



Colorado Evaluation & Action Lab
UNIVERSITY OF DENVER

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► Apprenticeship Program

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*with actionable insights,
synthesis, and editorial support
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This evaluation is being conducted on behalf of CDEC under the coordination of the Colorado Evaluation and Action Lab's Early Childhood Evaluation Hub to build evidence for stimulus-funded early childhood activities.



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Overview

The Colorado Department of Early Childhood (CDEC) used federal and state stimulus funding to implement an [Apprenticeship Program](#), which provides education and training to new or developing early care and education (ECE) professionals. This activity supports [CDEC's strategic goal #2](#) to recruit, support, and retain highly competent, caring, and diverse professionals across early childhood care and education settings.



Apprenticeships combine college coursework or competency-based training with mentorships and paid work experience in order to be recognized as a federally registered apprenticeship. The stimulus funding uniquely includes scholarships for new and existing early childhood professionals and a new stipend for apprentices, mentors, and early childhood providers employing apprentices. The Apprenticeship Program is implemented via three partner Institutions of Higher Education (IHEs) who serve as Apprenticeship Program vendors: Red Rocks Community College (RRCC), Colorado Mesa University (CMU), and University of Colorado - Colorado Springs (UCCS).

CDEC partnered with the Colorado Evaluation and Action Lab (Colorado Lab) to coordinate the evaluation of stimulus-funded activities. The Colorado Lab selected the Butler Institute for Families at the University of Denver to evaluate the Apprenticeship Program.



What We Will Learn by the End of the Evaluation

- How the three IHEs operating the Apprenticeship Program implemented this opportunity and notable successes and challenges in getting it off the ground.
- Who participated as apprentices and apprenticeship employers and whether this pathway shows promise for recruiting a diverse workforce.
- Whether the Apprenticeship Program supported students to advance in higher education and become an early childhood professional in the field.

This brief represents early insights from the initial phases of evaluation work. Interim findings will be communicated in Spring 2024 and final findings will be delivered in Fall 2024.



Evidence-Based Decision-Making

[Evidence-Based Decision-Making \(EBDM\)](#) recognizes that research evidence is not the only contributing factor to policy and budget decisions. EBDM is the intersection of the best available research evidence, community needs and implementation context, and decision-makers' expertise. Actionable insights across these domains are highlighted in the box below, with supporting evidence and additional information detailed for each in the sections that follow.





Actionable Insights

- IHEs, apprenticeship employers, and CDEC stimulus leads all agree that the program is beneficial for apprentices, mentors, and apprenticeship employers.
- There is variation across IHEs with regard to diversity of recruited apprentices.
- As a result of stimulus funding, IHEs have received the necessary funding and support to relaunch their Apprenticeship Programs or acquire federal registration for the first time.
- IHEs have varied requirements for mentors which may influence the quality of the apprentice experience and ability to recruit mentors.
- The Apprenticeship Program provides meaningful financial support, and financial needs vary by participating employers.
- IHEs should expand the availability of coursework, training, and administrative support in Spanish and other languages to increase the diversity of apprentices.
- IHEs should consider looking at Credit for Prior Learning opportunities to ensure that college credit can be awarded for on-the-job experience and training received during apprenticeships.
- The greatest challenge moving forward is identifying funding sources to keep the program operating at its current level of support, which is crucial for the program to meet its goals.

Best Available Research Evidence

Data in this section come from CDEC's internal tracking documents and interviews with CDEC stimulus program leads, IHEs, and apprenticeship employers.

IHEs, apprenticeship employers, and CDEC stimulus leads all agree that the program is beneficial for apprentices, mentors, and apprenticeship employers.

- **Value for apprentices.** The relationship apprentices have with mentors helps them grow the knowledge and competencies needed to enter and stay in the early childhood field. The flexibility of the apprenticeships also supports each student's unique interests, needs, and schedule. Additionally, apprenticeships give students the confidence to enroll in college.
- **Value for mentors.** The mentor-apprentice relationship appears to support the professional development and retention of mentor teachers. Mentors receive recognition and respect, as well as compensation for their time, expertise, and knowledge which may impact their likelihood of staying in the field.
- **Value for employers.** The Apprenticeship Program provides financial support through stipends to employers for hosting an apprentice. These financial supports contribute to the financial stability of employers and offset the time and resources dedicated to adding the apprenticeship model to their program.



