Vermont Early Childhood Education Apprenticeship Evaluation and Recommendations

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INTRODUCTION

Founded in 1916, Bank Street College of Education is renowned for pioneering early childhood and classroom-based progressive education rooted in how children develop and learn best. Since its inception, Bank Street has employed a scientific approach to the study of education, aiming to combine qualitative research and observation of practice for the betterment of children, teachers, and our larger democratic society. At Bank Street, we affirm that teaching and learning are expressions of justice. We believe that education is the world's most valuable cultural currency; we insist that it belongs to everyone. We ensure that students and educators develop the skills to thrive in our democracy and we build inclusive learning environments grounded in values of equity and anti-racism.

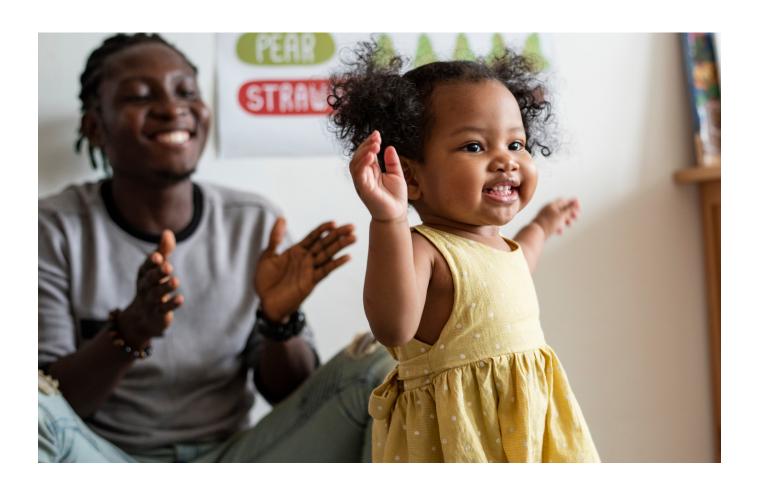
Today, Bank Street continues to research, support, and scale educational practices rooted in today's best understandings of how children, youth, and adults develop and learn. The Bank Street Education Center (the Ed Center) is a division of Bank Street College that disrupts inequity through systems-level change to help design better educational experiences for both children and adults. In deep collaboration with program partners—from teachers and families to policymakers—the Ed Center creates customized approaches that support strengths-based, learner-centered, and equitable educational practices to help all students and educators thrive. Through our work, we are building an evidence base to inform local practice and address some of the nation's deepest organizational challenges currently hindering effective and equitable teaching and learning for all.

Bank Street has long practiced and championed an approach to teacher development and preparation that centers the specific needs of learners, creates ample opportunities to make theory-to-practice connections through hands-on learning, and leverages the powerful impact of coaching and mentoring by highly skilled master educators. Apprenticeships enable early childhood educators to access a similar model of learning, where coursework is connected to daily teaching practice and learning is supported by a mentor educator. The Ed Center has produced several reports on apprenticeships in early childhood settings, including *Realizing the Promise of Early Educator Apprenticeships*, A *Snapshot of ECE Apprenticeship Programs*, and *Designing Early Childhood Educator Residency/ Apprenticeship Programs*: A *Guide to Estimating Costs*. ^{1,2,3} Early childhood apprenticeship programs are a promising approach to building a well-prepared, diverse, and dynamic workforce. They offer a unique method of providing on-the-job learning, relevant coursework, and supportive mentorship, which help to ensure that early childhood educators are well-equipped to support the developmental needs of young children, laying a strong foundation for lifelong learning.



The Ed Center was contracted by the Vermont Child Development Division (CDD) to conduct an evaluation of the Vermont Early Childhood Education Apprenticeship Program (VECEAP) and offer recommendations for its redesign. Vermont has a rich history of valuing education and community, and its early childhood education (ECE) system is a testament to this commitment. The state has long been a pioneer in progressive ECE practices and policies, emphasizing the importance of high-quality learning experiences for young children. With the recent passage of Act 76, the State increased Child Care Financial Assistance Program subsidy rates by 35 percent, providing programs with extra income that can be spent on program operations, which may include increasing educator compensation to support retention or investing in staff development.⁴ As Vermont continues to focus on creating an early care and education system that works for all its residents, the apprenticeship program is a critical component for building and sustaining a robust ECE workforce.

This report presents the findings of our evaluation, which aim to answer key questions about the apprenticeship's alignment with best practices, its use of available systems and resources, its success in attracting apprentices and mentors, and its role in workforce development.





PROGRAM DESCRIPTION

Apprenticeship programs have traditionally been used to bring new talent into high-skill, high-wage, high-demand trade professions such as electricians and plumbers. More recently, the model has expanded to human services fields such as education and behavioral health. The VECEAP was originally launched in 2001 and is currently administered by the Vermont Association for the Education of Young Children (VTAEYC), funded through a grant from the CDD of the Vermont Department of Children and Families. The program was connected with the T.E.A.C.H. Early Childhood® Vermont Scholarship Program Model (T.E.A.C.H. hereafter) in 2017, which outlines certain components to support early childhood educators in completing credentials and degrees. VTAEYC took over administration of the program in 2020. As part of the T.E.A.C.H. model, apprentice employers must agree to provide paid release time and a wage increase upon completion of an annual contract. The apprenticeship program is funded for 25 apprentices annually, and the current enrollment is 13. The youth apprenticeship program is funded for 25 apprentices and 20 students are currently enrolled.

The program is a registered apprenticeship with Vermont's Department of Labor. Registered apprenticeships are required to have five key components:⁶

- **1. Business/Employer Partnerships.** Apprentices must be currently employed by a licensed child care center to enroll in the program.
- 2. On-the-Job Training. On-site mentors support on-the-job training, specifically supporting apprentices in growing in National Association for the Education of Young Children (NAEYC) competencies. Mentors receive a \$1500 stipend annually. VTAEYC requires that mentors have an associate degree in ECE and complete a series of trainings focused on adult learning, including:
 - Mentor Pedagogy (required)
 - Perspectives in Leadership (optional)
 - Community of Practice (required)
- **3. Related Instruction.** This is provided by the Community College of Vermont (CCV), and currently involves 21 credit hours in ECE and related subjects.

Apprenticeship Course Requirements
INT 1050: Dimensions of Self & Society
EDU 1030: Introduction to Early Childhood Education
COM 1015: Communication in the Early Childhood Education & Afterschool Workplace
PSY 2010: Child Development
EDU 2045: Curriculum Development for Early Childhood Education
EDU 1270: Supporting Young Children with Diverse Abilities
EDU 2041: Leadership, Mentoring & Supervision for Early Childhood & Afterschool Practitioners
Total Apprenticeship Credits: 21



- 5. Wage Steps. Registered apprenticeships must include wage bumps—gradual increases in pay—as apprentices complete the program. In the T.E.A.C.H. model, this occurs at the completion of each one-year contract, via a \$500 bonus paid for by T.E.A.C.H. and a 1.5 percent wage increase from the employer.
- **6. Credential.** Upon completion of the program, apprentices earn an Apprenticeship Certificate and reach Level 3A on the Vermont Northern Lights Career Ladder.⁷

VTAEYC also administers a youth apprenticeship program for juniors and seniors in high school. The youth apprenticeship is administered through seven Career and Technical Education (CTE) centers around the state (out of 12 CTE centers total), either through human services or early education programs. Youth apprentices are placed at local child care centers (including Head Start programs) or Family Child Care (FCC) homes, and work 5 to 10 hours per week alongside a qualified mentor for \$15/hour. Participating high school seniors are required to take at least one college course (Introduction to Early Childhood Education) and are awarded a fast forward voucher or dual enrollment voucher at CCV. Youth apprenticeship mentors receive a \$500 stipend per semester and have the option to take Mentor Pedagogy and Perspectives in Leadership. They do not currently attend the mentor Community of Practice. Youth apprentices work with their mentor to practice NAEYC standards and competencies, while mentors complete assessments and track their work hours. Because of the alignment with NAEYC competencies, youth apprentices can pursue the apprenticeship after graduation.



QUALITATIVE DATA ANALYSIS

To identify strengths and areas for growth for the apprenticeship program, the Ed Center conducted 13 interviews with early childhood leaders throughout Vermont. Key themes and codes emerged during the analysis, which were reviewed and refined periodically. To ensure the validity of the data and findings, we conducted two member-checking interviews with five participants during which we asked for their feedback on whether the findings accurately reflect their experiences and perspectives. In addition to the interviews, we conducted three focus groups with apprentices, mentors, and directors, as well as a field survey. These elements are discussed later in the report and were analyzed using quantitative data analysis in the SPSS software. In order to gather background information, we also held two conversations with important State systems professionals, which were not included in the data analysis for confidentiality reasons. Through this comprehensive approach, we aim to provide insights and recommendations to enhance the design and impact of the VECEAP, ultimately contributing to the development of a robust ECE workforce in Vermont.



Overall Findings

To capture a well-rounded perspective on the VECEAP, participants were asked explicitly about the program's strengths and challenges. The interview questions centered around several core themes: the overall strengths and challenges of the program, communication between organizations running the program, how VECEAP fits into the broader pipeline for new ECE educators, the implications of the program's culminating credential, and its integration within the broader state context.

