



Early Childhood Brief

Draft:

Sep 9, 2024

Prepared by:

BERK12

Note: This report will be updated as additional information is requested, edits are required, and data is added. The date stamp (under the title) will signal the most current version.

Purpose.

Questions have been raised related to preschool programming across the two districts. This brief will attempt to organize and synthesize information about the current early childhood programs in order to better consider implications, options, and opportunities as the Sustainability project advances. In doing so, we hope to equip the research team, the 2D8T Steering Committee and the community with data and information necessary for planning in stages 2 & 3 of the study, when options and models are explored.

The importance of Early Childhood Education.

The importance of Early Childhood programming cannot be overemphasized. Early childhood experiences (birth to age 4 - prior to the start of formal schooling), are critical to cognitive development, which sets a foundation/trajectory for future educational, economic, and social success. These experiences offset gaps realized by students living in poverty, and are a necessary precursor to long-term educational and economic success. Research has confidently demonstrated that children begin learning long before they enter school and that development proceeds at an astonishingly rapid rate during the first few years of life. Neuroscience research shows that complex cognitive capacities are built on earlier foundational skills, and strongly shaped by interactions with caregivers and environments.

Summarized, the delivery of high-quality early learning opportunities, creating a continuum of learning from pre-kindergarten through grade three, can help close proficiency gaps and build a foundation for future success. Specifically:

Researchers have found that investments in quality preschool programs significantly bolster student success. According to the Learning Policy Institute, students who attend preschool are more prepared for school and less likely to be identified as having special needs or to be held back in elementary school compared to children who did not attend preschool. Additionally, studies show clear positive effects on children's early literacy and mathematics skills. ([Learning Policy Institute](#))

An empirical study led by an MIT economist, which examined children who attended public preschools in Boston from 1997 to 2003, found that attending preschool at age 4 makes children significantly more likely to go to college. The study revealed that among students of similar backgrounds, attendance at a public preschool increased "on-time" college enrollment — starting right after high school — by 8.3 percentage points, an 18 percent increase. There was also a 5.4 percentage point increase in college attendance at any time. ([Study: Preschool gives a big boost to college attendance](#))

A new review of scientific evidence indicates that preschool education for 3- and 4-year-olds can improve health and longevity while reducing persistent educational gaps. The review suggests that while gains are greater for those in poverty, children in middle-income households also benefit, leading to overall population gains. High-quality preschool programs provide much more than just basic academics; they support the cognitive, social, emotional, and physical development of the whole child ([Hahn & Barnett, Early Childhood Education: Health, Equity, and Economics](#)).

Poverty significantly impacts these early years. Income levels of families and maternal education levels are strong influencers of school readiness. This may be due to “input” advantages such as nutritious meals, safe and stimulating neighborhoods, access to high-quality childhood centers, and enriched (stimulating) home environments. Moreover, family relationships may be stressed by economic insecurity impacting the psychological well-being of the parents and, in turn, their ability to offer responsive and supportive parenting. This is further complicated by high-poverty homes that have associated problems with parental inconsistency related to routines and expectations, frequent changes

in caregiving, lack of consistent supervision, and poor role modeling. These stressors can impact brain development, namely the ability to make decisions, regulate emotions, and set goals. A few statistics to emphasize the importance:

Poverty:

- 61% of low-income children have no children's books at home.
- Poor children hear as many as 30 million fewer words than their more affluent peers.
- By age 2, poor children are already behind their peers in listening, counting, and other skills essential to literacy.
- A child's vocabulary as early as age 3 can predict third-grade reading achievement.
- By age 5, a typical middle-class child recognizes 22 letters of the alphabet, compared to 9 for a child from a low-income family.
- Black children enter Kindergarten with .4 reading and .66 math standard deviations below their white peers. In comparison, these gaps (deviations) double when comparing students from the 10th earning percentile and the 90th.

High-quality early learning, particularly through preschool programs, is instrumental in preparing children for academic success and future endeavors. Research highlights the long-term benefits, including increased college enrollment rates and improved health outcomes, especially for disadvantaged children. Investing in early education not only narrows proficiency gaps but also promotes overall societal well-being by nurturing the holistic development of young learners. Some highlighted outcomes of quality early childhood programs:

Outcomes:

- Pre-K (3 & 4 yr old programs) absenteeism is a strong predictor of chronic absenteeism in later grades.
- Expanding access to early childhood programs would narrow achievement gaps.
- Participation in early childhood boosts later earnings and positively impacts our national GDP.
- Affordable, accessible, quality early childhood programs help mothers' employment rates and income.
- Participation in early childhood reduces involvement with the criminal justice system and later need for remedial education.
- High-quality, affordable child care can help parents balance work and family responsibilities.

While this brief is not intended to provide a comprehensive literature study, it's important to offer that there are, generally, a number of tension points related to early education – as follows:

- **Mixed delivery.** Programs are delivered within public schools, private, federally funded, and home settings. This makes coordination and consistency challenging.
- **Access.** Ensuring that there is full, universal access to programs for all. Current barriers include cost, program funding, limited openings, & parental awareness/interest.

