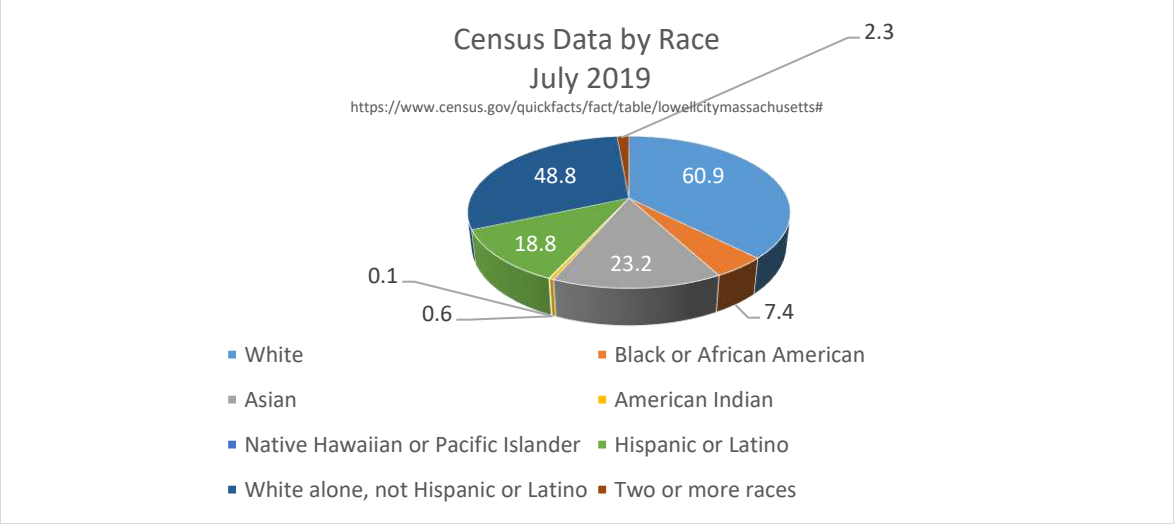
Lowell General Hospital has two campuses in Lowell (main campus in Pawtucketville and Saints campus downtown). Lowell General Hospital offers new parent support groups, as well as birthing, breastfeeding, and parenting classes.

Lowell Community Health Center provides primary health care, dental and eye care to the local community. Pediatric Medicine at Lowell Community Health Center is offered as a walk-in service. In addition, the Health Center offers access to behavioral health services, family planning and addiction treatment programs.

As of July 1, 2019, Lowell's population is estimated at 110,997, according to United States Census Bureau. An estimated 6.3% of the population, or 7,214 of the residents, are children under the age of five. Over the last nine years, there has been a slight drop in population among children under the age of 5 in Lowell.

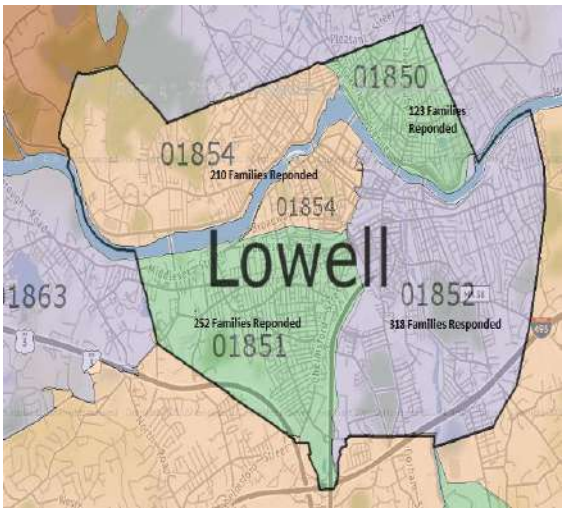


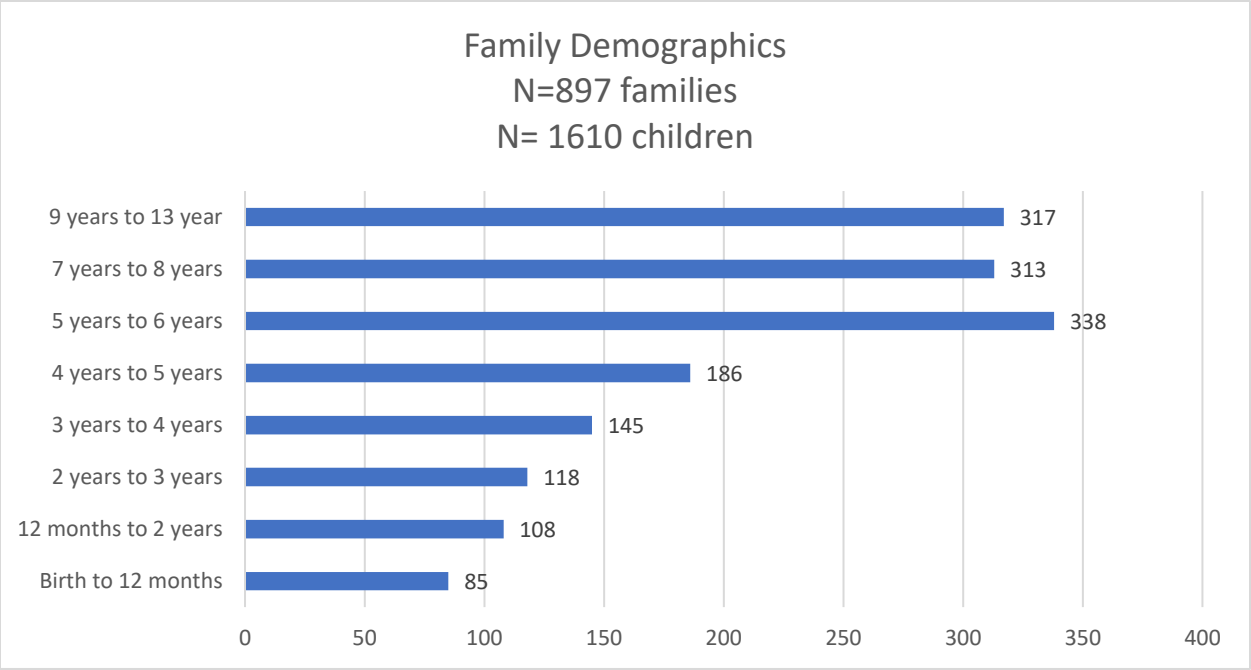
Lowell also has a racially diverse population, as shown by this chart:



Family Survey Results

A total of 913 families responded to the survey, of which 98.2% were Lowell residents from the following neighborhoods: 14% from Centralville (01850), 35% from Belvidere and South Lowell (01852), 28% from the Highlands (01851) and 23% from Pawtucketville (01854). The majority of Portuguese respondents live in the Highlands and Pawtucketville. Spanish-speaking respondents represented 10% of respondents in Centralville, 6% in Pawtucketville, and 4% in the Highlands. 10% of overall respondents answered the survey in their native language of either Portuguese or Spanish.



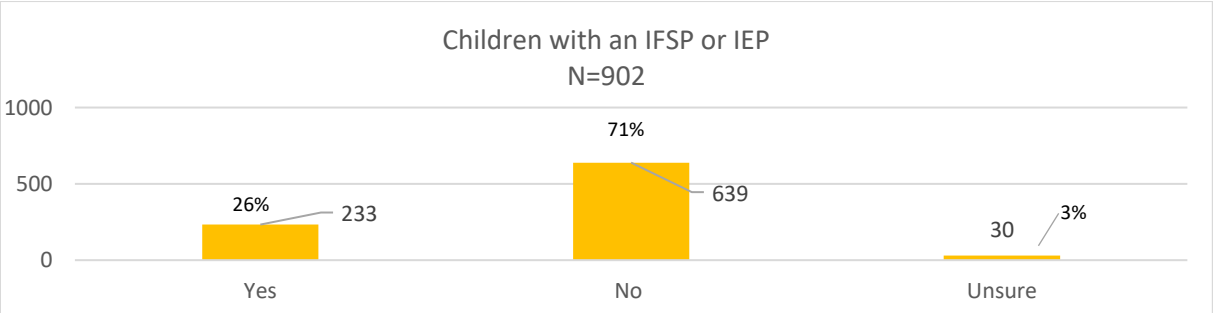


Of the one thousand six hundred and ten children included in the sample, 642 children were under the age of five, 338 were kindergarten eligible, and 630 children were school-age.

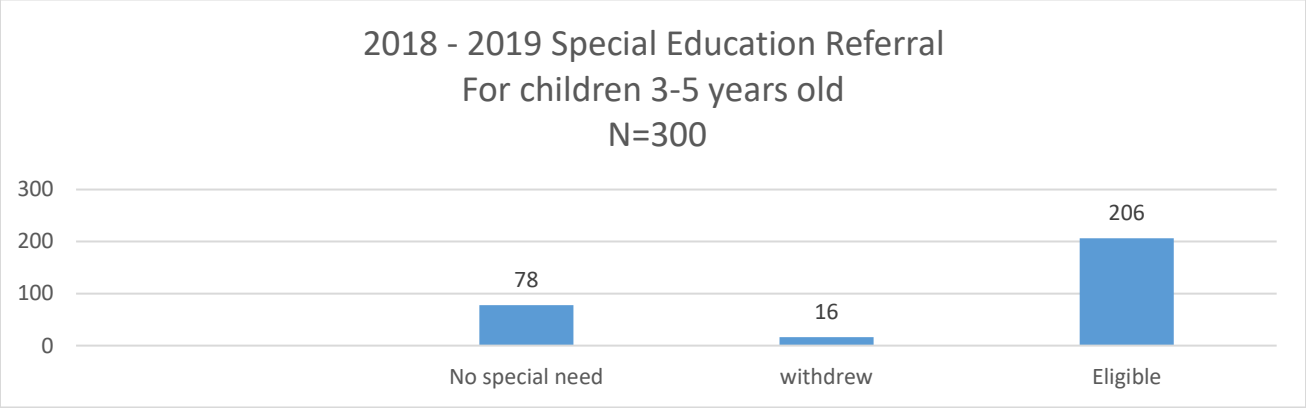
Children with Special Needs

Families completing the survey were asked to identify if their child had an Individual Family Service Plan (IFSP) or Individual Education Plan (IEP). Children aged birth to three years old with developmental delays or at risk for delay are eligible for Early Intervention (EI) Services. Early Intervention specialists work with families to develop an Individual Family Service Plan (IFSP) to support child development and help families know their rights and communicate their needs to support the child's health and achievement of developmental milestones.