OVERALL STRENGTHS

Longevity

VECEAP boasts several significant strengths that contribute to its effectiveness and impact, as highlighted by both interviewees and focus group participants. One of the program's notable strengths is its longevity. Established in 2001, VECEAP has cultivated a wealth of experience in preparing early childhood educators. As one interviewee noted:

"I think that the longevity of it is the strength. So I think being able to say, this program has been in existence for a long time, is a strength because it gives you credibility. I think that a lot of times, people come in or ask about the program because they've heard, 'so and so was an apprentice five years ago,' so that pulls a lot."

This long-standing presence has allowed the program to refine its practices, build strong partnerships, and establish itself as a reliable pathway for aspiring educators in Vermont.

College Accessibility

Another strength of VECEAP is the access it provides to first-generation college students and single mothers. Seventy-one percent of apprenticeship focus group participants identified as first-generation college students. Many participants highlighted how the program offered them opportunities they might not have otherwise had. One focus group participant stated:

"I'm a single mom of two; one with some medical complexities. So between that and working, and trying to make everything else work, it wouldn't have worked out any other way."



For first-generation students, VECEAP serves as an accessible entry point into higher education, offering practical experience and mentorship that bridge the gap between high school and college. Single mothers, in particular, praised the program for accommodating their unique challenges, such as balancing child care responsibilities that often come with a significant financial burden. The supportive structure of VECEAP enables these individuals to pursue their educational and career goals, fostering a more inclusive ECE workforce.

"[My mentor and center director] helped me with a lot of my classes, a lot of my homework. She gave me three hours a week out of my classroom to get work done. Because I have kids at home, it's really hard to do work at home."

"I had never done well in school. So I was very, very hesitant about taking classes, but I did. I did extremely well. I am so grateful and appreciative of the apprentice program. I think it's wonderful. I can't say enough good things about it."

Stable Pipeline

VECEAP also plays a vital role in maintaining stability within the ECE workforce. By providing a small but steady stream of qualified educators, the program helps ensure that child care centers can meet licensing requirements and maintain standards of care. For example, one interviewee explained:

"[The apprenticeship] is recognized in the regulations. So [educators] may not be ready for an associate [degree program], but they still have a place where they can work in a program and achieve. That's going to help them get where they want to get."

This stability is crucial for young children who benefit from consistent, high-quality educational experiences during their formative years. Current and former apprentices spoke highly of the program, with many expressing that they would not have pursued college education without it. This positive feedback underscores VECEAP's impact on individual educators' ability to stay and grow in the field, as well as its broader contributions to workforce stability.

"School is not my thing. I liked that it was planned out one class at a time. That clicked in my head, like, 'oh, I could manage this.' I would also qualify as a classroom teacher without going through a bachelor's degree, or a master's, or anything further—that was really appealing to me."

"I want to stay as lead teacher in my center. I'm going to start [the T.E.A.C.H.] program in the fall. I love working with the one-year-olds. I've been there so long that I'm just most likely going to stay."

Leadership Development for Mentors

In addition to supporting apprentices, VECEAP offers significant benefits for mentors. The program and connected training provide a leadership pathway for experienced educators, allowing them to advance their careers while giving back to the community.

Serving as a mentor not only enhances their professional skills but also positions them as role models and leaders within the ECE field. This mentorship component enriches the program by fostering a culture of continuous learning and professional development. Many mentors have noted that their involvement in VECEAP has been a valuable step in their career path, providing them with new opportunities for growth and advancement.

"I honestly [became a mentor] initially to push myself... to take kind of a leadership position; it felt like the next step. You watched somebody else mentor all those times, [and you feel like] it's your turn. It's as much about us growing as it is about seeing them grow, too. I feel like I've grown a ton as a teacher and an educator through this process. You can't help but learn when you're teaching, right?



Summary of Strengths

Overall, the VECAEP stands out for its comprehensive approach to supporting both apprentices and mentors. Its strengths in offering access to underserved groups, maintaining workforce stability, and providing leadership opportunities make it a vital component of Vermont's ECE landscape. The positive testimonials from participants highlight the program's profound impact on their educational and professional journeys, affirming VECEAP's role in shaping a dynamic and well-prepared ECE workforce.

OVERALL AREAS FOR IMPROVEMENT

Limitation of Culminating Credential

While the VECEAP has many strengths, several areas for growth were identified. One of the most significant challenges raised by participants is that the program does not culminate in an associate degree. While some interviewees indicated that there was a place for this program outside of an associate degree, this limitation was mostly viewed negatively, as it can restrict apprentices' career advancement and earning potential. As one interviewee stated:

"I would love to see that as a second step of your apprenticeship — no matter what anyone ends up doing, I feel like achieving your associate's degree is leaving people in a better place... no matter what they determine they want to do next."

Several apprentice focus group participants stated that they went on to get their associate degree after completing the apprenticeship program, indicating that they were able to independently build on the foundation that they established through VECEAP.

"I'm hoping to go into my associates after I finish the apprenticeship and get my certificate. Then hopefully do my bachelor's, and potentially my licensure, eventually."

"I have one staff member who did apprenticeship and is now doing the degree with just the T.E.A.C.H. scholarship. The apprenticeship was really important for her to have the guidance and somebody who was holding her accountable. This was a person who said, 'after apprenticeship, I'm never doing anymore college work.' By the end, it was like, 'I can do this. I can do more now as a single full time working mom."

However, in a focus group for sponsoring center directors, some expressed doubt as to whether most former apprentices could complete an associate degree without the support of the apprenticeship program.

"I can see how ... losing [apprenticeship] support completely could be really challenging—being so successful in an apprenticeship program and then maybe having drastically less success in another program when all of those supports are not built in in the same way."

Restrictive Requirements

The restrictive requirements of the program were also cited as a significant challenge. The administrative burden of the scholarship (e.g., contracts, paperwork, etc.), the limit to taking one course per semester, and the complications with other financial aid support were all cited as restrictive aspects of the program. Staffing challenges in providing paid release time required by T.E.A.C.H. make it difficult for prospective sponsor sites to commit to the program. As one interviewee noted:



"You really do need to have buy-in from the employer. I think that's probably true for any sort of apprenticeship, but it's particularly challenging in early childhood when we have major understaffing challenges happening."

"If I'm honest, since COVID, we're still not back to full staffing. So, getting those three hours out of the classroom for the apprentice is really hard from a staffing perspective. I think it's really valuable for the apprentices. They do need time—to take that class, or do their homework, whatever it is. I think it's a valuable thing. I know there's a stipend to pay for subs, and that's helpful generally. But just finding the body to go in there can be hard."

Lack of Qualified Mentors

The shortage of mentors is another barrier to engaging in the program, due in part to the requirement of an associate degree and the time required to mentor another educator. Because of the lack of available mentors, center directors often step into this role, which can complicate the peer-to-peer relationship generally expected between mentors and apprentices. Having a direct supervisor as a mentor can create conflicts of interest and power dynamics that make the mentorship process less effective and more stressful for apprentices. While most interviewees noted this as an area for improvement, many added that these restrictions were outside of their control. Of note, focus group participants stated that their relationship with their mentor was positive, even if it was their center director.

Communication and Technological Challenges

Participants also reported difficulties with communication from the organizations involved with the program. Apprentices said they often experienced delays in receiving responses to their emails, sometimes waiting weeks for a reply. It was unclear if this communication hiccup was from CCV advisors alone or also from VTAEYC staff. This lack of timely communication can lead to frustration and a feeling of being unsupported, negatively impacting the overall apprentice experience. As one focus group participant noted:

"Communication is really, really difficult. It's frustrating, and then they just kind of stop midway. Like, 'well, I haven't gotten an answer to that question so I'm just not going to do anything."

Technical challenges at the individual level further complicate participation in VECEAP. Apprentices frequently face technology-related issues, which can be particularly problematic given the increasing reliance on digital tools and platforms for education and communication. One such example is the portfolio, which is entirely online and requires a fair amount of computer literacy. These challenges can create barriers to completing program requirements and fully engaging with the content of the program.

"It was very foreign to me, because Google Sites was super new for me. Blogging was fine, doing the blog post, that's not hard for me. But it was like, where do we go [on the webpage]?"

Another area for growth is the lack of overall awareness of the program across the state. Many potential candidates and ECE centers are not aware of VECEAP (Appendix C), which limits the program's reach and effectiveness. This lack of visibility hinders the program's ability to attract a robust number of apprentices and mentors, reducing its overall impact on the workforce.

"[I would recommend] spreading awareness a bit more of the program. I'm pretty sure if I had known of it sooner, I would have started it sooner, and probably would have completed at least my associates by now."

Additionally, there have been some challenges with the collaboration between organizations and government agencies. These inter-organizational issues can lead to inconsistencies in program delivery, confusion among participants, and an overall lack of cohesion that undermines the program's effectiveness. For example, one interviewee noted:



There have been changes in leadership there that have not helped the collaboration grow, and then there" have been changes in leadership that have helped it flourish. When things are not going well there, it ripples out and is felt."

However, most participants noted that many of the tensions in previous relationships between organizations have improved.