- **Participation.** Who and how often students participate. This can vary in contact time (dosage) from five full days to two half-days.
- **Standards.** Whether programs are aligned with state/national standards and/or accredited (evaluated) within.
- **Approach.** There is some conflict over program content, philosophy, and approach from child-centered (more play and exploration) to skills-centered (academic outcomes).
- **Family engagement.** Recognizing and incorporating the needs of families (parents) in light of low educational attainment, economic challenges, and language barriers.
- **Quality.** This overlaps with standards and accreditation but also includes the credentials and training (initial and ongoing) of the program teachers. Of consideration, is the availability of a high-quality workforce (often those with degrees seek higher-paying opportunities in public schools).
- **Reach.** The rights of individuals to care for and raise their children prior to compulsory programming.

There are a variety of indicators that relate to the early childhood domain, defined as birth to age 5. Confirmation of these statistics can be challenging, recognizing the complexity of data collection and consistency/accuracy of collection. Of interest are indicators related to:

- Prenatal care (including mother's behaviors)
- Profile of mother
- Access to and Participation in Day Care, PreKindergarten, and Kindergarten programming
- Dosage and Quality of Daycare, PreKindergarten, and Kindergarten programming
- Kindergarten Readiness (as determined through a consistent screening process)

While this memo is not intended to dive into all of these indicators, it may be a useful addition to future drafts.

Early childhood, organization.

Early childhood education is a broad term used to describe any type of educational program that serves children prior to their formal school years, specifically before they are old enough to enter kindergarten - typically defined by the ages birth to 5. While compulsory education begins at age 6 (or 7) in some states, many (like New York and Massachusetts) have added public full-day Kindergarten programs that serve 5-year-olds. Thus, most public schools on-board students at age 5, beginning a thirteen-year relationship that completes at grade 12.

It's important to consider terminology within the early childhood ecosystem, recognizing that descriptors such as daycare, preschool, toddlers, center, nursery, and pre-K – along with early childhood – are interchanged (inconsistently). This may be a function of age span, philosophy and/or delivery approach, or program affiliation and/or (state) approval status. For the purposes of this brief, early childhood and age spans will be applied as further identification. Within the early childhood domain, delivery tends to be organized into age spans as follows:

- Birth to 2 years, 9 months
- 3-year old
- 4-year old

As mentioned, early childhood is a mixed-delivery system with programming provided in childcare settings often referred to as daycare or nursery programs, or in more conventional preschool or pre-kindergarten classrooms. While all programs are registered and licensed, the differential likely boils down to how closely the program is aligned with quality standards that reflect best practices/research, as well as the level of staff credentials/training. Programs may be housed in center-based, home-based (family or group), or public school settings, and they may be offered part-day, full-day, or even on a year-round schedule including summers. Early childhood education programs also differ in terms of funding and sponsorship and can be privately run, operated by a local school system (public subsidy), or operated through a federally funded program like Head Start. Head Start provides children from families with lower socioeconomic status or those who qualify under a specific at-risk category with free access to early childhood education programs.

Public schools, as described below, run programs for 3 and 4-year-olds, generally referred to as preschool (preK). We will use this term forward.

Early childhood, preschool Quality.

There is ongoing debate about what type of program qualifies as simply care and what type of program qualifies as education-focused. Similarly, what constitutes high quality. While various approaches and philosophies are applied in early childhood programs, many seek (voluntarily or by requirement) external accreditation. There are a range of accrediting organizations, among them the National Association for the Education of Young Children. Additionally, many state departments of education and state/national organizations (such as the National Education Association), offer input on the aspirations and components of a high-quality early childhood setting.

There is great variation (curriculum, alignment to standards, and program philosophy) across early childhood programs, from home-based (living room) programs to more formal center-based programs (ie. Head Start) and public school-operated classrooms. Additionally, staff managing and teaching in these programs hold varying levels of training and credentials. In some programs, teachers may only hold a high school diploma, while in others they hold a teaching license and an advanced degree (Master's) in the field. This results in an inconsistent delivery of experiences (defined as quality) and outcomes for those children enrolled. Add to this the variable of inconsistent dosage (partial day, partial week programs) for children, and it is no surprise why children exit from programs with varying levels of K readiness.

Public schools and accredited programs can lead in this area given they often operate with well defined and rigorous levels of required teacher credentials, accreditation indicators, and alignment with state/industry standards.