Children 3-5 years of age identified as having a disability in accordance with the Individual with Disability Education Act (IDEA) are provided an IEP to support their access to the general curriculum or provide individual instruction to support progress. IEPs are developed by the families and the District to outline individual goals, supports, and instructional methods required to aid the student in making progress due to a disability.



Twenty-six percent of children in the sample have either an IFSP or IEP. Three percent of families were unsure whether their child had an IFSP or IEP, and 71% children were developmentally appropriate based on their age group and did not have any barriers to accessing learning. Each year Lowell Public Schools receives a large number of referrals from parents, early intervention partners, and others (including community child care, pediatricians, and the Department of Children and Families (DCF)) identifying children who may have a special need. As the chart below illustrates, 5.3% of students referred do not complete the process, 26% of students referred are found to have no special need, and 68.7% are found referred are found eligible.



There is a need in the community to provide more information on child development to assist families and community members in understanding the difference between a disability and a developmental delay that may be due to variation in growth or opportunity. Families participating in activities through the Coordinated Family and Community Engagement Grant learn about developmental milestones and ways to foster child development through active engagement in learning with their child. Additionally, these families complete the Ages and Stages Questionnaire, which is a well-known developmental screener used by millions that provides information to families on children's developmental strengths while identifying areas that may be delayed. Screening children using validated and reliable tools prior to a special education referral can save the District time, resources, and money. Families responding to the survey additionally showed a strong interest in learning more about child development and having access to educators with knowledge of child development. Parents expressed a clear preference for participating in activities with their children while gaining further information on how to support their child's development.

Providing more information to parents on developmental screenings and programs for young children and their families in the community may result in more children accessing programs and services that foster their growth and development while supporting their families in their role as a child's first teacher and may also, therefore, result in fewer children being referred to special education.

Early Detection of Vision Disorders

Unlike other senses, vision *develops* in a child over the first few years of their life. Infants and preschoolers with untreated vision disorders can experience impaired parental bonding, delay in reaching motor and cognitive milestones, reduced social development, delayed language, and slower acquisition of early learning skills.

Young children who develop a vision disorder can appear to an adult to have normal sight, but nationally 1 in 17 pre-school children and 1 in 4 school-aged children have a vision problem that requires treatment. There is a higher incidence of vision disorders in children of Hispanic, Latino and African American descent, children from low-income families, and children with premature birth, low birth weight, neurodevelopmental delay or special health care needs.

Undetected and untreated childhood vision disorders have far-reaching effects, from mildly impaired vision for certain tasks through social, academic, and behavioral struggles, to adult blindness. Most vision disorders, if detected and treated early, are preventable and treatable, often simply with eyeglasses. After age 8, a child's vision development is complete and their chance for the best visual outcomes, which last a lifetime, are set.

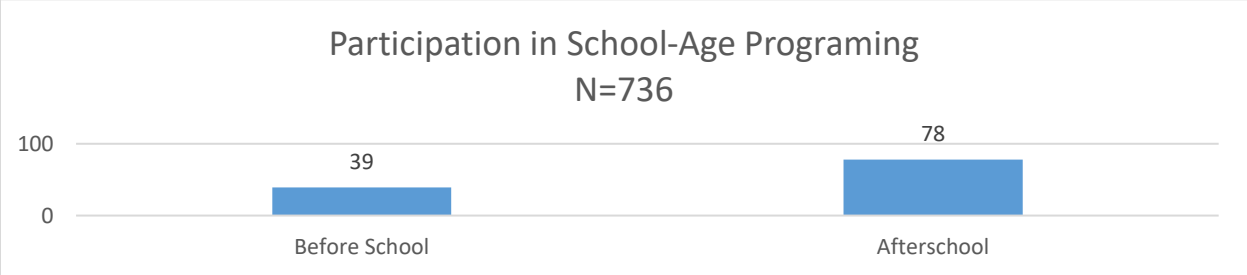
All children deserve to reach their full potential, not just those with naturally better sight. Professionals working in early childhood fields are in the unique position to enable recognition of possible vision problems if they know the early signs and symptoms and understand the narrow window of opportunity for intervention and correction.

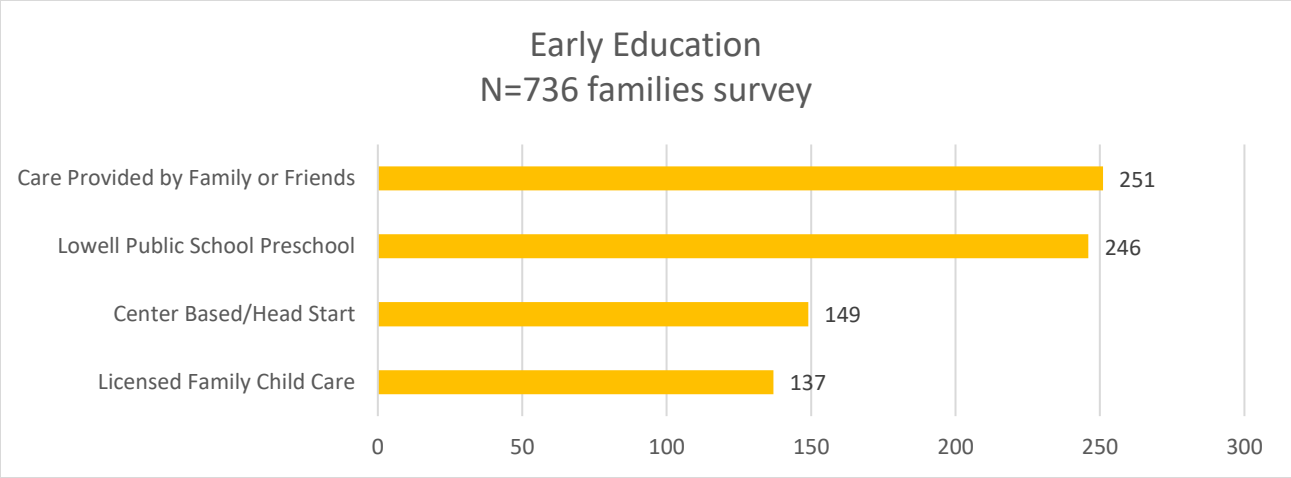
Currently, Early Childhood and Health curricula at U.S. universities and community colleges have little or no curriculum content about childhood vision. Further, knowledge of the vision development process and its influence on overall childhood development and learning is neither required to enter early childhood professions, nor embedded into program practices or professional continuing education once in the field.

This general lack of awareness among those professionals who are in daily contact with young children about the fundamental role of vision, is costly – both to the system but also to the child, their health and their future.

Participation in Early Education and Afterschool

The charts below provide data on respondent participation in early education and afterschool programing. Of the families responding, 72% reported children received care and education in formal programs, and 34% received care from family or friend (note that totals add to more than 100% because some families use more than one method of providing care to their children). Double the number of school age children participate in afterschool programing than before school programing.





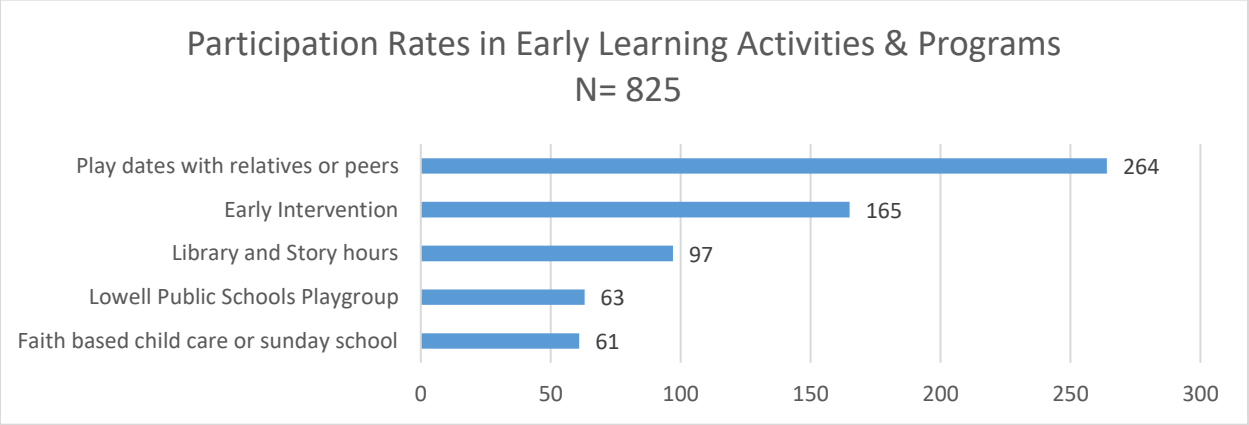
Over 82% of the families completing the survey report participating in early learning programs and 8% regularly participated in parent/child activities or programs in the community to support their child's development. Maintaining social connections with others in the community is an important social determinant of health for families of young children.

The goal of the Lowell Public Schools Coordinated Family and Community Engagement Grant, funded through the Department of Early Education and Care, is to build social connections among families in the community in order to enable families to be resilient to challenges, and aware of supports within their community that are available to them in a time of need. To foster this, the grant funds opportunities for children and their families to interact with one another through playgroups, which support social and emotional competencies and promote child development, while also providing parents with information on child development to support them in their roles as their children's first teachers.

While the data reveals some awareness of our seven playgroups throughout the community, there is a clear need for more outreach. Since the start of the pandemic in March 2020 and the move to all virtual programing, participation has been limited to families with access to computers (or similar devices) and internet. Despite these constraints, a number of families use cell phones to gain access in order to regularly participate. Attendance during fall of 2020 exemplifies the commitment of families in Lowell to their children and parenting. Fall 2020 attendance records for playgroups report 101 families with 162 children regularly participated in virtual playgroups in Lowell during the 2020-21 school year. Sixty-three families completing the Family Survey in spring of 2020 reported participating in playgroups.