We are firm promoters that not all children learn the same, yet we tend to lose that idea when it comes to adults. Our first two apprentices...[were] not college learners... but they have thrived [in] online trainings...and they've become some of our best teachers...The apprenticeship program is [an] amazing program that...builds on the passion that people already have.

- IHE Apprenticeship Administrator

There is variation across IHEs with regard to diversity of recruited apprentices. As of June 2023, CDEC reported a total of 56 active apprentices (Table 1). Across all apprentices, a majority (88%) identified as white, but this varied across IHEs. There is an opportunity to learn from IHEs that were able to successfully recruit and support a diverse group of apprentices. For example, one explanation may be offering unique professional development opportunities to existing professionals while offering an inviting pathway for historically underrepresented professionals in rural communities, postsecondary students with disabilities, and postsecondary students of color.

Table 1. Active apprentices across IHEs, June 2023

IHE	# Active apprentices
Red Rocks Community College (RRCC)	18
Colorado Mesa University (CMU)	27
University of Colorado – Colorado Springs (UCCS)	11
TOTAL	56

Table 2.

Race of active apprentices by IHE, June 2023

Race	CMU		RRCC		UCCS		TOTAL	
	%	#	%	#	%	#	%	#
White	100%	27	89%	16	55%	6	88%	49
Black or African American	0%	0	6%	1	9%	1	4%	2
American Indian or Alaska Native	0%	0	6%	1	18%	2	5%	3
Choose not to identify	0%	0	0%	0	18%	2	4%	2

Table 3. Ethnicity of active apprentices by IHE, June 2023

Ethnicity	CMU		RRCC		UCCS		TOTAL	
	%	#	%	#	%	#	%	#
Hispanic	26%	7	44%	8	36%	4	34%	19
Non-Hispanic	74%	20	56%	10	55%	6	64%	36
Choose not to identify	0%	0	0%	0	9%	1	2%	1



[A majority] of our apprentices represent a historically marginalized or underrepresented racial or ethnic group. That’s pretty extraordinary...We want to continue intentional recruiting to seek out diverse [candidates] and help prepare and create pipelines that reduce those barriers.

- One IHE Apprenticeship Administrator

Table 4. Gender of active apprentices by IHE, June 2023

Gender	CMU		RRCC		UCCS		TOTAL	
	%	#	%	#	%	#	%	#
Female	96%	26	100%	18	100%	11	98%	55
Male	4%	1	0%	0	0%	0	2%	1

Community Needs & Implementation Context

Data in this section come from CDEC stimulus program leads and IHEs. According to CDEC administrators, existing apprenticeship programs were in a state of flux prior to stimulus investments. RRCC’s program was established around 2000 but sunset due to lack of funding and infrastructure. At CMU and UCCS, administrators faced challenges pursuing and acquiring the federal registration needed to launch apprenticeships. Due to the fact that the US Department of Labor (DOL) does not have an obvious industry category for ECE apprenticeships, tailoring apprenticeship programs to meet federal requirements was challenging. Across all IHEs, staffing for apprenticeship administration has been extensive and expensive.

As a result of stimulus funding, IHEs have received the necessary funding and support to either relaunch their Apprenticeship Programs or acquire federal registration for the first time.

IHEs have varied requirements for mentors that may influence the quality of the apprentice experience and the ability to recruit mentors. For all participating apprenticeship employers, mentors are required to have a CDEC issued Early Childhood Professional Credential, several years of employment at the employer site, and/or mentorship classes. Other mentor teacher requirements varied across employers based on the IHE, and this will be an opportunity to understand whether differences in these requirements had an influence on apprentices’ experiences. Recruiting mentors has been challenging and limits the ability to serve all apprentices, even with the stipend.