In Massachusetts, early education is governed by the Department of Early Education and Care (EEC) and the Department of Elementary and Secondary Education (DESE). The Commonwealth (in concert with EEC and DESE) maintains a number of resources including:

- Preschool and Kindergarten Standards in Social-Emotional Development and Approaches to Play and Learning
- Guidelines for Preschool Learning Experiences
- Early Childhood Program Standards for 3 and 4 Years Old
- Massachusetts Early Learning Guidelines for Infants and Toddlers
- The Massachusetts Curriculum Frameworks for PreK-1

In Massachusetts, the EEC provides licenses for:

- **Family Child Care:** In the provider's home
- **Small Group and School-Age Child Care:** Up to 10 children in a community-based setting outside the home
- **Large Group and School-Age Child Care:** More than 10 or more children outside a home

The EEC maintains a Quality Rating Improvement System (QRIS) that is a method to assess, improve, and communicate the level of quality in early education and care and after-school settings - measuring and encouraging continuous improvement efforts. Additionally, the Massachusetts Association for the Education of Young Children (MAAEYC), an affiliate of the National Association for the Education of Young Children (NAEYC) provides resources and accreditation, which some early childhood programs take advantage of.

Early childhood, Certification.

In Massachusetts, there are two departments that certify early childhood educators: The Department of Early Education and Care (EEC) and the Department of Elementary and Secondary Education (DESE). EEC certifies the qualifications of educators to work in early education and care settings like childcare centers. These would include the ability to assume the following roles:

- Infant-toddler Teacher
- Infant-toddler Lead Teacher
- Preschool Teacher
- Preschool Lead Teacher
- Group Leader for Out-of-School Time
- Director I
- Director II

DESE licenses public school teachers for students in prekindergarten (PreK) through second grade. This license requires completion of a bachelor's degree and Massachusetts Tests for Education Licensure (MTEL) exams. Students who earn an Associate degree that allows them to teach in early childhood programs often complete a Bachelor's degree to meet public school teacher licensure requirements.

Important terms, Public School Preschool.

The following may/are offered by public school districts across the Commonwealth:

Home visitation programs are a service delivery strategy that links expectant parents and caregivers of young children with family support specialists. These specialists assist them in navigating the early stages of their child's life. Research indicates that visits from nurses, social workers, early childhood educators, or other professionals can support effective parenting, reduce abuse and neglect, improve health, and enhance child development and school readiness. Home visits typically include parenting guidance and coaching, as well as connecting families with necessary resources and services.

([Massachusetts EC101](#)). *The Mohawk Trail and Hawlemont School Districts do not offer these programs.*

Universal Preschool refers to a publicly funded education initiative that ensures all families have the opportunity to enroll their preschool-aged children in pre-kindergarten programs. This initiative aims to provide equitable access to early childhood education regardless of family income or background.

The Mohawk Trail and Hawlemont School Districts do not offer this model.

Integrated Preschool in Massachusetts refers to early childhood education programs that include both children with disabilities and their typically developing peers in the same classroom. These programs are designed to provide an inclusive environment where children of varying abilities learn and grow together, benefiting from diverse interactions and support. The goal is to foster social, emotional, and academic development through a curriculum that meets the needs of all students, ensuring that children with disabilities receive the necessary services and accommodations within a mainstream educational setting. Each classroom enrolls up with approximately 15 children. Of these 15 children, 7 will have identified special needs, and 8 will be typically developing peers who pay tuition to attend.

The Mohawk Trail and Hawlemont School Districts provide an integrated preschool model.

Current preschool models, introduction.

As mentioned, in Massachusetts, preschool programs are not compulsory. Preschool programs in Massachusetts are not mandatory, and families can choose their own arrangements. This may include home programs, center programs, community programs, or those operated by the local public school district. Public schools, while not required to provide preschools, are mandated to provide services to students with identified needs, as described below.

Early Childhood Special Education (ECSE) services are designed for young children (aged 3-5) with disabilities who need specially designed instruction or related services and whose disability(ies) causes the children to be unable to participate in developmentally appropriate typical preschool activities. School districts are required by law to ensure that developmentally appropriate ECSE programs and services are available. ECSE programs and services ensure that all children with disabilities have a free and appropriate public education (FAPE) that is designed to meet their unique needs and enable them to

make progress in acquiring knowledge and skills, improving social relationships, and learning to take action to meet their needs within the general education program.

A young child who is deemed eligible for special education receives services in the least restrictive environment (LRE), which can include his/her home, a childcare setting, or a public school, as determined by the child's Individualized Education Program (IEP) Team. Services are provided at no cost to families through ECSE programs in public school districts throughout Massachusetts. Processes for referral for evaluation and determination of eligibility are the same as those for older, school-aged children with disabilities. ([Mass DESE Early Childhood Special Education](#))

Current preschool models, details.

Mohawk Trail and Hawlemont districts offer preschool programs that deliver services for those students with identified needs, as well as “typical” students.

- There were a total of 6 preschool classrooms in 2023-24 in HRSD (1) and MTRSD (5), with 7 planned for 2024-25 (see details below).
- Approximately 89 students participated in partial or full-day programs, of these:
 - 25 were on IEPS (qualifying for services)
 - 16 students were choice (lived outside the 8 towns)
- Each classroom had a licensed teacher (total of 6)
- Each classroom had at least one paraprofessional, with several 1:1 and some part-time (total is just under 9)

In the Mohawk Trail and Hawlemont districts, students can attend school for varying amounts of time:

- half-day sessions (approximately 8:30 a.m. to 11:30 a.m.),
- extended-day sessions (approximately 8:30 a.m. to 12:30 p.m.), or
- full-day sessions (approximately 8:30 a.m. to 2:30 p.m.).

