



An Untapped Opportunity:

Registered Apprenticeship at Minority

Serving Institutions

RUTGERS
Graduate School of Education

Center for
MSIs



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Registered Apprenticeship at Minority Serving Institutions

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01 Executive Summary

Minority Serving Institutions (MSIs) are at the forefront of student success and opportunity for low-income and first-generation students as well as students of color (Gasman & Conrad, 2013). These important institutions know how to design programs that emphasize comprehensive and practice-based learning. MSIs play a vital role in the nation's economy, as they level the playing field and create opportunities for disadvantaged populations and reduce the underrepresentation of people of color in fields that white people traditionally dominate (Gasman & Conrad, 2013). Despite numerous work-based learning programs firmly established at MSIs across the nation, these institutions offer limited Registered Apprenticeships (RA) or apprenticeships of any kind. Further, to date, researchers have paid little attention to MSIs and their involvement with RA (Welton & Owens, 2017).

Believing that there is potential for growth related to RA at MSIs, we conducted a landscape analysis to understand how MSIs are currently engaging with RA and why it may be beneficial for MSIs to embrace RA-based learning programs more comprehensively. After performing general search engine and institutional website searches, distributing a short survey, and conducting interviews with key stakeholders in RA at MSIs, we determined that roughly 11% of MSIs offer RA programs, and that this participation is inconsistent in nature, outcomes, and availability. We also



found that MSIs better serve students of color and help address workforce and community needs, such as teacher education apprenticeships and community health worker apprenticeships. Given that MSIs are leaders in implementing work-based learning programs on their campuses and have a history of creating higher level career paths for graduates, the untapped market of apprenticeship should not be ignored.

02 Introduction and Background

Registered Apprenticeship is a form of work-based learning and a proven workforce training model that combines “paid on-the-job learning and formal classroom or online instruction to help a worker master the knowledge, skills, and competencies needed for career success” (Jobs for the Future (JFF) website, n.d.). RA is used in various sectors such as information technology (IT), healthcare, business, and education in addition to more vocational trades such as construction, manufacturing, and engineering. By combining “on-the-job” training and educational models, RA is a unique program that benefits both students and employers. Additionally, for trades or fields that require certificates of proficiency, RA provides this type of documentation as part of the program. Employers turn to RA to build partnerships with institutions of higher education, replace an aging workforce, attract diverse talent, and keep pace with industry advancements and competitors.

According to the U.S. Department of Labor, RA participation in the country is on the rise: in 2020, 3,143 new programs were established, representing a 73% increase from 2009. Moreover, the Department of Labor (2021) stated, “These programs are incredibly successful: 92% of apprentices retain employment after completing an RA and earn an average starting salary of \$72,000” (n.p.). Although RAs offer a strong record of accomplishments, the U.S. has a long road ahead in terms of advancing equity in RA participation. While programs have become more diverse over time, most of the individuals in RA are still white.¹ According to demographic data, out of 686,000 apprentices between 2010 and 2019, 77.5% identified as white, 15.3% as Black, 2.9% as Native American/Alaska Native, 2.1% as Asian, 1.6% as Native Hawaiian/Other Pacific Islander, and 0.5% as multi-racial. In terms

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of ethnicity, 567,000 apprentices or 18.3% identified as Hispanic (U.S. Department of Labor, 2021). Of even more concern, students of color in RA are paid less and have lower completion rates than white apprentices.

Although they are doors to opportunity for some, RAs still harbor some clear disparities. Minority Serving Institutions (MSIs) may offer hope for diversifying RA as they educate 26% of all students and nearly 45% of students of color (Rutgers Center for Minority Serving Institutions, 2021). There are 797 MSIs across the nation. These institutions include – most prominently – Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs), Tribal Colleges and Universities (TCUs), Predominantly Black Institutions (PBIs), Asian American and Native American Pacific Islander Serving Institutions (AANAPISIs), as well as a few other types.¹ MSIs enroll large numbers of low-income students, students of color, first-generation students, and non-traditional students, therefore, offering a fruitful opportunity in terms of the expansion of RA and empowering these populations. MSIs can also help inform larger discussions around RA and people of color, specifically in the areas of support needed to advance completion and wage disparities.