Lack of Access for Family Child Care Providers

Lastly, there is a lack of opportunities for FCC providers to participate in VECEAP. As one interviewee stated:

"One of the things that I personally struggled with is that [VECEAP is] not available to all early childhood educators in Vermont. It's not available to family child care providers, and I think that that would be a group of educators who would benefit from having the structure of the apprenticeship model."

These providers play a crucial role in the ECE landscape, especially in rural areas, and their exclusion from the program means that a significant segment of the workforce is not being adequately supported or developed.

PROGRAM DISTRIBUTION

In addition to conducting interviews and focus groups, the Ed Center analyzed the distribution of early childhood programs participating in the apprenticeship program across the state. This analysis involved comparing the geographic spread of these programs with the origins of current and past apprentices and examining how these patterns relate to various demographic factors, such as racial composition and average income by county. To visualize this distribution, two maps were created using data from VECEAP, Bright Futures Information System, and the Census. These maps, which can be found here and here, highlight several key findings (Chart 2 & 3).

Chart 2. Vermont Early Childhood Programs

Current Apprentice Sponsor Programs (24-25) All items Current and Repeat Apprentice Sponsor Programs (24-25) All items Former Apprentice Sponsor Programs All items **FCCs Non-Apprentice Sponsor Programs**

All items

Child Care Center Non-Apprentice Sponsor Program

All items

Vermont Demographics (Race+Income)

All items

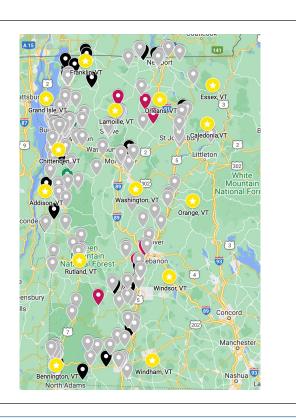
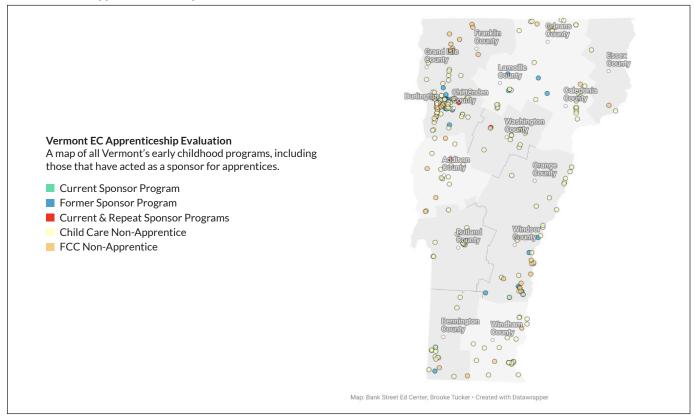




Chart 3. Datawrapper VECEAP Map



The counties with the highest percentages of Black and Latino populations include Addison, Chittenden, Washington, and Windham.⁴ Meanwhile, the counties with the lowest median incomes are Caledonia, Essex, Orleans, and Rutland.⁸ Based on the data of current and past apprentices and the demographic information mentioned above, specific outreach efforts could be targeted in Caledonia, Washington, and Essex counties, which currently have limited awareness of the program. Other counties, such as Addison, Chittenden, Washington, and Windham, already have apprentices or have had them in the past and therefore have some familiarity with the program.

Another area of growth is the inclusion of Vermont's large refugee population in the program. We asked interviewees specifically about the inclusion of this population, to which one interviewee noted:

"In some refugee [communities], there are more unregistered [programs]...programs where one family will be watching everyone in the neighborhood's kids. We've been talking about ways that we can reach out to those communities and where they'll be receptive."

Given the finding around program awareness, we utilized the map to explore potential outreach among refugee populations. Chittenden and Windham counties, which have some of the largest refugee populations—particularly Afghans, Ukrainians, and a significant influx of Haitian and Cuban entrants in 2021—were of particular interest. Although these counties have had apprentices in the past, further outreach is necessary to assess the representation of the refugee population within these programs, if any.



NATIONAL RESEARCH

In order to situate Vermont's program in the national landscape of apprenticeship programs and consider other models, we explored several different approaches to early educator apprenticeships from around the country.

FAMILY CHILD CARE APPRENTICESHIPS

In interviews, several early childhood leaders suggested the apprenticeship program should be open to FCC providers. The challenge in using the apprenticeship model for FCCs is the lack of an on-site supervisor or employer/business partner, as FCC providers are sole proprietors. Other states have demonstrated limited success in adapting an apprenticeship model for this target audience, namely by identifying a backbone organization (e.g., an FCC union and a Child Care Resource & Referral Agency) to provide supervision and mentorship.



In California, Early Care & Education Pathways to Success (ECEPTS) served as the apprenticeship intermediary for an FCC apprenticeship program which was piloted with 20 FCCs from 2021-23 with funding from the Heising-Simons Foundation. Fifteen of 20 participants completed the program, with five dropping out due to health or family issues. FCC providers took four college courses that are required to earn the California Child Development Associate Teacher Permit. A Child Care Resource and Referral organization, Child Care Resource Center (CCRC) in San Bernardino served as the lead agency, providing a mentor that worked with all participants and hosting the coursework in person and on weekends. ECEPTS registered this as an on-the-job training program—it was never a registered apprenticeship, as FCCs are their own business owners.

Rhode Island launched a registered ECE apprenticeship program specifically targeted to Spanish-speaking FCC providers in April 2021. Partners in the program include the Rhode Island Department of Human Services (DHS), which sets the quality standards of care; SEIU 1199 NE, which represents the bargaining unit of the FCC providers; the SEIU Education and Support Fund, which sponsors the apprenticeship, serves as an education provider, and provides coaching; and FCC providers themselves, who serve on the Joint Apprenticeship Training Committee that oversees the program. FCCs earn their Child Development Associate (CDA) credential through classes at the Community College of Rhode Island. Other FCC providers serve as peer mentors for the program and receive a 22-hour training that focuses on cross-cultural communication, goal-setting, problem-solving, conflict resolution, quality improvement, and the difference between evaluation and assessment. SEIU runs several other FCC apprenticeship programs around the country, including in California, Maryland, Maine, and a program in the planning phase in Connecticut.

One approach to addressing the lack of a supervisor/employer is to consider the state as a quasi-employer for FCC providers that receive child care subsidy funds. Desiree Leclair, National Director of Workforce Development, Child Care for the SEIU Education and Support Fund, explained that in the Rhode Island program, the FCC apprentice receives a wage increase because the credential they earn through the program moves them to the next tier of the QRIS, and subsidy rates increase with this movement.



APPRENTICESHIPS WITH ASCENDING CREDENTIAL TRACKS

Maine offers an example of creating two early childhood apprenticeship tracks that build upon each other—Early Childhood Specialist 1 and 2.¹³ Apprentices in the Early Childhood Specialist 1 track earn a Maine Infant Toddler Credential, Maine Youth Development Credential, Maine Family Child Care Credential, or a Preschool CDA. Apprentices in the Early Childhood Specialist 2 pathway earn an associate degree through a partnership with two colleges. The second track is a more recent addition and has not yet had apprentices progress through the program. Maine Roads to Quality Professional Development Network is the intermediary and the sponsor of the Maine ECE Registered Apprenticeship Program, which is funded through the State's Child Care Development Block Grant (CCDBG) through a contract with the Office of Child & Family Services in the Maine Department of Health & Human Services. In Maine, apprentices are required to have a minimum starting wage of 1.25 times the state's minimum wage (\$17.69) and an ending wage of 1.5 times the state's minimum wage (\$21.23). The apprenticeship program provides the sponsoring employer with \$10,000 per year in wage supplements to meet this requirement, but it limits the program to a maximum of 10 new apprentices per year.

Oregon offers an apprenticeship in behavioral health with three levels, which offer different entry points and a pathway for new-to-the-field professionals to progress in the field. It includes targeted opportunities for people who have experienced addiction themselves, as Level One offers programming for peer support specialists. Level Two is for professionals pursuing bachelor's degrees, and Level Three supports apprentices pursuing a master's degree. This is an example of an apprenticeship adapted to a human services field, which offers a strong wage progression and targets an underserved population.

Both of these programs offer examples of structures that enable apprentices to enter at any level and encourage apprentices to advance through ascending credentials if they wish.

ESTABLISHED APPRENTICESHIP PROGRAMS WITH STRONG ENROLLMENT AND COMPLETION

West Virginia has the longest running early childhood apprenticeship in the nation, which has existed since 1989. The program runs for four semesters, each 15 weeks in duration, with classes held one night a week for 2.5 hours. Apprentices can complete the program in less than 1.5 years. It offers classes in person and virtually. Apprentices pay \$25 a semester to participate in the program. Upon completion, apprentices earn their Child Development Specialist credential, Level V on the State's career pathway. Classes are offered regionally, and are available depending upon "the number of interested early childhood programs, the availability of instructors, an appropriate location to hold class, and the establishment of a local council." The local council representative both registers students and oversees the implementation of courses. The program had 421 apprentices registered for the Spring 2024 semester and graduated 100 apprentices in 2023. Funding for the program is provided through the State's Child Care Development Block Grant (CCDBG).