It is also worth noting that a student’s Individual Education Plan (IEP) dictates when a one-on-one support paraprofessional is needed for the student’s success or medical/safety reasons. Families can adjust the length of their child’s school day during the year through an updated application.

Enrollment for students on Individual Education Plans (IEPs), who require special education, is on a rolling basis, as students may qualify for special services throughout the year. All schools hold registration in their respective buildings for “community” peer partner students to join the integrated preschool program. Enrollment dates and information are advertised in advance and the district website contains a link regarding registration information. For the 2024 - 2025 school year, in-person registration dates ranged from the end of March through mid-April and coincided with kindergarten registration. Registration is for a three-hour day; however, families have the option of paying tuition for a longer day or additional days.

An essential component of the preschool program is the inclusion of "typical" peer partners, who learn alongside children with Individualized Education Plans (IEPs). These peer partners demonstrate

age-appropriate cognitive, motor, social, and speech/language skills. They can initiate and maintain positive interactions with other children, participate actively in group activities, and follow directions from adults. Peer partners benefit greatly from the integrated preschool model. They develop an understanding of individual differences, foster cooperation with a diverse range of peers, and form meaningful friendships. Additionally, they gain a deeper appreciation and acceptance of diversity, respect for others, and opportunities to reinforce their learning by helping others and achieving greater academic outcomes.

The varied schedules, combined with rolling enrollment (a requirement by the Massachusetts Department of Elementary and Secondary Education), affect the assessment of class sizes at any given time. Our research team consulted with the Principals who were unable to project all demographic information for the upcoming 2024-2025 school year because class rosters and registration had not yet been finalized.

Transportation, currently, is not provided for preschool students. When there are limitations due to class size or staffing restrictions that prevent placing all students within the attendance zone, a waiting list is created. Out-of-town students (choice) may apply at any time but will only be offered a spot if there is available space after all students within the attendance zone have been accommodated. Principals also reported that **most students who attend preschool at their schools continue to kindergarten and beyond at the same schools**. The principal at Colrain Central mentioned that, occasionally, a student from Vermont might be enrolled in their preschool program due to the close geographic proximity. However, for the student to continue into the kindergarten program, the Vermont family would pay tuition.

Below is a summary of the enrollment at the close of the 2023-24 school year, based on information provided to the research team at that time.

School/Indicators	Buckland Shelburne	Colrain Central	Hawlemont Regional	Sanderson Academy
Number of classrooms	2 in 2023-2024 (3 in 2024-2025)	1	1	2
Total number of students in each classroom	14 in each class (28 total) 14 projected for 24-25	18 16 projected for 24-25	10 11 projected for 24-25	16 (AM) 17 (Full Day) 14(AM) 14 (Full Day) projected for 24-25
Number of “role model” students in	2023-2024 Class A 5 Class B 11	14	7	15 (AM) 16 (Full Day)

each classroom	2024-2025 Class A 9 Class B 10 Class C 11			
Number of students on IEPs in each classroom	2023-2024 Class A 9 Class B 4 2024-2025 Class A 5 Class B 4 Class C 3	8	2	1 (AM) 1 (Full Day)
Number of choice students per classroom	2023-2024 Class A 4 Class B 6 2024-2025 Class A 5 Class B 4 Class C 9	23-24: 2 24-25: 0	2	0 in one class (PK-F) 2 in other class (PK-M)
Number of teachers per classroom (FTE)	1 (2 total)	1	1	1 (2 total)
Number of paraprofessionals/ assistant teachers per classroom (FTE)	2023-2024 Class A 1 1:1 para .8 Class B 1 1:1 para 1.0 2024-2025 Class A 1 1:1 para 1.6 Class B 1 1:1 para 1.5 Class C 1	23-24: 1 full-time and 2 part-time 24-25: 1 full-time and 1 part-time	1	1

Preschool participation.

It can be a challenge to perfectly determine what percentage (%) of students are participating in pre-school programming given ages, cut-off dates for school entry, participation in external (non-district) programs, and the fact that the preschool services in the district cover both age 3 and age 4 students (in effect, two cohorts of students). Additionally, numbers of choice students inflate enrollment in the preschool programs as they include students who do not live in the 8 towns.

We used a very rough methodology to determine approximate percentage participation. Using DESE provided [enrollment data](#), we examined the enrollment of both preK and Kindergarten 2017-2024. Given that preK has two cohorts of students (ages 3 & 4), we simply divided it by half and then set that number against the total Kindergarten enrollment to determine approximate % participation.

We did wonder about whether more age 4 or age 3 students tend to participate in preschool programming. In order to consider this question, we conducted a spot check in 2020 and found that it was an almost perfect 50:50 ratio of 3 and 4 year olds. While this may vary year-to-year, for the sake of this exercise, we will assume balance between the two cohorts (for the purpose of equally halving the total enrollment number).