The Apprenticeship Program provides meaningful financial support, and financial needs vary by participating employers.

- IHEs distribute stipends to apprentices, mentors, and employers in order to offset the efforts and costs of participating in the Apprenticeship Program. In addition to these stipends, Apprenticeship Programs cover tuition and fees for all apprentices. It may be useful for IHEs to individualize the financial support provided to apprenticeship employers. For instance, RRCC raised concerns over providing the same amount of funding to each apprenticeship employer, as larger centers have the potential to enroll more apprentices than smaller centers or home-based providers. CMU recognized that apprentices need coverage for additional expenses, including gift cards for food and transportation. Wrap-around services supplement cost of living expenses for apprentices throughout their duration in the Apprenticeship Program.
- There have been other notable costs that put program sustainability at risk after stimulus funding ends. These include Apprenticeship Program staffing at the IHEs, essential apprenticeship management software, and administrative oversight among employers, including the complexity of processing stipend payments and tax requirements.



IHEs should expand the availability of coursework, training, and administrative support in Spanish and other languages. Spanish-speaking home-based providers rely on Spanish-speaking IHE administrative staff to successfully navigate the apprenticeship employer requirements. One IHE had a Spanish-speaking staff member who was able to provide administrative support to Spanish-speaking home-based providers. Increasing the availability of ECE coursework and training in other languages will also help support English-language learners in the ECE workforce. Apprenticeship employers emphasized that the expanding the availability of CDA programs, ECE 1011/1031 coursework, and PDIS courses in Spanish will create more equitable educational opportunities for Spanish-speaking ECE professionals.

Decision-Maker Expertise

Data in this section come from meetings with CDEC stimulus program leads.

- **Apprenticeship Programs have the potential to be a “heavy hitter” because of their ability to support the employer, mentors, and apprentices.** CDEC program leads recognize the unique value of this program and echo many similar benefits that IHEs and apprenticeship employers described.
- **Partnerships have strengthened the program.** Cross-sector instructional design talks between IHEs and key workgroups (Education Stackable Credential Pathways Leadership Team, Credit for Prior Learning, Individual Professional Development, Career Navigation Community of Practice, Multi-Industry Sector Partnership Community of Practice, CDE Teacher Apprenticeship Feedback Group) have led to notable advocacy in the field for apprenticeship pathways to education. These talks highlighted the need to provide highly trained mentors to apprentices, ultimately leading to inclusion of the Apprenticeship Program’s mentorship component. Additionally, CDEC’s partnership with the State Apprenticeship Agency (SAA) improved the federal registration process for apprenticeship programs. IHEs initially faced challenges when working with the DOL to meet federal requirements, but the SAA has since provided them with the necessary support and resources to complete federal registration. Continuing to partner IHEs with the SAA will be worthwhile for ensuring that the federal registration process is successful.
- **The greatest challenge moving forward is identifying funding sources to keep the program operating at its current level of support.** CDEC program leads recognize that with reduced budgets, the financial stipends for apprentices, mentors, and employers are a natural place to cut costs. However, these stipends are a crucial component for the program to meet its goals. To address this concern, it may be possible to utilize Colorado Department of Labor and Employment (CDLE) workforce initiative funds to cover the traditional components of the Apprenticeship Program (i.e., tuition) and leverage CDEC funding for stipends. While stipends are not necessary in other fields, they are unique to ECE Apprenticeship Programs (in relation to other CDLE apprenticeships) because most ECE teachers do not earn a living wage and there is an increased workload when taking on an apprentice. The continuation of stipends may make it more worthwhile for employers to take on the burden of hosting an apprentice and training new ECE professionals.



I was not going to be able to afford to finish my degree, and I was not able to take multiple semesters off from my job to do hours in other classrooms. The help from the grant has opened all the doors for me and is allowing me to truly accomplish my lifelong dream of being a certified early childhood educator.

- Apprentice (as shared by IHE Apprenticeship Administrator)