Pennsylvania's apprenticeship program has multiple models around the state, with a variety of different culminating credentials and degrees (including Child Development Associate credentials, associate degrees, and bachelor's degrees). It was started in Philadelphia by SEIU 1199c. Upon its success, the State pursued establishing apprenticeships throughout Pennsylvania. Pennsylvania Key oversees and runs the project work for the state. ²⁰ Each apprenticeship is administered by a regional hub that has its own intermediaries and determines the credential or degree that works best for the community. Some programs also partnered with local private businesses for funding and support to establish the program. For example, Volvo, a large employer in the area, contributed initial support.

These examples demonstrate the value of having local or regional touchpoints to recruit apprentices into the program.



YOUTH APPRENTICESHIPS

Youth apprenticeships offer a pathway for high school students to explore careers in ECE, providing a general introduction to education and human services fields and potentially leading to later employment in child care or pre-kindergarten programs. Youth apprenticeships in ECE are a newer approach to workforce development. Because of this, there are not yet abundant examples or available research on their impact. As with the broader apprenticeship system, a key goal is creating a pathway to high wages. Recruiting young people into ECE may raise equity concerns as it remains a persistently low-paying field. High schoolers often use youth apprenticeships for career exploration and therefore the program may attract students who are interested in elementary school teaching or other human services professions, so youth apprenticeships are not necessarily a direct recruitment pipeline. As Vermont continues to pursue this program, tracking student outcomes (such as entrance into college programs or employment in the ECE field) could contribute valuable information on the impact of these programs.

One example of ECE youth apprenticeships takes place in California. Students in Oakland's Early Care and Education Youth Apprenticeship program earn 12 college credits through Berkeley City College while completing 150 on-the-job training hours at a child care center that is co-located within the high school. The courses are interdisciplinary and include general education coursework.²² The program was established in 2019 and is showing promise, but because these programs are new for ECE, there is not a wide body of evidence to demonstrate their efficacy.

VERMONT APPRENTICESHIP PROGRAMS

Most apprenticeship programs in Vermont are targeted toward trade professions, such as electricians and plumbers, and thus offer few best practice lessons as these roles focus on a more tangible skill set than teaching or caring for children.²³ The closest analogous program may be the newly established Vermont Teacher Apprenticeship Program, which launched in Fall 2024 and is focused on the Northeast Kingdom. Apprentice teachers must already hold a bachelor's degree and currently teach under an emergency or provisional license. The apprenticeship consists of weekly modules and culminates in Level One licensure so long as participants complete the coursework and their Vermont Licensure Portfolio.²⁴

The Vermont Rural Education Collaborative, which pursued partnerships with the Department of Labor and Agency of Education to launch this initiative, also intends to launch a Teacher Apprenticeship for those who do not yet have a bachelor's degree and for professionals pursuing a master's degree. This model is similar to Vermont's current ECE apprenticeship in that it focuses on incumbent teachers, although apprentices already have experience with a college education. As this program is implemented, VTAEYC or CDD may wish to connect with its leaders to learn more about its successes and challenges thus far.





RECOMMENDATIONS

CREATE AN EQUITY-CENTERED RECRUITMENT PLAN TO INCREASE IMPACT

Vermont's apprenticeship program has been under-enrolled for several years (Table 1). The traditional apprenticeship is funded for 25 apprentices annually but in FY2024, there were approximately half that number enrolled.

Table 1. Apprenticeship Enrollment

	Number of apprentices enrolled	Number of apprentices funded	Number of youth apprentices enrolled	Number of youth apprentices funded
FY2022	18	25	19	25
FY2023	15	25	12	25
FY2024 (as of Q3)	12	25	20	25

Given that the support of a sponsor employer is required for a professional to pursue an apprenticeship, center directors are an important resource to support educators in entering the program. Of the eight current sponsor programs, five had previously sponsored apprentices. This repeat participation is a positive indicator of satisfaction with the program, however, 85 percent of centers in the state (187 out of 221 licensed providers for infants, toddlers, and preschoolers) have not participated in the program. The apprenticeship could increase impact across regions of the state if recruitment focused on areas that have not historically accessed it (as shown in the previously referenced map).



To increase diversity in the program, recruitment should focus on both region and demographic composition. With this in mind, we recommend targeted efforts towards centers in Caledonia, Essex, and Washington counties, which have lower median incomes and higher populations of Black and Latine Vermonters. Marketing materials for prospective sponsor sites could include messaging around increased retention and the impact of highly qualified teachers on program quality.

Partnership from CDD, including consultation with licensing staff, could support the dissemination of materials or provide guidance on which centers to target. Quality Support Specialists from the System for Program Access to Resources for Quality Supports (SPARQS) program already provide similar support and referrals to the program. Prioritizing larger centers could support directors in being able to identify a mentor and could also result in the recruitment of multiple apprentices from one site.

Learning from apprenticeship programs in other states and the importance of tailored local/regional approaches to outreach, VTAEYC may want to consider partnering with Community Child Care Support Agencies and/or Northern Lights Resource Advisors around the state to spread the word about the program and increase recruitment from programs not yet engaged in SPARQS. Former or current apprentice sponsors could serve as "apprenticeship ambassadors," reaching out to other center directors about the impact and benefit of the program and connecting interested leaders to VTAEYC.



Vermont CDD should establish a relationship with the State Refugee Office in the Agency of Human Services for support in engaging communities with refugee populations. If CDD supports the establishment of licensed centers in these communities, they could refer interested participants to the apprenticeship program. This would both provide a career pathway for refugees as they move through the resettlement process and create a pipeline of early childhood professionals who reflect the culture of children in their communities.

To ensure that the program reaches those who would benefit the most from its support, individualized marketing efforts should make the benefits of the program clear. In the focus groups, first generation college students and single parents both expressed that the support provided by the apprenticeship program enabled them to attend college. VTAEYC should highlight the program's approachable college coursework directly tied to day-to-day teaching practice, one-on-one mentorship to guide learning and provide encouragement, and paid leave time to attend class or study. Marketing materials (such as videos, flyers, or brochures) could include testimonials from current or former apprentices alongside a brief list of program components.

A clear pathway from the youth apprenticeship program to the apprenticeship program could provide a steady pipeline of new apprentices ready to begin a long-term career in early care and education. As more professionals leave the field, it is increasingly important to recruit young people and provide them with the knowledge and experience needed to enter and persist as educators. Harnessing this early interest and giving young educators the support they need in their earliest years of teaching can contribute to retention and create a sustainable path into the field. We also recommend tracking the career trajectory of youth apprentices to determine whether they typically stay in early childhood or transition to other fields.

STRENGTHEN COMMUNICATION

VTAEYC currently has two staff dedicated to communication with apprentices, youth apprentices, and mentors across the state. In our focus groups, we heard concerns about communication with the program from apprentices, mentors, and sponsoring center directors. In some cases, individuals seemed unsure who to reach out to (e.g., VTAEYC staff or a CCV advisor). In other cases, people referenced waiting for responses via email only to learn that the staff member had changed. We also heard stories of apprentices asking their mentors questions about the program and receiving inaccurate responses because these questions were outside of the mentor's scope.

"I think the paperwork and sometimes communication were a little confusing. We had several emails back and forth just trying to figure out how I was supposed to answer [the forms]."

"There was definitely a lot of emailing back and forth until we understood what was going on."

Some sponsors and apprentices reported difficulty navigating enrollment and related paperwork at the outset of the program. A Flesch-Kinkaid readability analysis of the apprentice contract rated it at a ninth-grade level, and the personal responsibilities document at an 11th-grade level. Standard guidelines for creating accessible materials recommend that they are written at a maximum of a fifth-grade reading level.²⁷ Although some of the contractual language is likely required by T.E.A.C.H. Early Childhood National Center, we recommend working to see if the initial material can be made more accessible to reduce comprehension barriers and overwhelm.

"[It was] definitely overwhelming and a lot of information at once. I think it was more the technical jargon.... It was almost like reading what a lawyer would write. I think understanding exactly what they meant was difficult. But once it was figured out, it was pretty straightforward."

A new set of resources for current apprentices, mentors, and sponsoring center directors should include answers



to frequently asked questions, clearly delineate who to contact depending on topic area, and include a visual of how to enter and progress in the program (including necessary paperwork). For example, a communications chart could clarify that questions about class enrollment should be directed to a CCV advisor, whereas questions about T.E.A.C.H. requirements should be directed toward VTAEYC staff (rather than a mentor). Mentor training should also include some reminders about who apprentices can reach out to with questions about the program, and what kind of questions to direct towards VTAEYC versus CCV. This information is likely made clear in initial orientations, but having the information readily accessible and in different modalities can provide valuable support throughout the program. All materials should also be analyzed for readability.

"I think it's hard to understand how to move forward in the program sometimes, because a lot of it involves self-searching. Like I've gone through the website and I've asked [a VTAEYC staff member] about it. But I think it's hard because when I look at the website it's super daunting."

While the development and organization of these resources would require an initial investment of staff time, it would eventually relieve the communication burden on VTAEYC staff members, reducing the number of emails and phone calls requiring response. We believe this would not require additional funding.