For MTRSD, it appears that participation ranges from about 60-80%. Again, this number may be slightly smaller in that cohort sizes (halved) are approximations and additional students attending may be out-of-district (choice) students. As such, you could comfortably say that somewhere between half and about 2/3rds of eligible students attend the district preschool programs, with an overall eight year average of 70% participation.

Mohawk Trail RSD, PK & K Enrollment (2017-2024), % Participation

	PK (3/4)	PK (3/4)	K (5)	%
	TOTAL	HALVED	TOTAL	PARTICIPATION
2024	78	39	52	75%
2023	79	39.5	55	72%
2022	76	38	46	83%
2021	53	26.5	41	65%
2020	58	29	53	55%
2019	89	44.5	64	70%
2018	99	49.5	77	64%
2017	105	52.5	64	82%
TOTAL	637	318.5	452	70%

For HRSD, the enrollment fluctuations (as is the case with much of their data) are more volatile based on smaller cohort sizes. Thus, changes year-to-year may appear more dramatic than in MTRSD.

Participation, using the same limited methodology, results in participation rates from about 20% of eligible students to almost 100%. Overall, the eight year average participation rate was 58% - about 10% lower than MTRSD.

Hawlemont RSD, PK & K Enrollment (2017-2024), % Participation

	PK (3/4)	PK (3/4)	K (5)	%
	TOTAL	HALVED	TOTAL	PARTICIPATION
2024	3	1.5	8	19%
2023	17	8.5	9	94%

2022	17	8.5	15	57%
2021	13	6.5	13	50%
2020	23	11.5	16	72%
2019	29	14.5	15	97%
2018	26	13	25	52%
2017	10	5	17	29%
TOTAL	138	69	118	58%

As the districts consider working towards universal participation in preschool programs, this data collection and tracking can be improved and updated in order to create targets towards 100%, if the district chooses to set this as a goal.

Preschool, dosage.

We use the word “dosage” to refer to the amount of time a student attends a program. For example, if they attend half days, 3 to 5 days per week, an/or afternoon sessions. As such, the time-on-learning (in programs (will vary).

Below, the district provided information about how many in-district students take advantage of the free 3, hour program, by school 2016-2022. While this does not include the 2024 data, it provides a general snapshot of the level of participation/dosage. While there are variations by school, if you look at the aggregated data, there is a reasonable balance of families (across the years) choosing to attend 3 days versus 4 or 5 days. For example, in 2016, there was almost a perfect balance across the three options. In 2018, more students selected the 4 day option. Clearly, the more time in a program, the higher the dosage and, we would argue, the bigger the educational impact on the student’s development.

	BSE	Colrain	Hawlemont	Sanderson	Grand Total
2016	28	8		2	38
3 Days - 3 HOURS	7	4		1	12
4 Days - 3 HOURS	8	4			12
5 Days - 3 HOURS	13			1	14
2017	31	7		4	42
3 Days - 3 HOURS	8	1			9
4 Days - 3 HOURS	7	6			13
5 Days - 3 HOURS	16			4	20
2018	25	4	9	23	61
3 Days - 3 HOURS	2		5	5	12
4 Days - 3 HOURS	12	4	1	10	27
5 Days - 3 HOURS	11		3	8	22
2019	27	8	2	24	61
3 Days - 3 HOURS	4	2		7	13
4 Days - 3 HOURS	13	6	1	8	28
5 Days - 3 HOURS	10		1	9	20
2020	16	5	1	15	37
3 Days - 3 HOURS	3			8	11
4 Days - 3 HOURS	5	5		2	12
5 Days - 3 HOURS	8		1	5	14
2022	3	1		14	18
3 Days - 3 HOURS	2	1		12	15
4 Days - 3 HOURS	1				1
5 Days - 3 HOURS				2	2
Grand Total	130	33	12	82	257

Preschool composition.

The Massachusetts Department of Elementary and Secondary Education provides parameters around the makeup of integrated preschool classes. This includes the number of students, student-to-teacher ratios, as well as services provided to students.

For public school programs that integrate children with and without disabilities, the class size *shall not exceed 20* with one teacher and one aide and no more than five students with disabilities. If the number of *students with disabilities is six or seven* then the class size may *not exceed 15 students with one teacher and one aide*.

It appears the ratios in some classes do not align with these regulations. This could be due to exceptions allowed by DESE. The research team encourages exploring district student enrollment policies for preschool, as well as specifics outlined in preschool student Individual Education Plans (IEPs).

Preschool, registration.

All schools hold registration in their respective buildings. Enrollment dates and information are advertised in advance and the district website contains a link regarding registration information. For the 2024 - 2025 school year, in-person registration dates ranged from the end of March through mid-April and coincided with kindergarten registration. Registration is for a three-hour day; however, families have the option of paying tuition for a longer day or additional days.

Preschool, Core curriculum.