¹ Other types of MSIs include Alaska Native and Native Hawaiian Serving Institutions (ANNH) and Native American Serving Non-Tribal Institutions (NASNTI)

According to the National Center for Educational Statistics (2021), there are 797 Minority Serving Institutions in the United States. Of these institutions, 87 have RAs. Most RAs are at public MSIs, with only 2.2% at private MSIs. Regarding the distribution of RAs across MSI type, most RAs (64.4%) are at Hispanic Serving Institutions (HSIs), with the next largest amount (25.3%) at Asian American and Native American Pacific Islander Serving Institutions (AANAPISIs). Predominantly Black Institutions (PBIs) represent 13.8% of RA programs at MSIs. The other types of MSIs – Tribal Colleges and Universities (TCUs), Native American Serving Non-Tribal Institutions (NASNTIs), Historically Black Colleges and Universities (HBCUs), and Alaska Native and Native Hawaiian Serving Institutions (ANNH) represent very small percentages of RA programs.

Research Approach

To learn more about RA at MSIs, we conducted a landscape analysis. Our process included: Separating the 2021 comprehensive list of MSIs, available through the U.S. Office of Postsecondary Education, into 2-year and 4-year institutions; conducting internet searches, through Google, using the name of each MSI along with the term “registered apprenticeship” or “pre-registered apprenticeship,”² and visiting the websites of each of the 797 MSIs in the country and using the institution’s search bar to find and review RA materials on their websites. To cross-check our work, we also searched state and federal lists of RAs to see if they contained MSIs that we did not find through our previous approach. Once we exhausted ways to locate RAs at MSIs, we distributed a survey to the 87 MSIs we identified as having RAs to learn more about their programs. Our survey had a 13% response rate, despite four attempts to secure participation. We also conducted seven interviews, using a standard interview protocol, with a broad cross-section of program administrators to prepare the “spotlights” for this report and to gain a deeper understanding of the strengths and challenges in RA at MSIs.

Despite our efforts, we encountered some limitations in constructing our landscape analysis. These included:

- More than likely there are RAs at MSIs that are not included in our landscape analysis because we were not able to find them using Google searches, institutional searches, state RA lists, and the federal RA list. We invite these institutions to contact us so that we can update our landscape analysis. Please reach out to us at rutgers.cmsi@gse.rutgers.edu.
- We acknowledge that some programs we have noted as active may be inactive due to a lack of website maintenance. Many programs are only traceable through press releases and statements that are over five years old; therefore, we are unsure if they are still active beyond a limited website presence. In addition, MSIs may have dissolved RA programs as we worked on this report. Of note, there is no consistency in terms of operation across RA at MSIs, or in general.
- Despite sending out a follow-up survey to gain more information, we want to acknowledge the low response rate to our survey, and hope that future surveys will result in greater participation.

As this is the first research report to focus entirely on MSIs and RA, it serves as a foundation, and hopefully will be the impetus for more research in this area.

² Pre-apprenticeship refers to the programs that prepare individuals for apprenticeship programs.