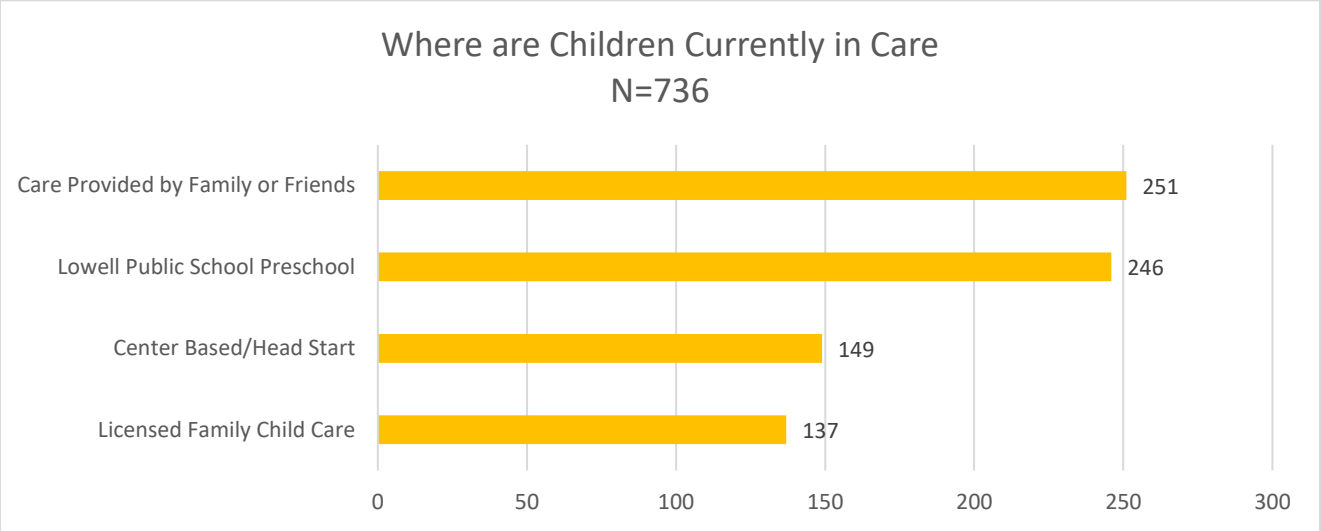
Additionally, sixty-one children received home visits twice a week virtually through Parent Child Plus. This national program model is evidence based and has demonstrated results ensuring that vulnerable children start school ready to succeed. Parent Child Plus graduates are 50% more likely to come to kindergarten prepared than their socio-economic peers. Participating children are 50% less likely to need special education services by third grade and they outperform their peers statewide on achievement tests in mathematics. Additionally Parent Child Plus graduates score two times higher on social emotional skills than their peers and have a 30% higher graduation rate than their peers. Parent Child Plus (2021). Lowell continues to maintain a wait list for this program.

The data below summarize the results from the Family Survey conducted in May to September 2020.



Early Care and Education

Of those responding to the survey, 736 families reported children received care and education outside of their home. Thirty-four percent of families with children under five reported receiving care from family or friends. Thirty-three percent of preschoolers attend Lowell Public Schools' preschool. Twenty-two percent of families reported enrollment in center-based or Head Start programs. Nineteen percent of families reported attending licensed family childcare programs.

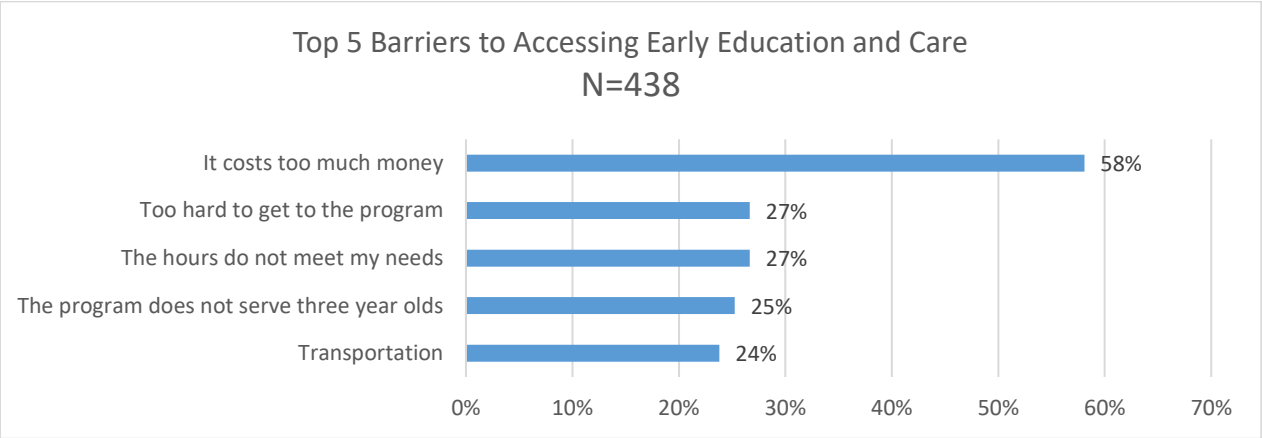


Reported Barriers to Access

Three-hundred and thirty respondents with children 3, 4, or 5 years old reported having barriers to accessing early education and care. ***Thirty-six percent of families completing the survey reported preschool age children were not attending preschool.***

- **Cost** was the largest barrier to access.
- **Transportation** and **program hours** present a barrier to 24% and 27% of the families, respectively.

- **Lack of access to programs serving 3 year olds** was a problem for 25% of the families surveyed.
- Twelve percent reported having difficulty finding care in the summer.
- Nine percent of unenrolled preschool families reported not be interested.
- Eleven percent reported being on a wait list for a voucher in order to afford programing.
- Three percent reported difficulty in finding programing for their special needs child.



A sampling of open-end responses provides additional insight into barriers:

- "After early intervention, she was not qualified for other services"
- "All programs were full"
- "Cannot get a voucher from Department of Early Education and Care"
- "Child is not yet four"
- "Transportation is needed for daycare in afternoon"
- "It only ½ day and I am teacher who need full-time care"
- "My child can only go if gets into preschool, where my cousin goes to school so he can get there"
- "She only qualifies for part day at CTI"

Barrier to Access - Cost

Cost continues to be a barrier for 58% of responding families in Lowell. According to the Economic Policy Institute, the average cost of full-day preschool for a 4 year old is $15,095 per year. Infant care in Massachusetts costs families an average of $20,913 per year, which, according to 2018 data reported by the Economic Policy Institute, is 63.7% more than in-state tuition at a four-year public college. The median household income in Lowell was estimated at $51,987.00 from 2014-2018 according to the United States Census Bureau. The price of full-time center-based childcare for two children in the Northeast is often a household's highest expense, often higher than the cost of housing, college tuition, transportation, food, or health care, according to Childcare Aware 2019.

The National Center for Education Statistics found in 2018 that the percentage of 3-5 year olds enrolled in preschool was higher for whites at 43% versus blacks 38%, Asian 36%, and lowest for Hispanics and children of two races or more at 35%. Parents' educational attainment and income play an important role in access to preschool. In 2018, 48% of parents with professional degrees sent their children to full-

day preschool, while only 11% of parents with less than a high school education enrolled their child in full-day preschool, according to the National Center for Education Statistics.

In school year 2016-17 Lowell was able to significantly increase the number of students attending preschool from racial and/ethnic minority groups through the Preschool Expansion Grant which funded free full-day preschool programing to eligible four-year-old students. Of the 162 four-year old students enrolled that year, 18% were white non-Hispanic, 29% Hispanic, 12% Black, 36% Asian American, and 4% Two or more races.

The PEG program cost $20,918.00 per child according to the Department of Early Education Care Year 2 Cost Report. Federal grant allocations later ceased. State funding to sustain the program was substantially lower and unable to fund all aspects of PEG programing in the community, even though there was evidence of success on student outcomes and the state program was expanded to include three year olds.

In 2018, Preschool Expansion Grant (PEG) partners met to strategize ways to sustain the full-day program with the knowledge that federal funding would cease in 2019. Additionally it was unclear what level of funding, if any, the state would allocate to maintain the program in the future. The group developed a variety of strategies, including grant funding, private pay, and vouchers, to sustain the full-day program in 2019-20 while at the same time expanding services to three year olds. However, once the program was no longer free enrollment dropped and one partner pulled out of participating in the program.

When the federal grant ended, it became hard to fill these previously coveted seats due to the need to charge families tuition. For example, many families made too much money to qualify for a voucher, but not enough to afford to pay full tuition. Given the median income in Lowell estimated at $51,987.00 and the average cost of full-day preschool is $15,094.00, it would take almost 30% of a working family's income to access preschool in Lowell for one child.

The Greater Lowell Community Health Needs Assessment reports families renting in Lowell spend 57% of household income on housing and those owning their own home spend 35.1% of income on housing. Many families therefore find it difficult to find the funds to prioritize early education over food, clothing, and housing.