ADAPT PROGRAM DESIGN TO VERMONT'S EDUCATORS AND UNIQUE STATE CONTEXT

Consider adapting the course pacing

In our focus groups and interviews, some individuals expressed appreciation for the limitation of one class per semester, while others expressed frustration. This limitation means that apprentices can earn a maximum of 9 credits per calendar year (assuming an apprentice takes one 3 credit class in the spring, summer, and fall semesters). The fastest an apprentice could complete the program is therefore 2 years and 4 months (7 semesters, 3 credits per semester). As apprentices become accustomed to balancing coursework and working, allowing them the flexibility to take more than one course at a time would enable them to graduate from the program more quickly and could improve the completion rate of the program overall. Adult learners often stop out of college programs given personal challenges such as health or family issues.²⁸ Allowing those who feel academically prepared to take more classes when circumstances allow would enable them to go further in the program faster.

This would either require additional funding upfront or slightly smaller cohorts if some apprentices are taking more coursework (e.g., one apprentice taking two classes may take two 'slots' in the program). However, this could result in the investment being recouped as more apprentices persist and complete the program more quickly.

Create a crosswalk to link competencies to coursework

There is an opportunity for VTAEYC and CCV to work together to promote more cohesion across coursework, portfolio completion, and mentorship support. VTAEYC recently shifted the apprenticeship program from an hours-based model, which requires apprentices to log hours worked, to a competency-based model, which requires apprentices to demonstrate satisfactory performance in various NAEYC competencies via a portfolio. Many in the focus groups expressed that this was a positive change, although there was some confusion around the web-based portfolio and what to 'look for' for each competency. Apprentices also expressed a desire for more structure around completing the competencies, such as due dates or guidelines for when each blog assignment should be completed.

"It's confusing because I am supposed to hit all these competencies [and] I have to show evidence, but the evidence is observations my mentor makes. I basically have to prove how I know the competencies. I have to do it off of websites, and resources and stuff like that. Some of the classes [are not] correlated [to the competencies]."



"I wish it was a little more structured, instead of just letting us go at our own pace. I do appreciate that, but I think having a due date might be more helpful because, if not, what's going on in my classroom sometimes takes priority. So then it may get lost. I think even a loose due date might be helpful. "

VTAEYC is in the process of developing a rubric for competencies, which will support mentors and apprentices in identifying what each competency looks like in practice and gauging progress. We also recommend that CCV and VTAEYC work together to develop a crosswalk that guides apprentices as to which specific competencies align with each course, more closely tying day-to-day teaching practice with what is covered in CCV classes. This will require staff time but would not have significant funding implications for the program.

Create specific resources for portfolio development and consider a professional portfolio software VTAEYC developed a web-based portfolio via Google Sites, which mentors and apprentices use to track the development of NAEYC competencies. This system, while affordable, requires a certain level of technological savvy to learn as apprentices 'build' their own Google Site. VTAEYC has supported this rollout by doing site visits and showing mentors and apprentices how to use this system in person, on their own computers. This level of support demonstrates VTAEYC's commitment to the success of apprentices and mentors, but is unsustainable for staff to continue long term. In the immediate, we recommend developing resources such as user-friendly videos or short screen recordings that demonstrate the creation of a portfolio, walking mentors and apprentices through the process step by step. As new mentors are recruited into the program, they should receive specific training on the technical aspects of portfolio creation, whether in a standalone training or within one of the required mentor courses.

For the future, we recommend use of an established purpose-built portfolio software, such as TK20, used by many institutes of higher education. VTAEYC could explore this in partnership with CCV, as the institution may already have a tool that apprentices, mentors, and VTAEYC could access. While this would require an initial, potentially significant investment, it will reduce the time and travel of VTAEYC staff members over time and could enhance integration between an apprentice's teaching practice, mentorship, and coursework.

If the cost of a portfolio software is prohibitive, the program should consider utilizing a Google Suite product that is more familiar to apprentices and with a lower technological barrier, such as Google Slides or Google Docs, in order to improve accessibility.

"It's really nice that we're building a portfolio because I can also use that in the future, which is really exciting."

Change the apprenticeship's culminating credential to the CCV child care certificate

The current design of the apprenticeship, which culminates in 21 credits related to ECE, enables educators to enter the field and satisfy licensing requirements for the role of associate teacher. Interviewees expressed satisfaction with this as an entry pathway into the field, which is needed given workforce shortages. However, these 21 credits fall just short of the 24 credits required for the CCV Child Care Certificate. The final 3 credits are for Professional Field Experience (INT-2860). Given an apprentice's experience in the field, they can complete a competency-based course challenge process to meet this requirement and earn a certificate with support from their CCV advisor. The portfolio currently completed by apprentices could serve as the qualifying artifact to share with CCV for the course challenge process. Although this opportunity exists, it is not clear how many apprentices go through this process.





If Vermont were to shift the apprenticeship's culminating credential to the Child Care Certificate and integrate the course challenge process into the apprenticeship, apprentices would leave the program with a credential. This would not only serve as an important milestone for students, but also open more opportunities for federal student aid. For example, in order to be eligible for the Pell Grant, students must be income-qualified and enrolled in courses that are in a certificate- or degree-granting track. Connecting apprentices with a certificate that already exists at CCV could have a positive impact on funding, potentially allowing T.E.A.C.H. to be utilized as a last-dollar scholarship. Given the persistent low pay in the field and the population this program serves, many apprentices would be likely to qualify for Pell Grants, thus relieving some of the tuition burden currently carried by T.E.A.C.H. funding. If 50 to 75 percent of a cohort

of 25 were eligible for partial Pell eligibility, we estimate that this could save the program between \$11,100 - \$17,575 in tuition costs annually. The Pell Award amount could increase if an apprentice is permitted to take 6 or more credit hours per semester.

Table 2. Pell Eligibility

Actual Enrollment Per Semester	Pell Eligibility
12+ Credit Hours (full-time)	100% of Pell Award
9-11 Credit Hours (¾ time)	75% of Pell Award
6-8 Credit Hours (½ time)	50% of Pell Award
Less than 6 Credit Hours	25% of Pell Award

Table 3. Estimated Annual Pell Award Impact on Tuition Cost

Description	Pell Award Amount
Maximum Pell Award (Full-time, 2024-25)	\$7,395
Partial Pell Eligibility Estimate (For cost estimation purposes)	\$3,698
Partial Pell Eligibility (Estimated: 25% of possible award, due to 3 credit hours per semester)	\$925
Pell Awards Per Year (50% of apprentices eligible for partial awards)	\$925 x 12 apprentices = \$11,100 per year
Pell Awards Per Year (75% of apprentices eligible for partial awards)	\$925 x 19 apprentices = \$17,575 per year

Create an additional apprenticeship pathway that ends in an associate degree

As Vermont moves towards adopting Power to the Profession, a framework that lays out three main levels of the profession connected to credentials and degrees (Table 4), the State should consider adding another pathway to the apprenticeship which culminates in an associate degree (Level ECE II).



Table 4. Power to the Profession Levels and Description

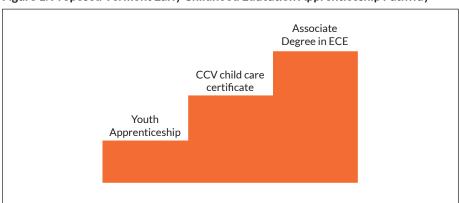
Level	Qualifications	Responsibilities (Birth-5 Settings)
ECE I	Professional preparation program that meets a minimum of 120 hours	Can help develop and sustain high-quality child development and learning environments and can serve as an effective member of ECE teaching teams
ECE II	ECE Associate Degree	Can be responsible for developing and sustaining high- quality development and learning environments with staffing and support models that provide frequent access to ECE IIIs for guidance
ECE III	ECE Bachelor's Degree OR ECE Master's Degree as initial preparation	Can be responsible for independently developing and sustaining high-quality development and learning environments, can serve as an effective member of ECE teams, and can guide the practice of ECE Is and IIs

In focus groups, we heard from sponsoring center directors whose staff were motivated to pursue their associate degree, but worried about continuing college coursework without the support provided by the apprenticeship.

"I had an employee who had taken some courses in the past, so doing the apprenticeship would not have benefitted [her] education-wise. So they put her into T.E.A.C.H. to get her associate degree. She struggled because she didn't have the apprenticeship [support]."

If the state adds an associate degree apprenticeship program, the apprenticeship would facilitate a clear, supported pathway from the youth apprenticeship program to a certificate to the associate degree (Figure 1). Because the apprenticeship serves many single mothers and first-generation college students, creating a track that culminates in an associate degree would promote equity of access to higher education programs. It would also contribute to the enrollment and sustainability of the apprenticeship program, as those who earn associate degrees could serve as qualified mentors to new apprentices and current interested apprentices could continue in the program, thus increasing program participation. Because we are not suggesting the addition of another cohort, this would increase the program's investment in individual apprentices without increasing the cost of the program overall.