Figure 01

RA programs at MSIs

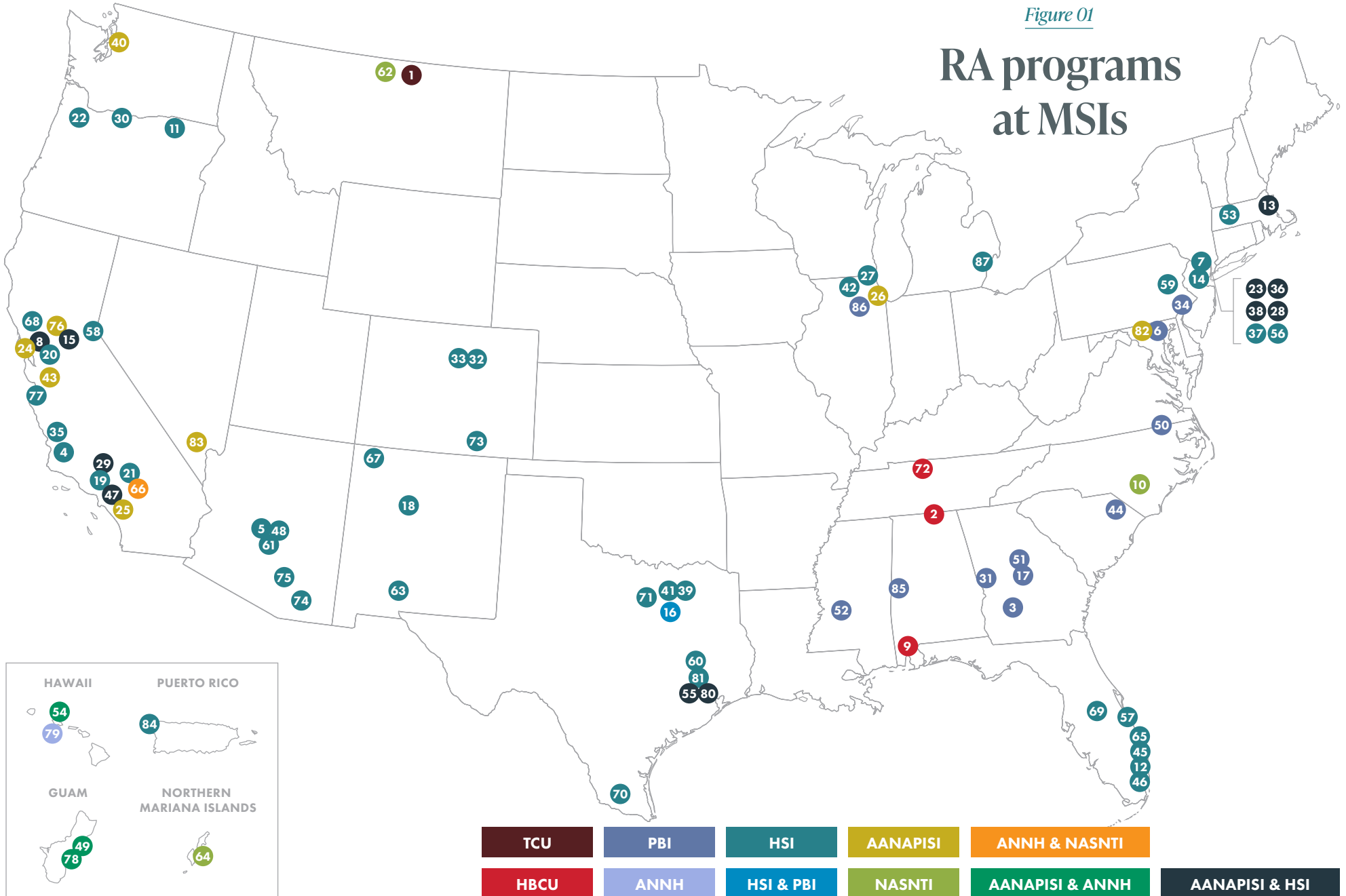




































Figure 01 Continued RA programs at MSIs

Click  for more info about the program.

	INSTITUTION	LOCATION	PROGRAM	
1	AANIHHH NAKODA COLLEGE	Harlem	MT Nursing	
2	ALABAMA AGRICULTURAL & MECHANICAL UNIVERSITY	Normal	AL Social Work	
3	ALBANY TECHNICAL COLLEGE	Albany	GA Various Programs	
4	ALLAN HANCOCK COLLEGE	Santa Maria	CA Electricians, Plumbing, Operating Engineers	
5	ARIZONA STATE UNIVERSITY	Phoenix	AZ Digital Workforce	
6	BALTIMORE CITY COMMUNITY COLLEGE	Baltimore	MD Various programs ³	
7	BERGEN COMMUNITY COLLEGE	Paramus	NJ Health professions, manufacturing	
8	BERKELEY CITY COLLEGE	Berkeley	CA Early Childhood Education	
9	BISHOP STATE COMMUNITY COLLEGE	Mobile	AL Electromechanical	
10	BLADEN COMMUNITY COLLEGE	Dublin	NC Various programs	
11	BLUE MOUNTAIN COMMUNITY COLLEGE	Pendleton	OR Construction, Electrical	
12	BROWARD COLLEGE	Fort Lauderdale	FL IT	
13	BUNKER HILL COMMUNITY COLLEGE	Boston	MA Electric Power Utility Technology	
14	CALDWELL UNIVERSITY	Caldwell	NJ Business	
15	CALIFORNIA STATE UNIVERSITY - SACRAMENTO	Sacramento	CA Various programs	
16	DALLAS COLLEGE - CEDAR VALLEY CAMPUS	Lancaster	TX Robotics/Engineering	
17	CENTRAL GEORGIA TECHNICAL COLLEGE	Warner Robins	GA Electrical, various programs	
18	CENTRAL NEW MEXICO COMMUNITY COLLEGE	Albuquerque	NM IT	