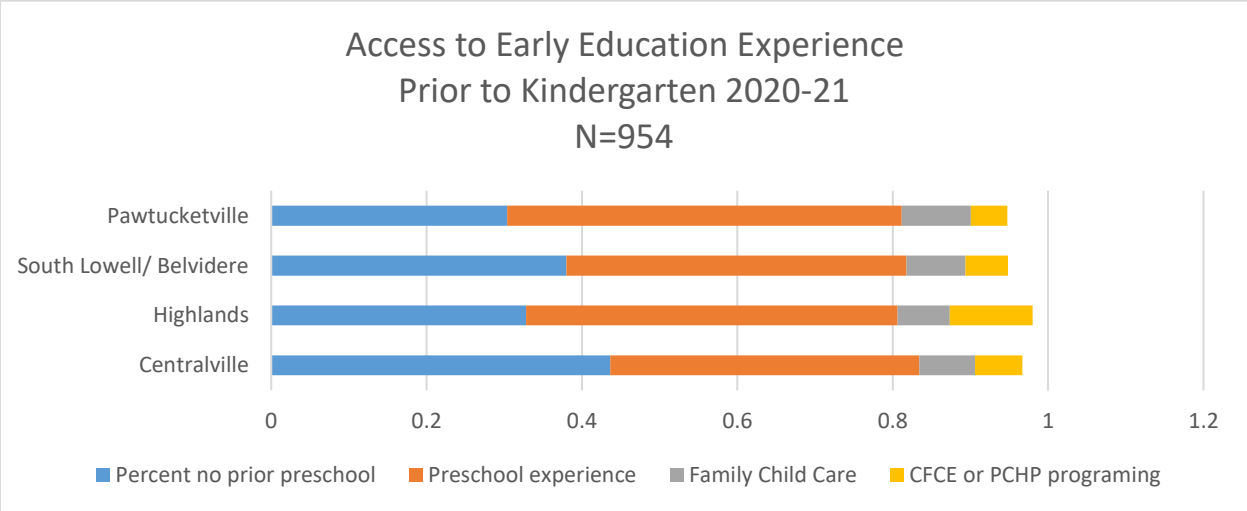
As this analysis demonstrates, access to preschool in Lowell is not equitable but rather based on a family's socioeconomic status or its ability to provide transportation to a half-day program. In 2020-2021, the Massachusetts Department of Elementary and Secondary Education provided Lowell Public Schools with $4,500.00 in Chapter 70 funding per enrolled preschooler and additional funding through the Department of Early Education and Care to open three full-day school year classrooms in the Lowell Public Schools' Cardinal O'Connell and Greenhalge Schools, enabling the community to maintain twenty-seven public full-day preschool seats in Lowell.

Commonwealth Preschool Partnership Initiative funding was used to maintain salaries of Bachelor level degreed teachers in partner programs at Lowell Collaborative Preschool Academy, Little Sprouts, and Greater Lowell YMCA while providing funds for the second half of the day for the three full-day preschool classrooms opened in Lowell Public Schools. A gap clearly exists between the amount families can afford to pay to access preschool and the true cost of preschool. Center-based programs struggle to

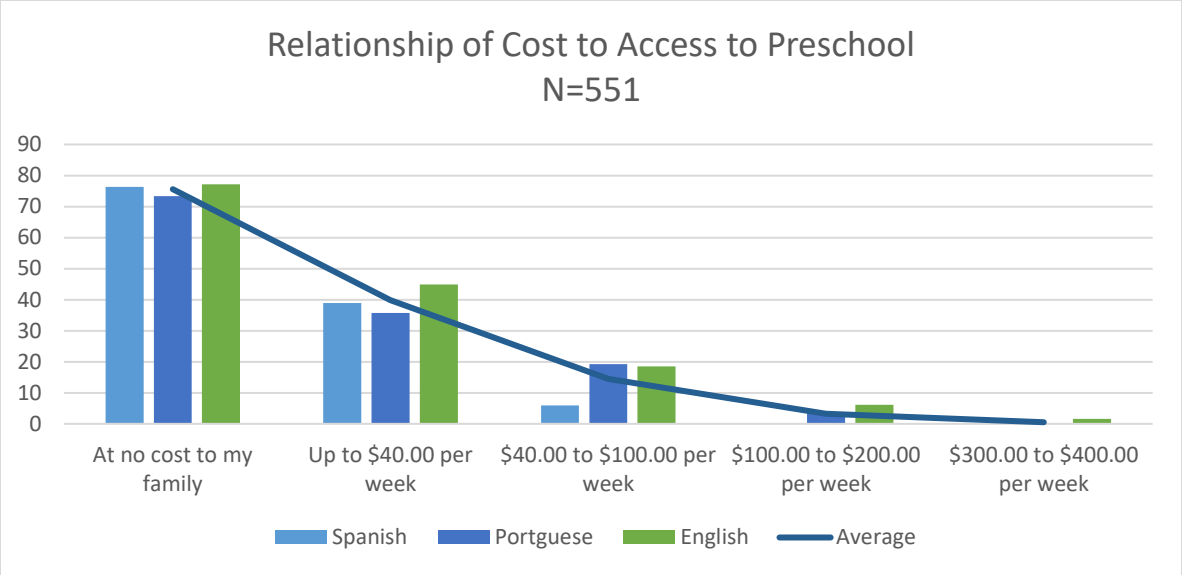
retain degreed teachers given the private sector's inability to offer higher salaries, and public schools struggle to offer access to free education given that Chapter 70 limits state reimbursement to only a half-day of preschool.

Access to preschool is limited for many in Lowell based on socioeconomic status and is more likely to impact racially diverse students. Dr. Ronald Ferguson suggests that racial bias and tracking may begin in kindergarten due to the socioeconomic barriers that prevent some children from accessing preschool because of their family's income.

Approximately 36% of all incoming kindergarteners in 2020-21 had no prior preschool experience. The different socioeconomic statuses of the neighborhoods in Lowell result in variations to access. In Centralville, which has the lowest median income of Lowell's neighborhoods (https://www.incomebyzipcode.com/massachusetts/), 44% of kindergarteners did not attend preschool compared to South Lowell/Belvidere 38%, the Highlands 33% and Pawtucketville 30%.



The Department of Health and Human Services recommends allocating no more than 7% of a family's income to early education, which, given the median household income in Lowell, would be about $70 per week. However, perhaps because of the high cost of housing in Lowell, the Family Survey revealed that most families in Lowell feel they can afford up to $40.00 per week for preschool/child care and there is a large drop in a family's ability to pay more than $40.00 per week. **Families responding to the survey were asked, "How likely are you to access Early Education and Care at the following cost."**



Transportation

Of 438 respondents, 24% of the families stated transportation was a primary barrier to access to early education. Families in need of transportation primarily lived in two areas of the city: the Highlands (19%) and Belvidere and South Lowell (36%). Regardless of neighborhood, transportation is a factor for families that have no car or that otherwise lack the ability to transport their child to a 2 ½ hour preschool program while maintaining employment.

Seats for Three Year Olds

From 2013-17, the average birth rate in Lowell per year was 2,310. However, over the last five years the birth rate has dropped to an average of 1,553 births per year. The chart below shows birth rates for the past five years. Based on birth rate data it is estimated that roughly 50% of age-eligible kindergarten and 24% of age-eligible preschoolers are enrolled in Lowell Public Schools. As enrollment declines for these age groups in Lowell Public Schools, more seats will be available and the District may therefore want to consider the feasibility of increasing access to preschool to serve at-risk children in the community as an intervention for closing the achievement gap before it begins.

Adding a three-year-old program would provide peer models for three year old children with special needs served within District classrooms. Currently, three year olds with special needs are placed in classrooms with four year olds as peer models. In addition, there is a strong interest within the community to expand full-day preschool to four year olds and offer programing to three year olds. In order to consider options Lowell Public Schools would need to work with community programs, identify space, and consider various options for funding the second half-day of the day for students.

Birth year	Number of births	Year turning 3	Year turning 4 (LPS)	Kindergarten (LPS)
2016	1351	2019	2020	2021
2017	2349	2020	2021	2022
2018	2184	2021	2022	2023
2019	2173	2022	2023	2024
2020	1823	2023	2024	2025

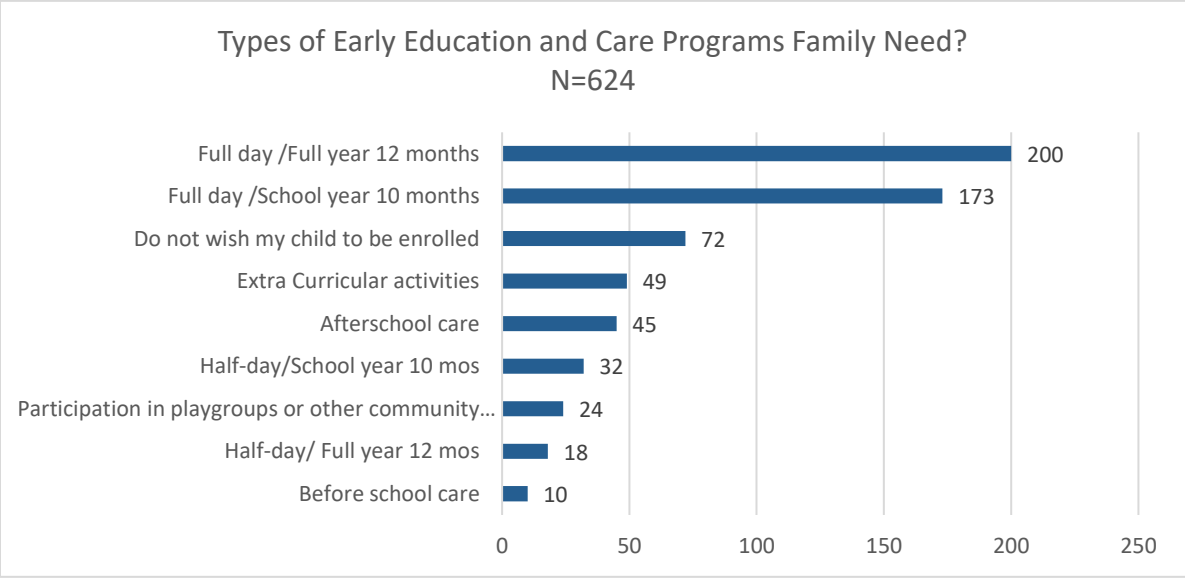
Types of Early Education and Care Needed by Families

Five hundred and fifty five families were asked whether they would use full-day early education if they could access it. The majority of families (74.59%) responded, "Yes", while 9.25% responded "No", and 16.15% were "Not Sure". The majority of respondents preferred full-day programing, but stated it was not readily available at a cost their families could afford.

Five hundred and fifty families were asked whether they would access half-day early education and care if they could access it. The majority of families (55.09%) responded, "Yes", while 21.64% "No", and 23.27% were "Not Sure".