As with all other grades, there are Massachusetts DESE curriculum [standards](#) for preschool students in reading, mathematics, social studies, and science. These standards are incorporated into the daily curriculum through both imaginative play and teacher-directed activities. Children work on developing self-regulation skills, social skills such as problem-solving and communication, and cognitive flexibility and creativity. Teachers and other early childhood professionals modify and scaffold materials, strategies, and activities that respond to the individual learning needs of the students.

For the most part, the schools use teacher-created materials and assessments in preschool classes; however, there are some exceptions.

- Buckland-Shelburne School uses the *Keys to Literacy* program and routines for both instruction and to assess (benchmark) students. Keys to Literacy is considered to be high-quality instructional materials (HQIM).
 - The principal also shared specific student data
 - **50%** of kindergarten students who did not attend BSE preschool were above 50% on National Measures.
 - As compared to **86%** of Kindergarteners who did at least one year in BSE Preschool were above the same 50% measure.

- The early childhood coordinator reported that all the PK teachers and paras were trained in the Keys to Literacy Program during the 2022-2023 school year with the expectation that they would use the tools and strategies in their classrooms.
- Hawlemont Regional School uses an adapted version of the *Heggerty* program utilized with their upper grades. Heggerty does provide a phonemic awareness program designed for preschool students and is considered HQIM.

Preschool, Specialists.

According to the school principals, schools provide various specialist classes to enrich the core curriculum. In schools without a dedicated specialist block, these enrichment areas are incorporated into the classroom experience. The delivery of these opportunities varies by classroom, involving the classroom teacher, a paraprofessional, a volunteer, or a community partner.

Buckland Shelburne	Colrain Central	Hawlemont Regional	Sanderson Academy
Library only	Music/ Motor group/ Library	Art, HAY, Physical Education, Library, Music, Movement	Art, Music, Physical Education, Library, Mindful Movement

The research team is continuing to enhance this section. Areas still needing attention include providing more details on where students "choice" from, district preschool enrollment guidelines, and any screening assessments used.

Finance Analysis.

We received fiscal data from the district in order to determine the impact of the preschool operation on district finances.

Students

There were 26 students with special education status, 21 with IEPs, and 5 with referrals. Of these 26, 22 were attending MTRSD or HRSD, while 4 were attending Valley Play School. (Valley Play School is a licensed childcare facility that provides full-time childcare services.) Across the MTRSD programs, there were 14 choice students, and in HRSD two.

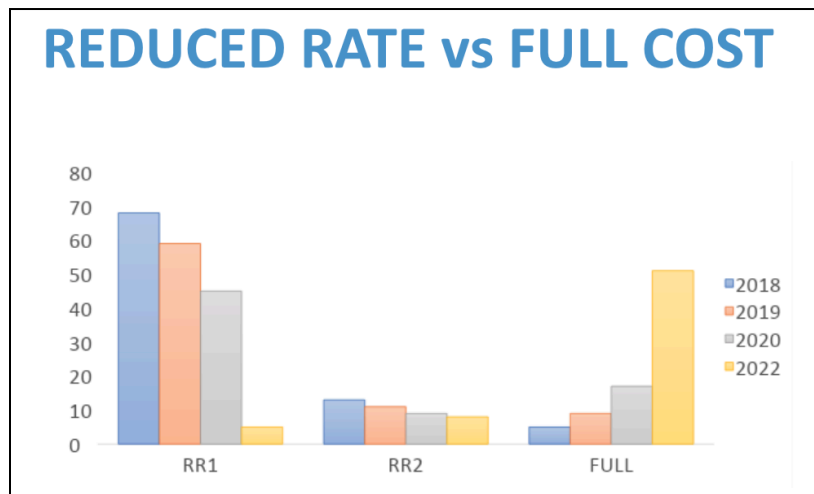
Revenue

As part of the preschool program, the district generates revenue through tuition. Overview:

- Tuition is calculated on an annual basis and then broken into 10 payments due on the first of the month in September through June.
- Prepaid discounts are offered (10% by 9/1 and 5% by 3/1).
- Rates are set for both 3 and 4-year-olds. There are full charge rates, and reduced rates (levels 1 & 2). Reduced rates are determined using the Federal Income Guidelines for Free/Reduced Lunch Program.

- Out-of-district students do not receive any free programming and pay the full rate.
- In district students receive free morning hours based on age (4 free mornings for 4-year-olds, 3 free mornings for 3-year-olds).
- Afternoon rates are set for in-district students who stay for the entire preschool program.
- A full charge rate for five days is about \$8600 per year. The afternoon rates, beyond the free morning hours, are about \$576 for one afternoon.
- A full charge rate for an afternoon (5 days) is about \$4,000 for 4-year-olds, while the two levels of reduced rates bring it down to \$2,520 and \$1,008 (this allows in-district students to participate for the full day).
- In MTRSD schools, there are extended morning options, while in HRSD there are not.
- There is no charge for special education students (IEPs are written as such).
- There is no out-of-district cost for Hawlemont, and all staff receive in-district rates even if they are out-of-district.
- All families can receive financial aid.