Figure 1. Proposed Vermont Early Childhood Education Apprenticeship Pathway





ENHANCE PROGRAM GOVERNANCE

Vermont's Department of Children and Families' CDD issues a grant funded by the Child Care Development Block Grant for VTAEYC to administer the apprenticeship program. In total, the T.E.A.C.H. scholarship program, apprenticeship program, and youth apprenticeship program receive a budget of \$583,000. From interviews, we learned that VTAEYC is given a great deal of autonomy over program design, marketing, and enrollment efforts. To ensure the program is meeting program goals and aligns with the CDD's broader vision, a designated CDD team member should meet regularly with the VTAEYC team and be responsible for reviewing quarterly reports.



Quarterly reports could become more useful for program monitoring by adding more clarity and specificity, including information on where each apprentice is in the program (e.g., how many credit hours they have earned so far), and two separate columns to indicate their employer and their county (from a dropdown menu). This will support accuracy and enable CDD or VTAEYC to more easily analyze patterns in the program. Reports should also include the overall retention rate for the quarter and provide an explanation for anyone who left the program. In the Apprentice Status column, it may be helpful to add a "pause" option to indicate those who have not enrolled in classes in the current semester but have expressed a desire to return to the program. This will enable VTAEYC to follow up periodically with those who may return to the program and help to recover any investments made in individuals who have to stop the program for personal reasons. After a predetermined amount of time (e.g., one year, or sooner if an apprentice expresses desire to completely drop out of the field), VTAEYC could remove these individuals from their list. Overall, increased specificity will provide CDD and VTAEYC with a clearer picture of how long it takes each apprentice to complete the program, on average, and better understand the barriers that lead to stopping out or program interruptions.

Table 5. Sample Reporting Structure

Apprentice Name	Initial Enrollment Semester and Year	Completed Credits	Apprentice Status	Sponsor Center	Sponsor Center County
[name]	[e.g., Fall 2022]	[3 - 24 credit hours, or up to 60 credit hours if pursuing AA]	[Dropdown options: New, Continuing, Drop Out, Pause)	[Center Name]	[From dropdown list to ensure accuracy]

Quarterly reports should also specify recruitment efforts with more clarity, including a recruitment plan for the year and progress towards implementing that plan, including the number of new centers reached each quarter broken out by different modalities (email, phone, in-person opportunities). If the apprenticeship program has difficulty recruiting or retaining 25 apprentices, the report should explain why. This can help CDD serve as problem-solving partners and may reveal insights into the challenges facing Vermont's early childhood workforce.



Finally, significant proposed changes or updates to the program design should be approved by CDD. While the shift to a competency-based apprenticeship has been well-received, additional planning around resources and training to prepare apprentices and mentors to implement the new approach may have led to a smoother transition (particularly as it relates to the creation of portfolios and understanding how to observe competencies).

CONSIDER FAMILY CHILD CARE APPRENTICESHIPS AS A FUTURE STRATEGY

The youth apprenticeship program allows students the opportunity to earn fieldwork experience at a FCC provider, preparing them to eventually own an FCC, if they wish. However, as it currently stands, these youth apprentices would not be able to continue in the program upon becoming an FCC provider. An apprenticeship program built specifically for incumbent FCC providers could support the quality of the care and education they provide, connect them with a network of other educators, and provide them the opportunity to advance professionally.

Often the biggest barrier to establishing an FCC apprenticeship is the requirement of an employer, as FCCs are sole proprietors or self-employed. Because these models require flexibility and creativity around the standard registered apprenticeship model, CDD and VTAEYC would need to partner closely with the Vermont Department of Labor to adapt the program. Existing support systems, such as Vermont Early Childhood Networks, could be used as a potential backbone association to provide mentoring. Mentor training could be adapted to include resources targeted to FCCs, such as business administration and enrollment, which could be supported through First Children's Finance. Because of the time and resources it would require to develop this program, we recommend enhancing Vermont's existing apprenticeship program that focuses on child care centers before establishing this pathway.





FUNDING SOURCES

WIOA STATE PLAN

The Workforce Innovation and Opportunity Act (WIOA) is a program that matches employers with unemployed adults seeking to enter the field and earn the required qualifications to do so. Vermont's ECE apprenticeship program has relied on center directors supporting their current employees in pursuing the program. If Vermont wished to shift the program to be open to people not currently employed in the field, CDD and VTAEYC could pursue inclusion in Vermont's next iteration of the WIOA state plan. Vermont's current WIOA state plan includes a reference to child care as a need for employment, so there may be an opening for discussion.²⁹ This can be a heavy time investment for limited funding, as it relies on out-of-work job seekers opting into child care when there are many other career opportunities offered through job centers that offer higher pay. Our national research revealed that most early educator apprenticeships are funded exclusively through early childhood funds (mainly CCDBG, though some states have also used American Rescue Plan Act or Preschool Development Grant funds).³⁰

US DEPARTMENT OF LABOR COMPETITIVE GRANTS

The US Department of Labor regularly releases notices for competitive funding opportunities (which can be found by monitoring the Current Grant Funding Opportunities page).³¹ A promising example is the Critical Sector Job Quality Grant, which stipulated child care as a critical sector and allowed funding for programs that target the incumbent workforce.³² Applications for Round 2 of this grant closed in July 2024, but a similar grant may be issued in the future. Regular meetings with the Vermont Department of Labor can build the groundwork for the collaboration needed to apply for such federal grants.

PHILANTHROPY AND CORPORATE GIVING

VTAEYC could pursue philanthropic or corporate giving to support its early educator apprenticeship programs. Local and state philanthropies might be interested in funding apprentices from a certain region, or may wish to provide start-up design funding to build out the associate degree apprenticeship pathway. Those that provide funding for Let's Grow Kids may be one place to explore, as these philanthropies have demonstrated interest in funding early childhood system projects in Vermont.³³ Other national philanthropies that have demonstrated interest in early childhood workforce development include the Kellogg Foundation and the Robert Wood Johnson Foundation.

VTAEYC could also pursue funding from large State employers or other corporations that are based in Vermont. As the child care crisis wears on, more and more private employers are understanding the importance of a robust child care system for recruitment and workforce participation.

FEDERAL AND STATE STUDENT AID

As mentioned earlier, if Vermont shifts the apprenticeship program to culminate in the CCV child care certificate, many apprentices may be able to access federal aid such as the Pell Grant (which does not need to be repaid) as well as the Vermont grant via VSAC. As referenced earlier in the report, this would reduce some of the funding currently required for tuition.



CONCLUSION

Vermont's early educator apprenticeship program provides robust support to educators seeking to enhance their expertise through college coursework. With a few changes, the program could attract a more diverse set of educators to the program, offer an opportunity for them to move further in their education and remain in the field, and continue to build the quality of early care and education provided to young children in Vermont. As the program evolves, Vermont should continue to assess how to adapt the program to meet the needs of the workforce.

Appendices



APPENDIX A

Click here to view the "Vermont Qualitative Data Analysis Codebook"



APPENDIX B

Vermont Early Childhood Apprenticeship Evaluation

Focus Group Demographics: August 15, 2024

High-Level Summary

Analysis of the three focus groups involving apprentices, mentors, and directors, revealed several key insights:

- **Demographics:** An overwhelming majority of participants identified as "White" (84.6%) and primarily spoke English at home (84.6%).
- Apprentice Experience: A significant portion of apprentices worked with infants (66.7%), and many identified as first-generation college students (71.4%). However, 40% of apprentice focus group participants did not complete the program, highlighting potential challenges in retention.
- **Education:** The majority of mentor and director participants held a bachelor's degree as their highest level of education (71.4%).
- **Program Involvement:** Most Director's programs had been involved with the apprenticeship for over five years (66.7%), and Directors reported hosting an average of three apprentices since joining the program.

This data underscores the program's long-term engagement but also points to areas needing attention, such as apprentice retention and targeted support for first-generation college students.

ALL FOCUS GROUP DEMOGRAPHICS

- For all focus group participants, the county where their schools are located varied, with Waterbury having the most (Chart 1).
- The focus group participants also varied in age, but the largest percent were in the 35 44 years old age range (Chart 2).
- An overwhelming majority of the participants identified as "White" (84.6%) and selected "English" as their language spoken at home (84.6%) (Chart 3 & 4)

Chart 1. School Location

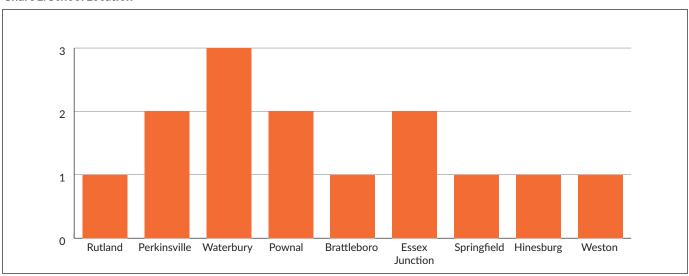




Chart 2. Participant Age

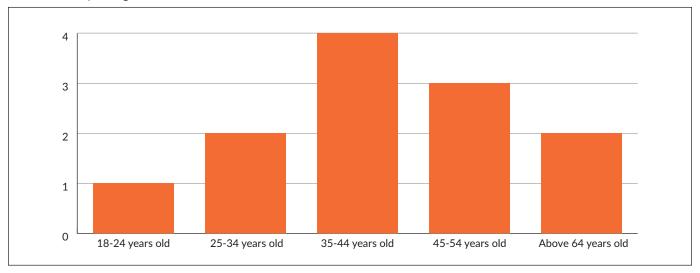


Chart 3. Participant Race(s)