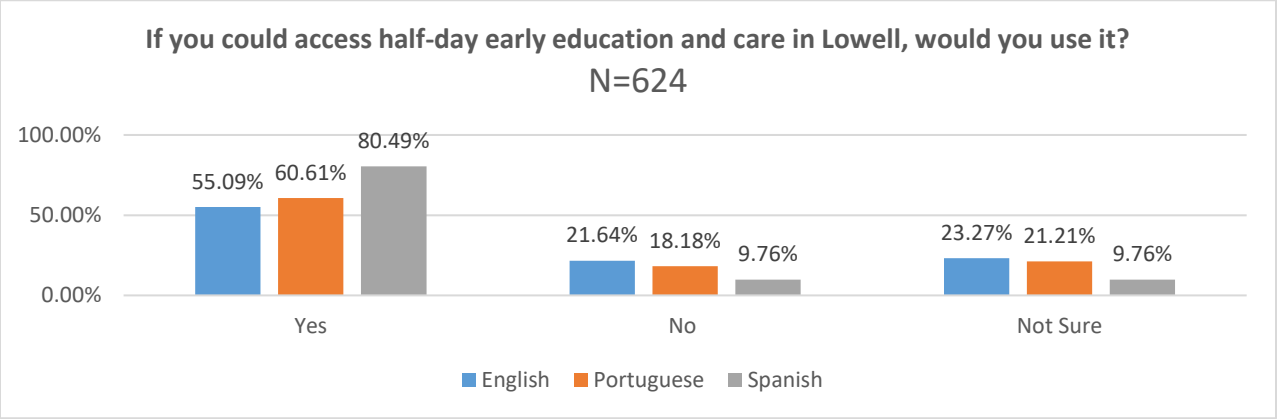
The chart on page 15 provide information on type of early education and care family reported needing.

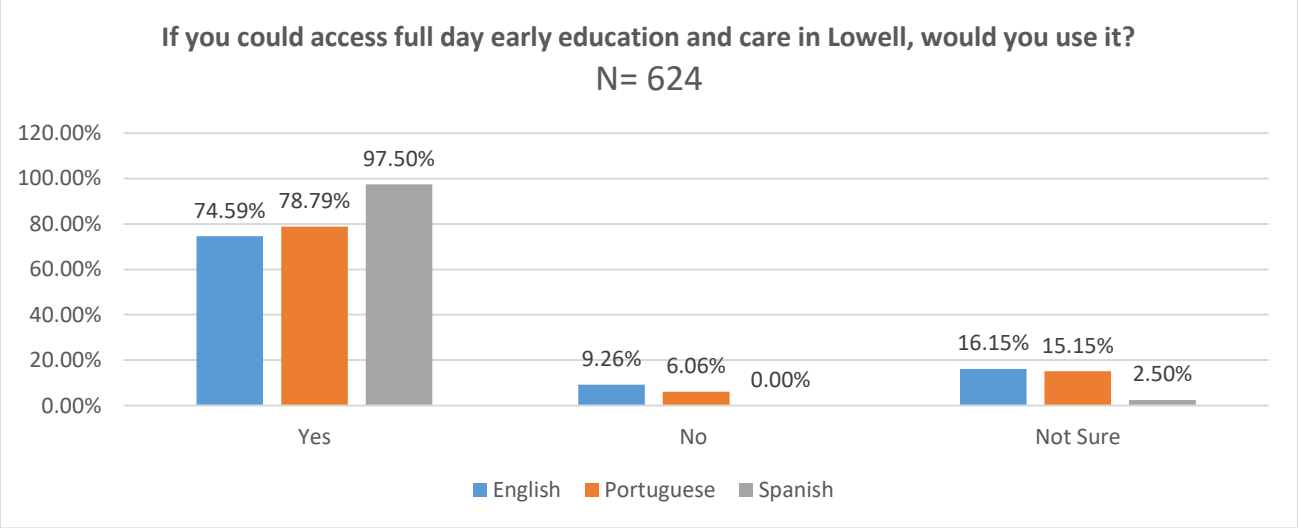
- Thirty-two percent of families reported needing full-day year round programing.
- Twenty-eight percent stated a full-day school year programing would suffice.
- Less than 5% of the families were interested or able to consider half-day school year programing and even less were interested in half-day programing year round.



A sample of 624 families surveyed indicated that access to full-day preschool was preferred; however, over the last several years Lowell Public Schools has filled its available preschool seats, serving on average 564 children in half-day programing in which transportation is not provided. Therefore, a family's ability to secure care, time, and transportation around their work schedule becomes a critical factor in accessing the available free half-day preschool programing. Extending the day would eliminate some difficulties for many families associated with transporting a child back and forth for a two and a

half hour program. The charts below, segmented by the language in which the responding parent responded to the Family Survey, confirm access to full-day at no cost or a low cost will increase participation, especially for Hispanic families in the community.





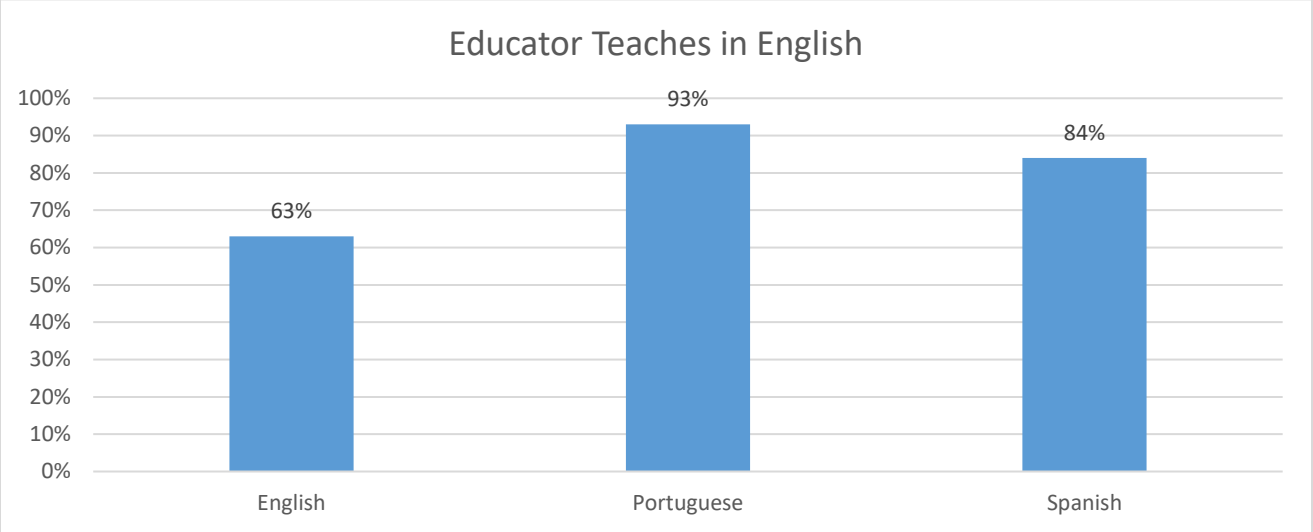
Impact on Reading and Math Achievement

There are many children that start school in Lowell without the benefit of having attended preschool. On December 1, 2020 there were over 74 languages spoken by students enrolled in Lowell Public Schools, of which 64% speak English, 12.77% Spanish, 10.60% Khmer, and 5% Portuguese. According to Lowell General Hospital's *2020 Health Needs Assessment*, 13.8% of households are occupied by residents that speak a language other than English. Fortunately, children are born language learners.

Researcher have found that learning two languages early on has cognitive as well as social benefits. Researchers Kovacs and Mehler (2009) found that infants raised in bilingual household were better able to switch responses following a rule than their monolingual peers, thereby displaying enhanced cognitive control abilities. These findings suggest that experiences in two language early in life enhance a child's cognitive systems. In a study by Carlson and Meltzoff (2008) three groups of kindergarten students performed a set of executive function tasks; these groups consisted of native bilingual children, English-speaking monolingual children, and native English-speaking children attending a language immersion program in Japanese or Spanish as a second language. Controlling for verbal abilities and

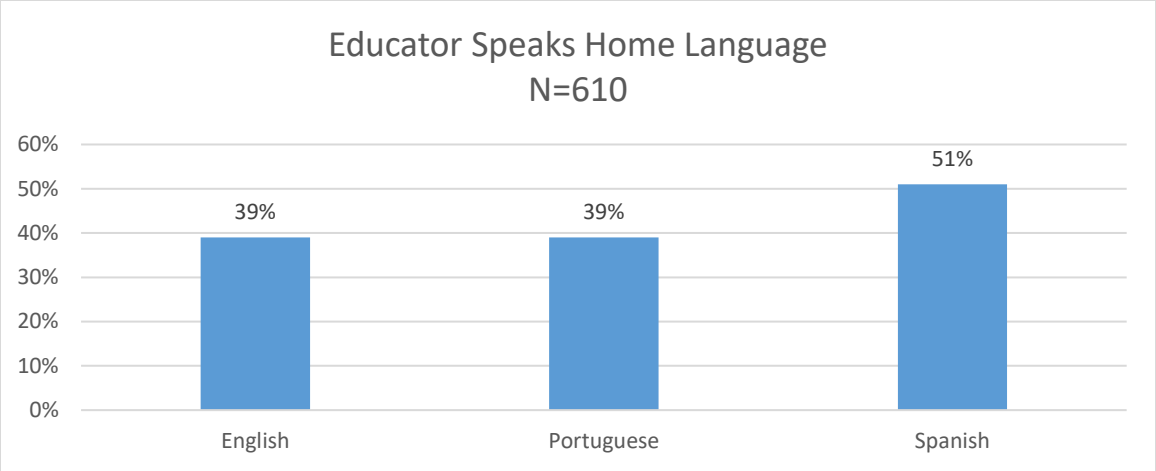
parents' socio-economics status, native bilingual children outperformed the other two groups. These findings suggest that early dual language exposure leads to enhancements of executive control processing. Nelson (2000). Center on the Developing Child articulates the influences of genes and experience that shape the brain early in life and that "serve and return" interactions between parent and child are critical to development. During the first years of life the parts of the brain that differentiate sound become specialized to distinguish language from other sounds. Early plasticity influences the brain architecture. Our diversity in Lowell should therefore be seen an opportunity to capitalize on building our children's brains early on.

Families in Lowell recognize the value of bilingual education for their children. The survey asked families about language preference for educators in preschool programs. The majority of those families with limited English skills responding to the survey preferred having their children educated in English. The bars in the next two charts represent the language of the Family Survey to which the parent responded.



At the same time, families appreciate having access to staff that speak their home language. Half of the native Spanish speakers responding to the survey preferred having access to educators that speak their home language as compared to 39% of English and Portuguese families. There is clearly a need for diversity among the educators and staff providing early learning opportunities within our community.