	INSTITUTION	LOCATION	PROGRAM	
19	CERRITOS COLLEGE	Norwalk	CA Construction	
20	CHABOT COLLEGE	Hayward	CA Advanced Manufacturing, Construction, Healthcare, Service	
21	CHAFFEY COLLEGE	Rancho Cucamonga	CA Industrial, Electrical, Mechanical	
22	CHEMEKETA COMMUNITY COLLEGE	Salem	OR Industrial, Healthcare	
23	CITY COLLEGE OF NEW YORK - CUNY	New York	NY Advanced manufacturing, electrical engineering, CAD/3D Printing, Business	
24	CITY COLLEGE OF SAN FRANCISCO	San Francisco	CA IT, Industrial	
25	COASTLINE COMMUNITY COLLEGE	Fountain Valley	CA Cybersecurity, IT	
26	COLLEGE OF DUPAGE	Glen Ellyn	IL Advanced manufacturing, IT, healthcare, industrial	
27	COLLEGE OF LAKE COUNTY	Grayslake	IL Automotive, Business, Manufacturing, IT, Horticulture	
28	COLLEGE OF STATEN ISLAND/ CUNY	Staten Island	NY Nursing	
29	COLLEGE OF THE CANYONS	Santa Clarita	CA Construction, Advanced Manufacturing	
30	COLUMBIA GORGE COMMUNITY COLLEGE	The Dalles	OR Electrical, Construction	
31	COLUMBUS TECHNICAL COLLEGE	Columbus	GA Industrial	
32	COMMUNITY COLLEGE OF AURORA	Aurora	CO Cybersecurity, IT	
33	COMMUNITY COLLEGE OF DENVER	Denver	CO Healthcare	
34	COMMUNITY COLLEGE OF PHILADELPHIA	Philadelphia	PA Biomedical, Early Childhood Education	
















TCU HBCU HSI & PBI HSI PBI ANNH AANAPISI NASNTI ANNH & NASNTI AANAPISI & ANNH AANAPISI & HSI






³ Various programs indicate 5+ apprenticeship fields

Figure 01 Continued

RA programs at MSIs

Click  for more info about the program.

	INSTITUTION	LOCATION	PROGRAM	
35	CUESTA COLLEGE	San Luis Obispo	CA	Early Childhood Education 
36	CUNY BOROUGH OF MANHATTAN COMMUNITY COLLEGE	New York	NY	IT 
37	CUNY JOHN JAY COLLEGE OF CRIMINAL JUSTICE	New York	NY	Electrical 
38	CUNY LAGUARDIA COMMUNITY COLLEGE	Long Island City	NY	Healthcare 
39	EASTFIELD CAMPUS - DALLAS COLLEGE	Mesquite	TX	Robotics 
40	EDMONDS COMMUNITY COLLEGE	Lynnwood	WA	Occupational Safety and Health 
41	EL CENTRO CAMPUS - DALLAS COLLEGE	Dallas	TX	Robotics 
42	ELGIN COMMUNITY COLLEGE	Elgin	IL	Industrial, Nursing, Paramedic, Firefighter, Culinary 
43	EVERGREEN VALLEY COLLEGE	San Jose	CA	Manufacturing 
44	FLORENCE-DARLINGTON TECHNICAL COLLEGE	Florence	SC	Industrial, Nursing, IT, Automotive 
45	FLORIDA ATLANTIC UNIVERSITY	Boca Raton	FL	Various programs 
46	FLORIDA INTERNATIONAL UNIVERSITY	Miami	FL	IT, Construction, Nursing 
47	FULLERTON COLLEGE	Fullerton	CA	Industrial 
48	GATEWAY COMMUNITY COLLEGE	Phoenix	AZ	Manufacturing 
49	GUAM COMMUNITY COLLEGE	Mangilao	GU	Trade 
50	HALIFAX COMMUNITY COLLEGE	Weldon	NC	Advanced Manufacturing 
51	HELMS COLLEGE	Macon	GA	Culinary 

	INSTITUTION	LOCATION	PROGRAM	
52	HINDS COMMUNITY COLLEGE	Raymond	MS	Automotive 
53	HOLYOKE COMMUNITY COLLEGE	Holyoke	MA	Healthcare 
54	HONOLULU COMMUNITY COLLEGE	Honolulu	HI	Construction, Mechanical 
55	HOUSTON COMMUNITY COLLEGE	Houston	TX	Various programs 
56	HUDSON COUNTY COMMUNITY COLLEGE	Jersey City	NJ	Advanced manufacturing 
57	INDIAN RIVER STATE COLLEGE	Fort Pierce	FL	Culinary 
58	LAKE TAHOE COMMUNITY COLLEGE	South Lake Tahoe	CA	Culinary 
59	LEHIGH CARBON COMMUNITY COLLEGE	Schnecksville	PA	Robotics 
60	LONE STAR COLLEGE SYSTEM	The Woodlands	TX	IT, Industrial 
61	MESA COMMUNITY COLLEGE	Mesa	AZ	Industrial 
62	MONTANA STATE UNIVERSITY - NORTHERN	Havre	MT	Plumbing, Electrical 
63	NEW MEXICO STATE UNIVERSITY	Las Cruces	NM	Industrial, Electrical 
64	NORTHERN MARIANAS COLLEGE	Saipan	MP	Various programs 
65	PALM BEACH STATE COLLEGE	Lake Worth	FL	Industrial, Manufacturing, Construction, and Transportation 
66	RIVERSIDE CITY COLLEGE	Riverside	CA	Automotive, IT, Culinary, Early Childhood Education 
67	SAN JUAN COLLEGE	Farmington	NM	IT, Healthcare, Advanced Manufacturing 
68	SANTA ROSA JUNIOR COLLEGE	Santa Rosa	CA	Industrial, Electrical 