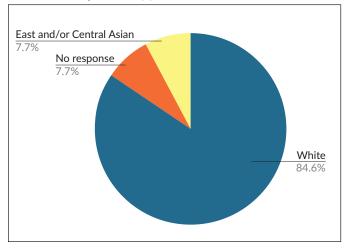
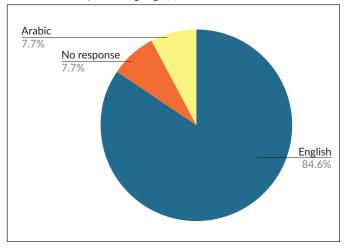


Chart 4. Participant Language(s)



APPRENTICE FOCUS GROUPS

- The apprentice focus group participants have been in the ECE field for an average of 8.4 years.
- The majority of apprentice focus group participants were former apprentices (83.3%) (Chart 5).
- The majority of apprentice focus group participants identified as first-generation college students (71.4%) (Chart 6).
- There was an even split of Lead Teachers and Assistant Teachers in the apprentice focus group (Chart 7).
- The majority of apprentice focus group participants currently worked with infants (66.7%) (Chart 8).
- 40% of apprentice focus group participants did not graduate or finish the program (Chart 9).

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Chart 5. Current vs. Former Apprentice

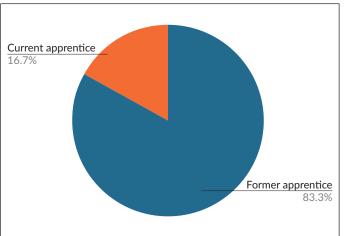


Chart 6. First-Generation College Student

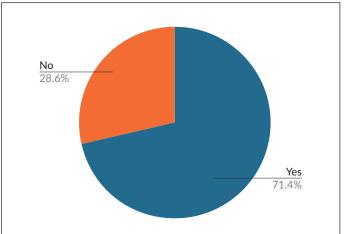


Chart 7. Participant Role

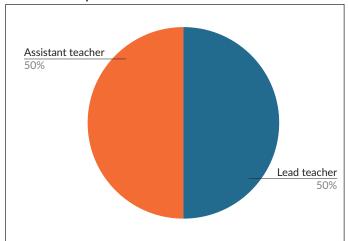


Chart 8. Participant Working Age Group

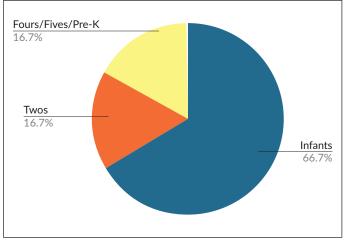


Chart 9. Participant Program Completion

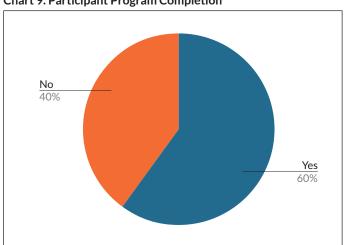
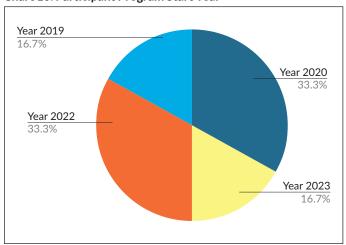


Chart 10. Participant Program Start Year





MENTOR AND DIRECTOR FOCUS GROUPS

- The majority of participants were Directors (75%) (Chart 11).
- The majority of participants had a bachelor's degree as their highest level of education (71.4%) (Chart 12).
- Most participants' programs had been involved with the apprenticeship program for 5+ years (66.7%) (Chart 13).
- The Directors have hosted an average of three apprentices since starting with the program.

Chart 11. Percent of Mentors and Directors

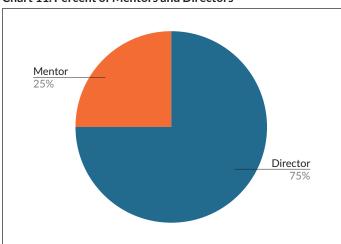


Chart 12. Highest Level of Education

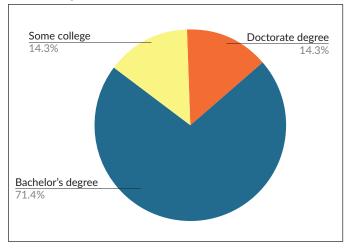
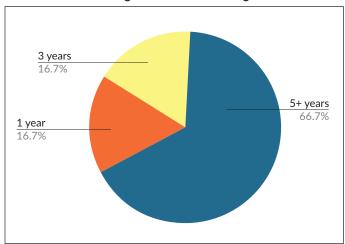


Chart 13. VTAEYC Program Involvement Length





APPENDIX C

Vermont Early Childhood Apprenticeship Evaluation

Field Survey Findings: August 8, 2024

High-Level Summary

This report presents the findings of a field survey conducted to assess awareness and participation in the Vermont Early Childhood (VT EC) Apprenticeship Program among professionals in the ECE sector, garnering responses from 22 participants. However, 4 of these responses were incomplete, resulting in a final valid sample size of 18 respondents (n=18). The survey revealed that 27.8 percent of respondents had not heard of the program and, of respondents who had heard of the program, 30.8 percent did not participate, indicating a potential gap in outreach or communication efforts.

The demographic breakdown of respondents showed an even distribution across professional roles, with representation from directors, lead teachers, and FCC providers. However, there was a notable concentration of respondents working in Chittenden County and a predominance of participants aged between 35-44 and 45-54 years. These findings provide valuable insights into the current reach and visibility of the VT EC Apprenticeship Program within the state's ECE community.

A bivariate analysis was conducted to explore potential associations between program awareness and participation and respondents' age, county of residence, and professional role. Despite examining these factors, no statistically significant relationships were found between program awareness and any of the demographic variables. Additionally, no statistically significant associations were found between program participation and any of the demographics variables.

Univariate Analysis

The univariate analysis in this report examines four key variables: respondent age, role, county of residence, and awareness of the VT EC Apprenticeship Program. Descriptive statistics were calculated for each variable. The proportion of respondents who were aware of the VT EC Apprenticeship Program was also detailed, providing insight into the reach of the program within the sample population. Age was summarized using age categories with percentages. The respondents' roles were categorized and presented as frequencies and percentages, as were the counties they reside in.

PROGRAM AWARENESS AND PARTICIPATION

As you can see in Chart 1, the majority of respondents were aware of the VT EC Apprenticeship Program. However, not all of those who were aware of the program participated in it, as you can see in Chart 2. Additionally, when asked what kept those who knew about the program from participating in it, only one respondent answered and stated "Already have a master's degree in education."

Bank Street Education Center

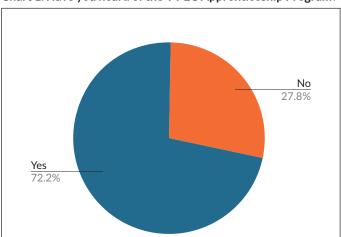
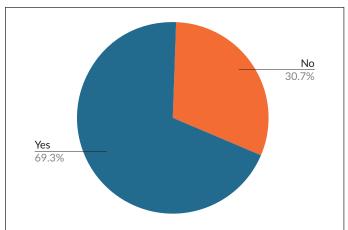


Chart 1. Have you heard of the VT EC Apprenticeship Program? Chart 2. Among those who were aware of the program, did you participate in the program?



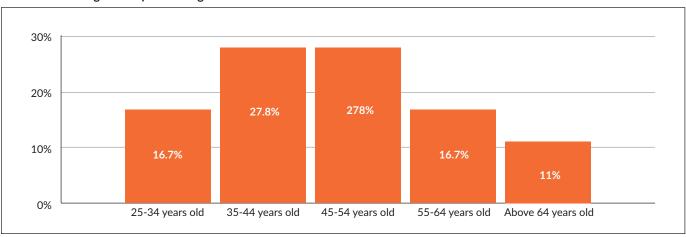
AGE OF RESPONDENT

The age distribution of survey respondents is predominantly concentrated in two age groups: 35-44 and 45-54 years old. These two groups constitute the majority of the sample, indicating that middle-aged individuals are the primary participants in the survey. This concentration suggests that the survey results may largely reflect the perspectives and experiences of individuals within these age ranges.