Lowell has addressed this need. CFCE playgroups are led by early learning facilitators that reflect the community (Khmer, Spanish, and English). Playgroups are held in English but the inclusion of a bilingual facilitator provides families with an opportunity to ask and answer questions about child development and community resources in their home language, thereby increasing the parent's access to information that will support their child's development. All playgroups include a read-aloud portion followed by extension learning activities that encourage children to use new vocabulary. Playgroups encourage families to read books daily in either English or the family's home language to foster language and literacy skills.



Many CFCE parents have expressed that the main reason they joined a playgroup is to assist both them and their child in learning English. The Preschool Expansion Grant in Lowell found that children at risk for academic failure, particularly children whose home language was not English and those with no prior formal early education, benefited the most from playgroups, making substantial gains in early literacy and mathematics prior to kindergarten entry. In 2019 a longitudinal conducted by Abt tracked the outcomes of Preschool Expansion Grant students in Lowell into early elementary school and found that significant growth in early academics, particularly early literacy, continued through the end of first grade.

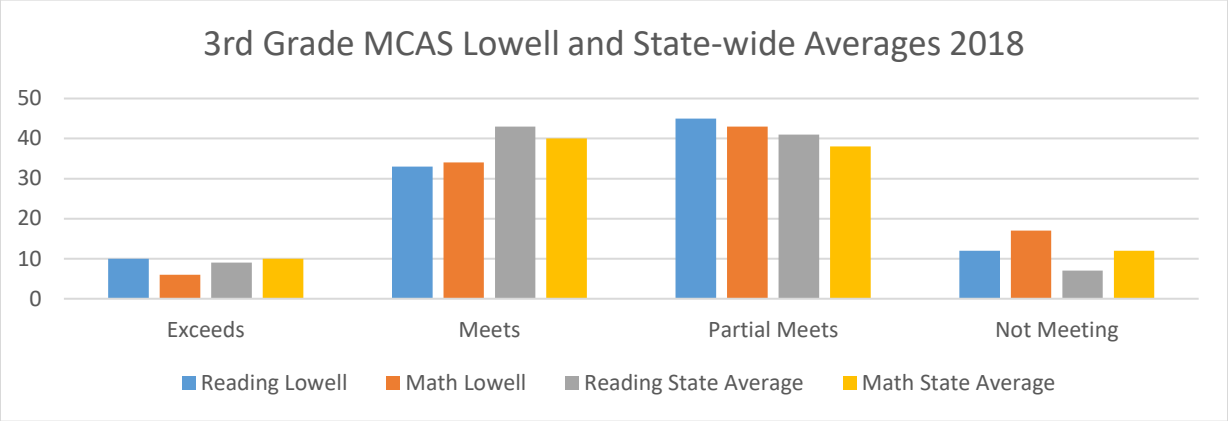
Increasing access to early learning programs and preschool as intervention would assist in closing the achievement gap for English language learners before it begins by capitalizing on the brain's ability to simultaneously acquire two languages. In addition, increased access to preschool would decrease the number of referrals to special education, particularly for speech and language issues, and it would increase equity within our school system. According to Ferguson (2008): "The fact that black and Hispanic children reach the age of nine with fewer math and reading skills on average than whites is mostly because black and Hispanic children begin school with fewer skills. Once enrolled in school there is a chance that black and Hispanic children could learn more than whites but still have lower levels of skill because they start so far behind."

Our findings from the Preschool Expansion Grant demonstrate the impact full-day preschool has had on language, early literacy, and even mathematics outcomes. The majority of English language learners enrolled in preschool became proficient in English prior to kindergarten entry. As a community, we must support children's access to preschool. Equitable access for all students may not be possible until more full-day options are available. In the meantime, some students will continue to start school unnecessarily behind their peers due to missed opportunities for early learning.

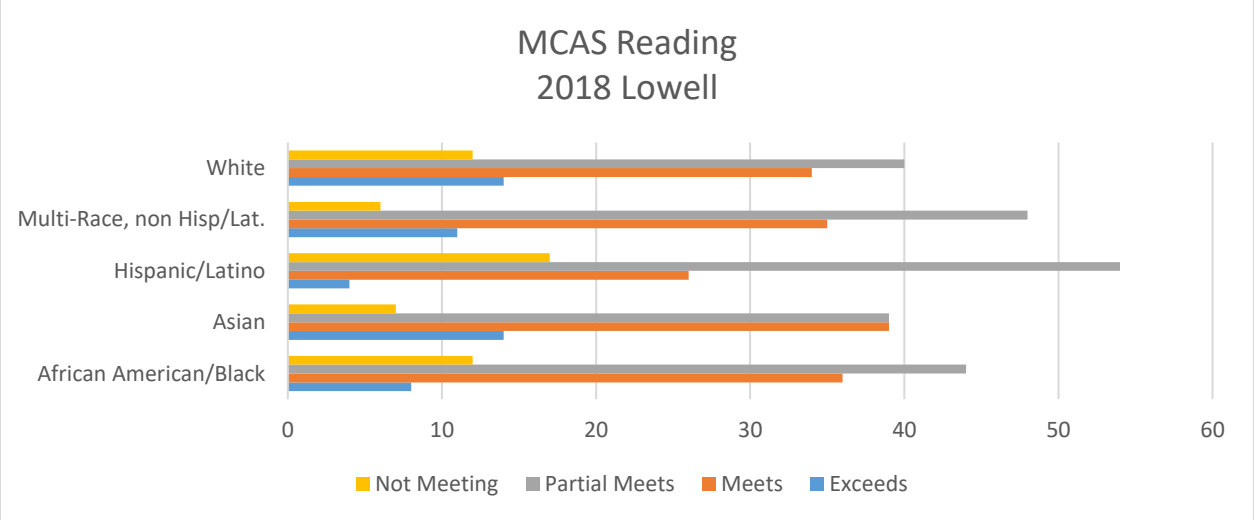
Research has demonstrated that preschool provides motivation for learning while developing the social, emotional, linguistic and cognitive abilities of young children. Without universal access to preschool, those children whose families cannot afford preschool and are less likely to provide rich early learning opportunities at home are at unnecessary risk for school failure.

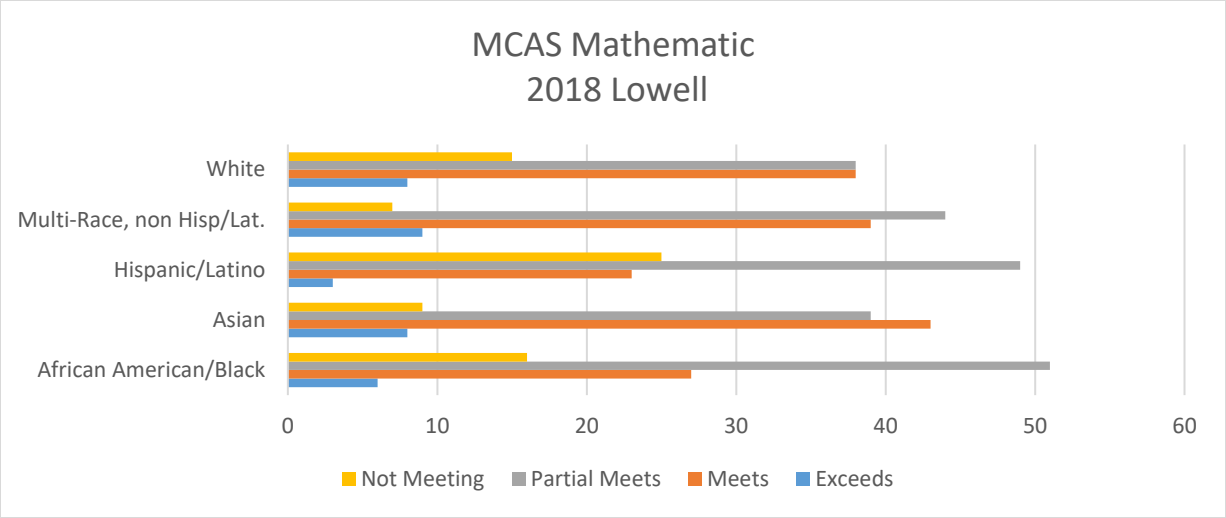
We can close the achievement gap in Lowell, especially for our minority and at risk students, by supporting brain development and early learning opportunities right from the start. In Lowell, the

results of the 2018 MCAS illustrate the way that meaningful differences among students upon school entry only widen over time.



As we drill down into Lowell's 3rd grade achievement gaps in reading and mathematics, our largest gap is for our Hispanic and Black children, the same groups that historically have less access to preschool and are less likely to be enrolled in half-day programing.





The American Academy of Pediatrics recognizes the need to intervene in the lives of young children to improve their physical and mental health. The Academy devised the Ecobiodevelopment (EBD) Framework as a tool to assess toxic stress and prevent it from affecting healthy brain development through the promotion of the 7Cs of resilience (competence, confidence, connectedness, character, contribution, coping and control). Pediatricians now recommend practical programs to aid families in nurturing children's emerging social, emotional, and language skills through positive parenting and early learning. Strong connections among the city's hospitals, pediatricians, and early education resources are critical to ensuring health and education within the community.

Lowell's Coordinated Family and Community Engagement Grant programs provide a range of services and programs to families to strengthen the connection between parents and children. Currently, Lowell Public Schools provides 60 families with twice weekly home visits through the Parent Child Plus program, which uses education to break the cycle of poverty for low-income families. These Home Visitors provide early literacy opportunities to close the equity gap one family at a time.

Our CFCE program regularly offers parental education and family engagement events in addition to hosting seven playgroups throughout the community to foster early literacy and share child development information with families while supporting families in developing resiliency. Lowell's CFCE program provides information on child development, programs, and family assistance.