In an [enrollment trends presentation](#), the district displayed what percentage of students pay full, versus the two tiers of reduced rates.



Based on this data, between 2018 and 2022 there has been an increasing rate of full pay (from less than 10% in 2018). In contrast, reduced rate 1 has been on the decline since 2018 while the reduced rate 2 has been relatively stable.

Additional analysis is certainly possible if/as additional questions are asked, and data is requested.

School Details

The following fiscal data was provided by the business office. It is combined with the enrollment data collected directly from the schools. This data reflects the 2023-24 school year.

Colrain.Program Details

Classrooms operated	1
Total Students	18
Students w/IEP	8
Choice students	2
Teachers	1
Paraprofessionals	
Regular	1
Part-time (1:1)	2

Finance Details**Expenses**

Paraprofessionals	\$45,105
Teacher	<u>\$50,855</u>
Total	\$95,960

This class is mandatory given the number of IEP students

Revenue

Tuition	\$26,110
---------	----------

TOTAL COST TO DISTRICT	\$69,850
-------------------------------	-----------------

Buckland-ShelburneProgram Details

Classrooms operated	2
Total Students	28
Students w/IEP	13
Choice students	10
Teachers	2
Paraprofessionals	2.8

Finance Details**Expenses**

Paraprofessionals	\$64,464
Teachers	<u>\$134,336</u>
Total	\$198,800

Both classes are mandatory given the number of IEP students

Revenue

Tuition	\$75,268
---------	----------

TOTAL COST TO DISTRICT	\$123,532
-------------------------------	------------------

SandersonProgram Details

Classrooms operated	2
Total Students	33
Students w/IEP	2
Choice students	2
Teachers	2
Paraprofessionals	2

Finance Details**Expenses**

Paraprofessionals	\$96,385
Teachers	<u>\$151,812</u>
Total	\$248,197

Mandatory Classroom #1 (1 teacher, 2 para)	\$104,775
---	------------------

Optional Classroom #2 (1 teacher, 1 para)	\$143,442
--	------------------

Revenue

EXPLAIN	\$62,425
---------	----------

TOTAL COST TO DISTRICT TO RUN BOTH CLASSROOMS	\$185,772
--	------------------

TOTAL COST TO RUN SECOND CLASSROOM ONLY, LESS REVENUE	\$80,997
--	-----------------

Hawlemont.Program Details

Classrooms operated	1
Total Students	10
Students w/IEP	2
Choice students	2
Teachers	1
Paraprofessionals	
Regular	1

Finance Details**Expenses**

Paraprofessionals	\$24,398
Teacher	<u>\$39,708</u>
Total	\$64,106

This class is mandatory given the number of IEP students

Revenue

Tuition	\$11,281
---------	----------

TOTAL COST TO DISTRICT	\$52,825
-------------------------------	-----------------

Summary of Finances, MTRSD

Total students served	79
Special education students	23
Choice students	14
 Teachers	5
Para professionals	6.8
 Total expenditures	\$542,957
Mandatory classrooms (4)	\$399,535
Optional classroom (1)	\$143,422
 Revenue	\$168,803

If revenue were applied to, net cost to district (this assumes all revenues would still flow):

Total expenditures	\$379,154
Mandatory classrooms (4)	\$235,732
Optional classrooms (1)	\$(20,381)

Summary of Finances, MTRSD & HRSD Combined

**This model assumes 4 mandatory classrooms based on special education numbers*

Total students served	89
Special education students	25
Choice students	16
Teachers	6
Para professionals	7.8
Total expenditures	\$607,063
Mandatory classrooms (4)	\$399,535
Optional classroom (2)	\$207,528
Revenue	\$175,084

If revenue were applied to, net cost to district (this assumes all revenues would still flow):

Total expenditures	\$431,979
Mandatory classrooms (4)	\$224,451
Optional classrooms (2)	\$32,444

We will note that the district has not used special education grant funds (FC240) as part of this fiscal analysis. They do receive a FC262 grant that offsets costs associated with the early childhood coordinator.

Findings and Considerations:

The educational research fully justifies the importance of early intervention. To the degree that communities (schools and agencies) can support children in their earliest years results in positive outcomes (educational, behavioral, social-emotional). However, the early childhood ecosystem is a

mixed delivery system of variable quality, alignment to standards, training/credential for staff, and dosage (time on learning).

It is no surprise then that many state departments of education and school districts are pushing to expand formal programming for our youngest learners. While school districts are required to provide services for early learners with identified needs, many are moving towards universal (preschool for all) models.