Table 1. Frequency and Percent of Age

Age	Percent	Frequency	Cumulative Percent
25-34	16.7%	3	16.7%
35-44	27.8%	5	44.4%
45-54	27.8%	5	72.2%
55-64	16.7%	3	88.9%
Above 64	11.1%	2	100%

Chart 3. Percentage of Respondent Age





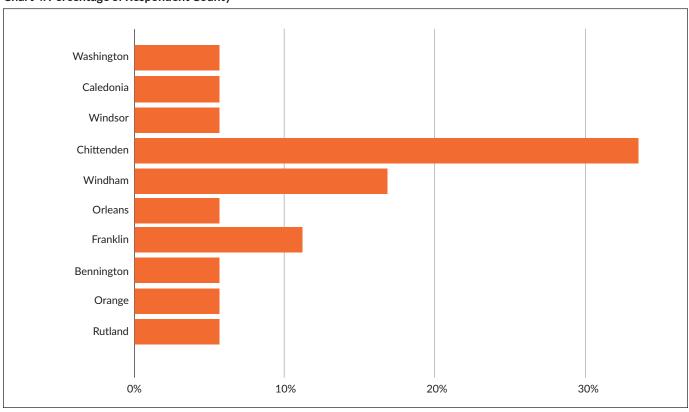
WORKING COUNTY OF RESPONDENT

Table 2 and Chart 4 reveal that the majority of survey respondents work in Chittenden and Windham counties. These two counties have the highest representation among participants, indicating that the survey findings are particularly reflective of the perspectives of individuals working in these areas.

Table 2. Respondent County

County	Percent	Frequency	Cumulative Percent
Washington	5.6%	1	5.6%
Caledonia	5.6%	1	11.1%
Windsor	5.6%	1	16.7%
Chittenden	33.3%	6	50%
Windham	16.7%	3	66.7%
Orleans	5.6%	1	72.2%
Franklin	11.1%	2	83.3%
Bennington	5.6%	1	88.9%
Orange	5.6%	1	94.4%
Rutland	5.6%	1	100%

Chart 4. Percentage of Respondent County





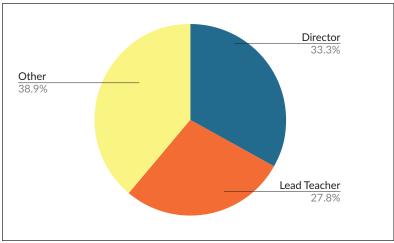
ROLE OF RESPONDENT

Table 3 and Chart 5 show that the roles of survey respondents are nearly evenly distributed among directors, lead teachers, and those categorized as "other." The "other" category, which includes a significant number of FCC providers, represents a substantial portion of the responses. This balance suggests that the survey captures a diverse range of perspectives from individuals in various roles within the ECE field.

Table 3. Respondent Role

Role	Percent	Frequency	Cumulative Percent
Director	33.3%	6	33.3%
Lead Teacher	27.8%	5	61.1%
Other	38.9%	7	100%

Chart 5. Percentage of Respondent Roles



Bivariate Analysis

The bivariate analysis section of the report explores potential associations between respondents' awareness of the VT EC Apprenticeship Program and their age, county of residence, and professional role as well as whether or not respondents who were aware of the program participated in the program or not and their associated demographics. Both Chi-Square and Fisher's Exact tests were employed to assess these associations. However, given the small sample size, Fisher's Exact test was prioritized for its accuracy in analyzing categorical data with limited observations.

The analysis examined whether there were statistically significant relationships between program awareness and program participation and each of the three variables, as well as program participation and the three variables. By using Fisher's Exact test, the report ensures more reliable results in determining whether awareness of the program and program participation is linked to specific age groups, counties, or professional roles within the sample population. The null and alternative hypotheses are listed for each association along with a conclusion.



H_a: There is no association between county and program awareness.

 $\mathbf{H}_{\mathbf{a}}$: There is an association between county and program awareness.

Significance level: 0.05

Chart 6. Heard of the Program x County

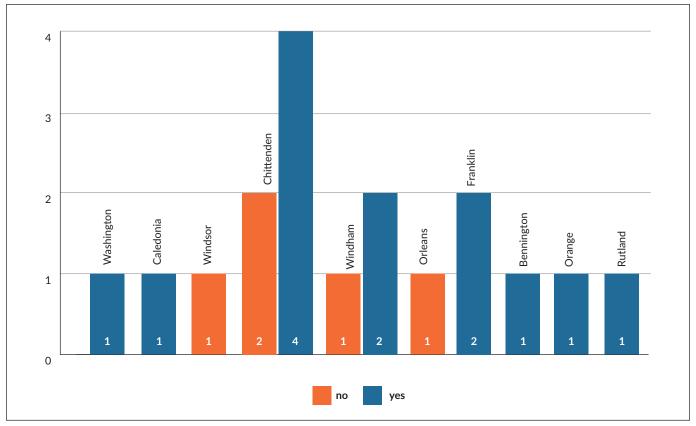


Table 4. County Chi-Square + Fisher's Exact Test (n=18)

	Value	Exact Sig. (2-sided)	
Pearson Chi-Square	8.031a	0.846	
Likelihood Ratio	9.813	0.728	
Fisher-Freeman-Halton Exact Test 7.721 0.846			
*p<0.05, **p<0.01, ***p<0.001			
a. 20 cells (100.0%) have an expected count of less than 5. The minimum expected count is .28.			

Conclusion: We failed to reject the null hypothesis; there is no association between county and program awareness (p>0.05). However it is notable that the sample size is small, making the Fisher's Exact test more appropriate, and the lack of statistical significance could be attributed to the small sample size.



H_o: There is no association between county and program awareness.

H_a: There is an association between county and program awareness.

Significance level: 0.05

Table 5. Role Chi-Square + Fisher's Exact Test (n=18)

	Value	Exact Sig. (2-sided)		
Pearson Chi-Square	0.744a	0.816		
Likelihood Ratio	0.758	0.816		
Fisher-Freeman-Halton Exact Test	0.914	0.816		
*p<0.05, **p<0.01, ***p<0.001				
a. 5 cells (83.3%) have an expected count of less than 5. The minimum expected count is 1.39.				

Conclusion: We failed to reject the null hypothesis; there is no association between role and program awareness (p>0.05). However it is notable that the sample size is small, making the Fisher's Exact test more appropriate, and the lack of statistical significance could be attributed to the small sample size.

PROGRAM AWARENESS AND COUNTY

H_o: There is no association between county and program awareness.

H_a: There is an association between county and program awareness.

Significance level: 0.05

Table 6. Age Chi-Square + Fisher's Exact Test (n=18)

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	Value	Exact Sig. (2-sided)		
Pearson Chi-Square	3.378a	0.590		
Likelihood Ratio	3.624	0.702		
Fisher-Freeman-Halton Exact Test	3.134	0.632		
*p<0.05, **p<0.01, ***p<0.001				
a. 10 cells (100.0%) have an expected count of less than 5. The minimum expected count is .56.				

Conclusion: We failed to reject the null hypothesis; there is no association between role and program awareness (p>0.05). However it is notable that the sample size is small, making the Fisher's Exact test more appropriate, and the lack of statistical significance could be attributed to the small sample size.



 \mathbf{H}_{o} : There is no association between county and program participation, among respondents who were aware of the program.

H_a: There is an association between county and program participation, among respondents who were aware of the program.

Significance level: 0.05

Table 7. Participate x County Chi-Square + Fisher's Exact Test (n=13)

	Value	Exact Sig. (2-sided)		
Pearson Chi-Square	8.306a	0.418		
Likelihood Ratio	10.503	0.418		
Fisher-Freeman-Halton Exact Test	8.124	0.317		
*p<0.05, **p<0.01, ***p<0.001				
a. 16 cells (100.0%) have an expected count of less than 5. The minimum expected count is .31.				

Conclusion: We failed to reject the null hypothesis; there is no association between county and program participation (p>0.05). However it is notable that the sample size is small, making the Fisher's Exact test more appropriate, and the lack of statistical significance could be attributed to the small sample size.

PROGRAM AWARENESS AND COUNTY

H_o: There is no association between county and program participation, among respondents who were aware of the program.

 $\mathbf{H}_{\mathbf{a}}$: There is an association between county and program participation, among respondents who were aware of the program.

Significance level: 0.05

Table 8. Participate x Age Chi-Square + Fisher's Exact Test (n=13)

	Value	Exact Sig. (2-sided)		
Pearson Chi-Square	3.611a	0.642		
Likelihood Ratio	4.958	0.552		
Fisher-Freeman-Halton Exact Test	3.218	0.642		
*p<0.05, **p<0.01, ***p<0.001				
a. 16 cells (100.0%) have an expected count of less than 5. The minimum expected count is .31.				

Conclusion: We failed to reject the null hypothesis; there is no association between age and program participation (p>0.05). However it is notable that the sample size is small, making the Fisher's Exact test more appropriate, and the lack of statistical significance could be attributed to the small sample size.



 \mathbf{H}_{o} : There is no association between role and program participation, among respondents who were aware of the program.

H_a: There is an association between role and program participation, among respondents who were aware of the program.

Significance level: 0.05

Table 9. Participate x Role Chi-Square + Fisher's Exact Test (n=13)

	Value	Exact Sig. (2-sided)		
Pearson Chi-Square	3.611a	0.336		
Likelihood Ratio	4.314	0.336		
Fisher-Freeman-Halton Exact Test	2.985	0.336		
*p<0.05, **p<0.01, ***p<0.001				
a. 6 cells (100.0%) have an expected count of less than 5. The minimum expected count is .92.				

Conclusion: We failed to reject the null hypothesis; there is no association between role and program participation (p>0.05). However it is notable that the sample size is small, making the Fisher's Exact test more appropriate, and the lack of statistical significance could be attributed to the small sample size.

ENDNOTES

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