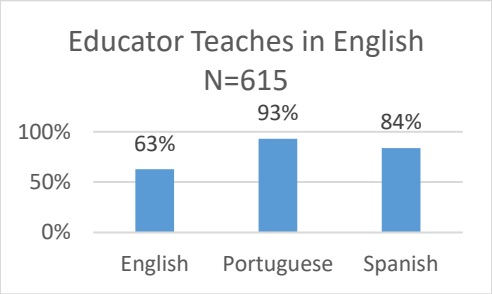
Information on Early Learning Programs

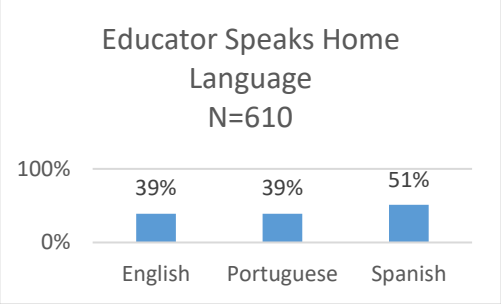
Fifty-eight percent of families reported having enough information to inform their decisions regarding services for their children. Twenty percent were unsure or felt more information would be beneficial. Having more information would ensure that all families can make informed decisions regarding early learning in Lowell.

What Matters to Families?

Families rated thirteen factors related to selecting an early education and care program. The top five most important factors were:

- Cleanliness,
- Qualified educators,
- Fostering child engagement,
- Preparing children for kindergarten, and
- Affordability.





In addition, the majority of Hispanic families responding to the survey preferred their children be taught in English but appreciated having access to educators that speak their home language. As a district, Lowell has been working hard over the last several years to improve communication with families in their home language. The addition of Language Line and SMORES (a digital communication tool for connecting families to school) has aided staff in communication.

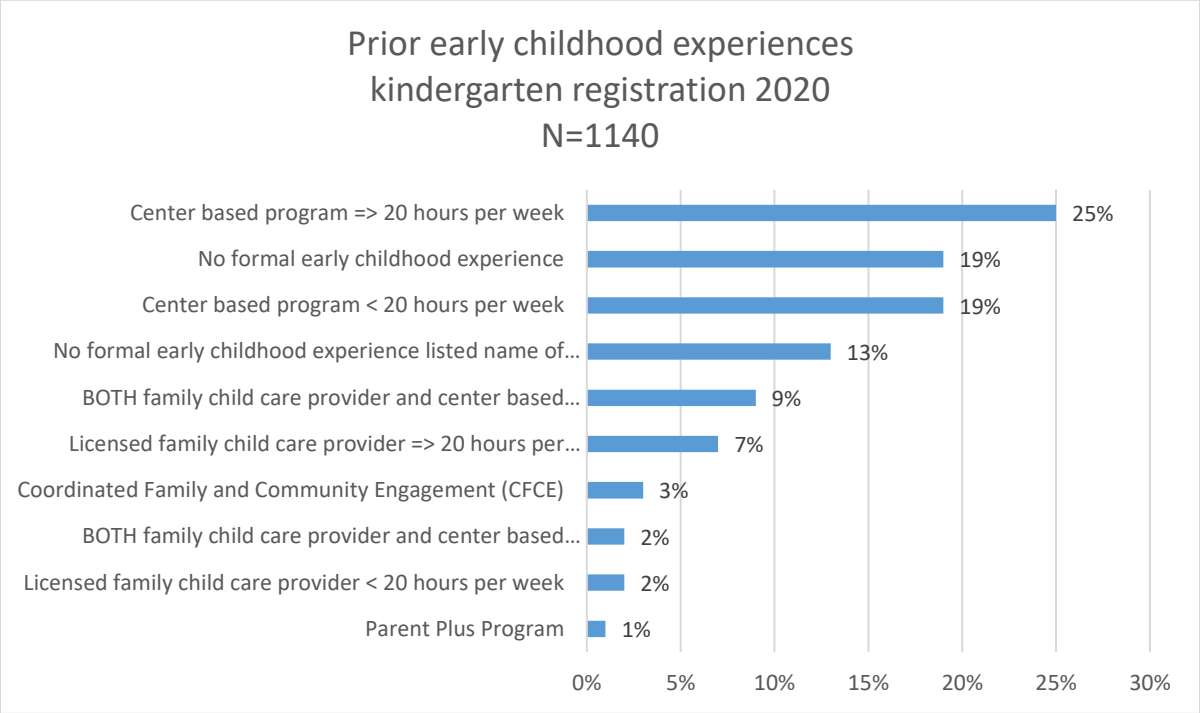
In 2019, the District prioritized hiring parent liaisons reflective of the rich diversity within our community. There is a need to connect our Early Learning Specialist/Home Visitors and District Parent Liaisons in order to better serve families. Internally and externally, staff across departments and agencies are not fully aware of all of the programing available to families. Additionally, linkage between Adult and Early Literacy Programs, once strong in Lowell through the Even Starts program, is now non-existent. Given the large number of refugees and non-English speakers in our city, connections with these groups must be strengthened and grown.

For example, over the last five years we have learned that many immigrant families participate in playgroups in order to expose their children to English and to learn it informally themselves as they participate in learning songs, reading books, and speaking to others in both English and their home language. Currently, Lowell's Early Childhood Department offers three playgroups supported by Spanish speakers and two playgroups supported by Khmer speakers. Over the past years we also have had numerous requests to offer playgroups with Portuguese- and Arabic-speaking support, and, if our funding expands, we hope to increase playgroups and Parent Child Plus home visitors in all these language.

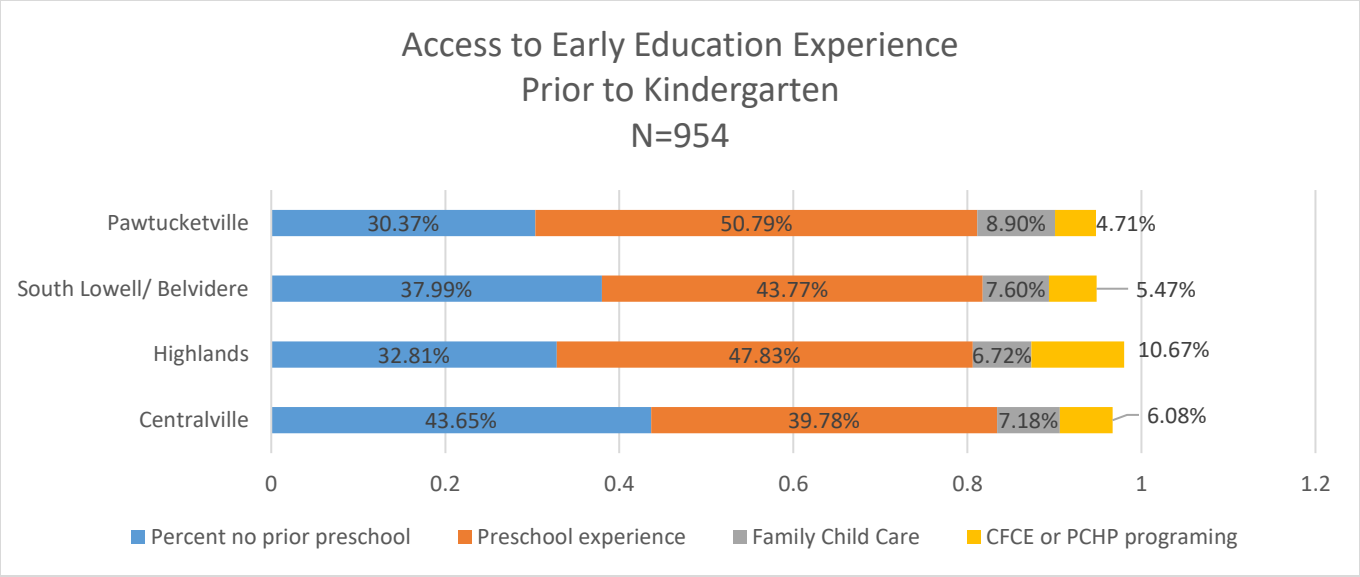
However, until the pandemic is over and in-person sessions are again possible, we will continue to see the number of families participating in virtual playgroups remain low compared to the pre-pandemic in person groups. The fact is that many of our most needy families are unable to participate in remote learning as they do not have access to devices and internet services. These families have become further isolated during the pandemic.

Transitioning to Kindergarten

Our 2020 kindergarten registration process included questions on prior early education and care. Of the 1,140 registering for kindergarten, the majority of families reported accessing some level of early education programing. The most preferred type of care appears to be center-based programs, which includes public and private schools, Head Start, and EEC licensed center based programs. It was interesting, and a bit confusing, that 13% of families checked, *No formal early childhood program experience*, yet listed attending a preschool program's name prior to kindergarten entry. Nineteen percent of children did not attend any program prior to kindergarten entry.



Children entering kindergarten came from over 75 different early education programs, including public and private schools, Head Start, and family child-care programs. The largest group of students enrolling in kindergarten was from South Lowell/Belvidere (329), followed by the Highlands (253), Pawtucketville (191), and Centralville (181), with the no prior preschool attendance ranging across groups between 30.37 to 43.65%.



The majority of children across all zip codes were enrolled in center-based preschool programs, with the percentage of children attending a center-base program ranging from 50.79% in Pawtucketville to 39.78% in Centralville. Of children attending a center-based program, 11% also attended a family child based program. Finally, a small number of children in all neighborhoods attended a family child care program or participated in a CFCE or Parent Plus Child program prior to kindergarten entrance.

Many families enroll children in early education programs outside of Lowell. Lowell has 18 programs and schools providing early learning opportunities to young children aged birth to eight years old. These programs have a capacity to serve 3,198 children: 72 infants, 119 toddlers, 63 infants and toddlers, 1,454 preschoolers, 1,222 kindergarteners, and 268 children in afterschool programs. See chart below.