Our review of the preschool programming in MTRSD and HRSD was high level, yet reveals some findings and considerations that can be advanced with additional data:

1. **Participation:** The district continues to encourage participation and invest in preschool programs (ages 3 and 4) beyond what is required.
 - a. Participation levels are reasonably high (50 - 70%) per cohort and suggest district commitment to supporting early learners in the 8 towns. This strategy also sets a solid foundation upon which universal preK could be considered in the near future.
 - b. School choice students (about 14 in 2024) are included in preK programs. Where spaces are available and choice students “fill” classes, this makes sense in that these families pay full tuition that can be applied to offset program costs. Additionally, given a general pattern of choice-out of the districts, engaging families early is a strategy to develop relationships and retain these families long-term in the districts - as has been evidenced in historical enrollment patterns.
 - c. Additional information on dosage is needed to more precisely model time-on-learning.
2. **Classrooms:** Between the two districts, there are 6 preK classrooms:
 - a. Of the five MTRSD classrooms, four would be categorized as “mandatory” in that they contain special education students in ratios approximate to state guidelines. Two notes:
 - i. Colrain may be slightly higher than recommended by DESE with 8 IEP students;
 - ii. Sanderson has two classrooms and is (by the numbers) mandated to operate one classroom, thus the second is optional.
 - b. Based on the number of special education students, there is the potential to combine the Hawlemont and Sanderson mandatory classroom into a single classroom. This would save some funding, but would also reduce the number of non-IEP students who could participate.
 - c. All totaled, of the 6 preschool classrooms operating between the MTRSD/HRSD elementary schools, based on 2024 numbers, the 8 towns could likely operate with 4 classrooms in meeting state requirements. If this were to occur, there would be less tuition revenue to program costs. This may have negative consequences in fewer students attending high quality programs, and enrollment implications for families who seek options in other districts. Additional analysis (and supporting data) would be needed to model this more precisely.

3. Funding:

- a. MTRSD invested about \$542,957 in 5 preK classrooms across three schools. With a revenue offset of \$163,803, the total cost to the district was \$379,154. Of the five classrooms, four are mandatory. The one optional classroom (Sanderson) costs between \$105-140,000 and could be eliminated. However, if cut it would result in reduced tuition revenue - thereby reducing savings.
- b. HRSD invested about \$64,106 in 1 preK classroom. With a revenue of \$11,281, the total cost was \$52,825. As the only district classroom, this is mandatory.
- c. Combined MTRSD and HRSD invested about \$607,063 in 6 preK classrooms. If they were run as a single district, 4 would be mandatory and 2 optional. If the two were cut, savings could be realized, but tuition would also be reduced, lowering savings. With this as a limitation, by only running the mandatory programs, the cost to the (combined) district could be reduced by about one-third.
- d. Currently, the preschool programs are funded without the benefit of FC240 or other potential grant funding. There may be an opportunity to seek additional grants to support program cost offset and/or to reflect special education costs by drawing from FC240.

4. Curriculum:

- a. The preschool program currently operates under various models, including half-day, full-day, and extended half-day schedules. This variability in program delivery results in students receiving different amounts of instructional time (dosage), making it difficult to consistently measure the program's impact and ensure all preschoolers are adequately prepared for kindergarten. To address this challenge, the district should consider adopting a research-based, high-quality preschool curriculum that ensures a uniform academic experience for all students.
- b. Such a curriculum would include a structured scope and sequence for key areas like literacy, math, and other content domains, ensuring that all students receive a well-rounded education. It would also incorporate strategies for differentiated instruction, enabling teachers to meet the diverse needs of all learners, including those with special needs and English Language Learners. By implementing a consistent, evidence-based curriculum, the district can better support the development of all preschool students and improve their readiness for kindergarten.
- c. Long-term, the district could seek out community partners and additional funds to expand home-visitation programs that support the earliest intervention and ongoing strengthening of relationships with families in the 8 towns.
- d. Potential connections to the high school could be expanded to build pathways for high school students towards early childhood/education pathways while also supporting the potential growth and expansion of preschool programming.
- e. Additional data could be collected about screening assessments and any evidence that suggests increased readiness for students who participate in preK programs, versus those who do not.

Close.

The purpose of this report was to explore trends in preschool programming across the two districts. These may (will likely) be important considerations as the Sustainability study moves forward. If our bias towards the need to invest in early childhood programs is not evident, we will reinforce that importance now. Dollars invested in our youngest learners yield positive outcomes for these students, for their families, and for our community. In fact, we commend districts working toward universal preK. Those who are able offer a value proposition that is attractive to families and can serve as both an educational and enrollment strategy.

We recognize that we have not answered all questions in this brief (or other briefs prepared), and this iterative process will require ongoing intelligence and revision. For example, updated analysis of preschool programs for the 24-25 school year may be warranted at some point in the coming school year. As such, we continue to encourage constructive feedback that includes critique, commendations, and ongoing questions or suggestions that help us to extend and improve this analysis. As we move towards the goal of developing solutions that strive to deliver the highest-quality education to our students at a cost the 8 towns can afford, we recognize that the ultimate decision will be made by the 2D8T Committee and the community.

This report was co-authored by Judy Rush (BERK12 Research) and H. Jake Eberwein (Project Manager), with the help of the BERK12 and MTRSD/HRSD teams. Comments, edits, questions and additional feedback can be directed to jakeeberwein@gmail.com or rushjudyr@gmail.com.