List of licensed center-based programs in Lowell, showing EEC-licensed capacity by age groups	**Total Capacity**	**Infants 0-15 months**	**Toddler 15 months ,to**	**Infants/Toddlers**	**Preschool 2.9 - 5 years old**	**Kindergarten**	**School-Age Kindergarten to 13 years**
1. Children's Village @ the Mill	**71**	**7**	**9**	**0**	**55**		**0**
2. CTI James Houlares Early Learning Center	**461**	**14**	**21**	**9**	**300**		**117**
3. Greater Lowell Family YMCA Nursery and Afterschool Program	**186**	**0**	**0**	**0**	**60**		**126**
4. Hellenic America Academy	**30**				**10**	**20**	
5. Immaculate Conception	**40**				**20**	**20**	
6. Learning Latta	**47**			**9**	**23**	**15**	

List of licensed center-based programs in Lowell, showing EEC-licensed capacity by age groups	Total Capacity	Infants 0-15 months	Toddler 15 months ,to	Infants/Toddlers	Preschool 2.9 - 5 years old	Kindergarten	School-Age Kindergarten to 13 years
7. Little Sprouts-Lowell	**170**	**14**	**36**	**18**	**92**		**10**
8. Lowell Catholic	**38**				**18**	**20**	
9. Lowell Collaborative Preschool Academy	**112**	**14**	**18**	**0**	**80**		**0**
10. Lowell Day Nursery	**109**	**0**	**9**	**0**	**100**		**0**
11. Lowell Public Schools	**600**				**600**	**1098**	
12. Merrimack Valley Christian Day School	**60**	**0**	**8**	**0**	**37**		**15**
13. Saint Michael's	**40**				**20**	**20**	
14. Saint Patrick's	**26**				**13**	**13**	
15. Small Steps	**36**	**9**	**9**	**18**			
16. Ste Jeanne d'Arc	**32**				**16**	**16**	
17. Toddler Corner	**16**	**7**	**9**	**0**	**0**		**0**
18. UTEC Early Education Center	**26**	**7**	**0**	**9**	**10**		**0**
	3198	72	119	63	1454	1222	268

Recommendations

Share Family Survey data with state and local community leaders and families to inform the District's 5-year strategic plan.

- Host community forums on the importance of early education.
- Hold a listening tour for families of young children.
- Share Family Survey data with School Committee and Strategic Planning Teams.

Collect and clean Program Survey data in collaboration with Council members to shed light on current landscape of early education programs in Lowell.

- Work with Common Start Coalition and other initiatives to stabilize staffing in early education programs while increasing qualification and salaries to reduce turnover.
- Utilize the expertise of Lowell's Early Childhood Council to identify strengths and areas of opportunity.

- Determine the capacity of programs to expand offerings to three year olds.
- Identify space within Lowell Public Schools to expand full-day school year preschool programs.

Leverage funding to increase access to early learning programs through a mixed delivery system to stabilize programing and ensure universal access.

- Vouchers
- Scholarships
- Grants – Commonwealth Preschool Partnership Initiative
- State allocations – ESSER II Funds or Student Opportunity Act

Strengthen Connections between Abisi Adult Education Center and Early Childhood Department.

- Collaborate to restore Even Start Programing.

Build in process for collecting and using additional data set to inform needs and achievement of goals.

- Collect data on reason families withdraw request for Special Education evaluation and follow up with family in 6 months.
- Collect Family Survey information regarding each child's early childhood program experiences for the purposes of reporting data in SIMS for element DOE050.

Program Survey A.

1. What is your zip code

2. How many children under the age of five live in your home?

3. What ages are your children? (Check all that apply)

- [ ] birth to 15 months Infants
- [ ] 15 months to 2 years 9 months toddlers
- [ ] 3 years old to 4 years old by September 1
- [ ] 4 years to 5 years old by September 1
- [ ] 5 years to 6 years old by September 1
- [ ] 7 years to 8 years old by September 1
- [ ] 9 years to 13 years by September 1

4. Do you have a child with a disability? Individual Family Service Plan (IFSP) OR Individual Education Plan (IEP)

- ( ) Yes
- ( ) No
- ( ) No sure

5. Please check all of the types of early learning programs your child/children birth to 5 years old participat on a regular basis.

- [ ] Family member or friend
- [ ] A family child care program child care in home setting
- [ ] Lowell Public Schools preschool
- [ ] A faith-based or church program
- [ ] Center-based program including Child Care Center or Head Start
- [ ] Before school program
- [ ] After school program
- [ ] Early Intervention
- [ ] Library Story hours
- [ ] Lowell Public Schools Playgroup
- [ ] Family day trips to museums, library, or other cultural events
- [ ] Play dates friends or family
- [ ] Public School Preschool
- [ ] Not applicable because my child was not enrolled in an early education program
- [ ] Other (please specify)

6. If you have a preschool child (child age 3, 4, or 5 years old) who does not currently attend an early education program, please indicate why. (Check all that apply)

- [ ] The hours do not meet my needs
- [ ] It costs too much money
- [ ] I am unsure of the quality
- [ ] I cannot find services for my child's special needs
- [ ] The program is only open during the school year, not in summer
- [ ] I do not understand the language spoken at the school
- [ ] I do not know where to get the information about programs
- [ ] I am not interested in early education or care for my child
- [ ] The program does not serve three year olds
- [ ] I am on the wait list for a voucher
- [ ] Transportation
- [ ] Need evening care (work second shift)

Other (please specify)

7. Do you feel that you have enough information to find preschool and child care programs that will meet yo family's preference and needs?

- ◯ Yes
- ◯ No
- ◯ Not Sure

8. I would be interested in participating in the following types of activities for my child/children. (check all tha apply)

- ☐ Workshops on parenting or child development
- ☐ Weekly playgroups
- ☐ Parent leadership (school site council, parenting advisory group, or PTO)
- ☐ Library Story hours
- ☐ Volunteering time to support community engagement for young children and their families
- ☐ Other (please specify)
- ☐ Parenting support groups
- ☐ Child and family joint activities - interactive events to do witl children
- ☐ Participating in Lowell's Early Childhood Council or City wid School Site Council
- ☐ Participating in Lowell Public School's Special Education Parent Advisory Council

Families early education and child care needs

9. What type of early education and care program does your family need?

- ◯ Full day for the whole year (12 months)
- ◯ Full day for the school year (September-June)
- ◯ Half day for the whole year (12 months)
- ◯ Half day for the school year (September-June)
- ◯ Regular participation in playgroup and other community programming with my child
- ◯ After school care
- ◯ Before school care
- ◯ Activities for young children in the community
- ◯ I do not/would not wish to enroll my child in an early education program

10. If full-day early education and child care in Lowell was available to your child would you use it?

- ◯ Yes
- ◯ No
- ◯ Not Sure

11. If half-day early education and child care was available to your child would you use it?

- ◯ Yes
- ◯ No
- ◯ Not Sure

12. How likely are you to use early education and child care programming at the following cost per child/per week?

	Very likely	Somewhat likely	No sure	Not likely	Very unlikely
At no cost to my family	◯	◯	◯	◯	◯
up to $40.00 per week	◯	◯	◯	◯	◯
$40.00 to $100.00 per week	◯	◯	◯	◯	◯
$100.00 to $200.00 per week	◯	◯	◯	◯	◯
$300.00 to $400.00 per week	◯	◯	◯	◯	◯

13. What matters the most to you when choosing an early education and child care program? Please check the best answer on each line:

	Very Important	Somewhat Important	Not Important
The program is affordable	○	○	○
The center or family childcare program is close to my home	○	○	○
The hours meet my needs	○	○	○
I have friends or family who are in the program or have been in it	○	○	○
The childcare space is clean	○	○	○
The center or family child care program engages my child in activities that foster my child's development.	○	○	○
The program serves lunch/other meals	○	○	○
The program provides transportation	○	○	○
Educators are qualified and have knowledge of child development	○	○	○
Educators teach English to my child	○	○	○
Educators speak my home language	○	○	○
This program prepares my child for kindergarten	○	○	○
The program provides access to support me and my children (health and wellness, referrals, and resources)	○	○	○

14. What makes it difficult to get the early education and child care you want for your child? (Check all that apply)

- [ ] The hours do not meet my needs
- [ ] It costs too much money
- [ ] Too hard to get to the program
- [ ] I am unsure of the quality
- [ ] I cannot find services for my child's special needs
- [ ] The program is only open during the school year, not in summer.
- [ ] I do not understand the language spoken at the school
- [ ] I do not know where to get the information about programs
- [ ] I am not interested in childcare for my child
- [ ] I do not have any problems
- [ ] I do not have transportation

Other (please specify)

15. Please check all the community services your family need?

- [ ] Help with health and wellness (physical and behavioral)
- [ ] Help with housing
- [ ] Help with food
- [ ] Help with Transportation
- [ ] Help with my child's speech and language development
- [ ] Places I can go to play or have fun with my child
- [ ] Places I can go to be with other parents and children around my child's age
- [ ] Financial assistance for early education or childcare
- [ ] Adult Basic Education/GED/HS Diploma
- [ ] English Language Learning classes for adults and children
- [ ] Library story hours and programs
- [ ] Home visiting
- [ ] Early Intervention (ages 0 to 3)
- [ ] Help moving my child from one program, family child care, or school to another

Other (please specify)

16. What factors make your participation in activities at your child's early education and care more likely? Check all that apply.

- [ ] The educators speak my language
- [ ] I feel welcome
- [ ] I know other parents
- [ ] The times offered are good for me
- [ ] There is childcare for my other children
- [ ] The program is close to my home
- [ ] I was told that I had to attend
- [ ] They offer activities for my child and I to do together
- [ ] Information is provided to families around child development
- [ ] Meeting other parents
- [ ] Learning about community resources

Other (please specify)

17. What kinds of information has your child's program or teacher shared with you? Check all that apply:

- [ ] Tells me ways I can be involved in the program or community
- [ ] Shares daily activities
- [ ] Tells me how I can help my child succeed in school
- [ ] Shares information on my child's progress
- [ ] Shares information with me to foster my child's development
- [ ] Shares information about child's strengths and areas of concern

Other (please specify)

18. Are you eligible for any financial assistance (for example, a voucher or scholarship) to send your child to a program or child care?

- ◯ Yes
- ◯ No
- ◯ Not Sure

19. If not eligible for financial assistance, does the cost of early education and care limit your ability to access a program for your child.

- ◯ Yes
- ◯ No
- ◯ Not Sure

20. If not eligible for financial assistance, were you able to afford and find access to a program for your child?

- ◯ Yes
- ◯ No
- ◯ Not Applicable

21. Are you on a waitlist early education or child care programming? Check one.

- ◯ Yes
- ◯ No
- ◯ Not Sure

22. If your family wanted information on early childhood programs and services, how would you prefer to receive it?

- ◯ Not interested
- ◯ Mail/letter
- ◯ Email
- ◯ Text message
- ◯ Facebook
- ◯ Phone
- ◯ Lowell Public Schools Early Childhood Education website

Other (please specify)

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