TCU
HBCU
HSI & PBI
HSI
PBI
ANNH
AANAPISI
NASNTI
ANNH & NASNTI
AANAPISI & ANNH
AANAPISI & HSI

Figure 01 Continued

RA programs at MSIs

Click  for more info about the program.

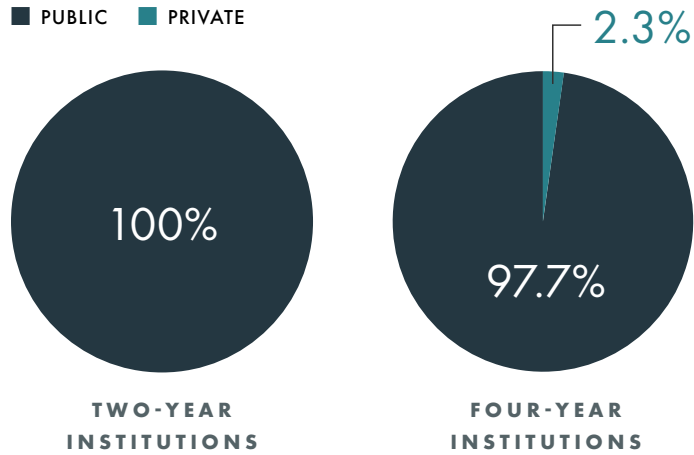
	INSTITUTION	LOCATION	PROGRAM	
69	SOUTH FLORIDA STATE COLLEGE	Avon Park	FL	Electrical 
70	SOUTH TEXAS COLLEGE	McAllen	TX	Industrial, automotive 
71	TARRANT COUNTY COLLEGE DISTRICT	Fort Worth	TX	Automotive, Business, Construction, IT, Industrial 
72	TENNESSEE STATE UNIVERSITY	Nashville	TN	Education 
73	TRINIDAD STATE JUNIOR COLLEGE	Trinidad	CO	Manufacturing, IT, Healthcare, Real Estate, Social Assistance 
74	UNIVERSITY OF ARIZONA (THE)	Sierra Vista	AZ	Industrial, Electrical 
75	UNIVERSITY OF ARIZONA (THE)	Tucson	AZ	Industrial, Electrical 
76	UNIVERSITY OF CALIFORNIA, DAVIS	Davis	CA	Nursing 
77	UNIVERSITY OF CALIFORNIA, SANTA CRUZ	Santa Cruz	CA	Agriculture 
78	UNIVERSITY OF GUAM	Mangilao	GU	Nursing 

	INSTITUTION	LOCATION	PROGRAM	
79	UNIVERSITY OF HAWAII AT MANOA	Honolulu	HI	Construction 
80	UNIVERSITY OF HOUSTON	Houston	TX	Healthcare 
81	UNIVERSITY OF HOUSTON - DOWNTOWN	Houston	TX	Electrical 
82	UNIVERSITY OF MARYLAND - BALTIMORE COUNTY	Baltimore	MD	IT 
83	UNIVERSITY OF NEVADA - LAS VEGAS	Las Vegas	NV	Healthcare 
84	UNIVERSITY OF PUERTO RICO, AGUADILLA REGIONAL COLLEGE	Aguadilla	PR	Aeronautical Mechanics 
85	UNIVERSITY OF WEST ALABAMA	Livingston	AL	Industrial 
86	WAUBONSEE COMMUNITY COLLEGE	Sugar Grove	IL	Automotive, Industrial, Engineering, Business 
87	WAYNE COUNTY COMMUNITY COLLEGE DISTRICT	Detroit	MI	Food & Agriculture, Industrial 

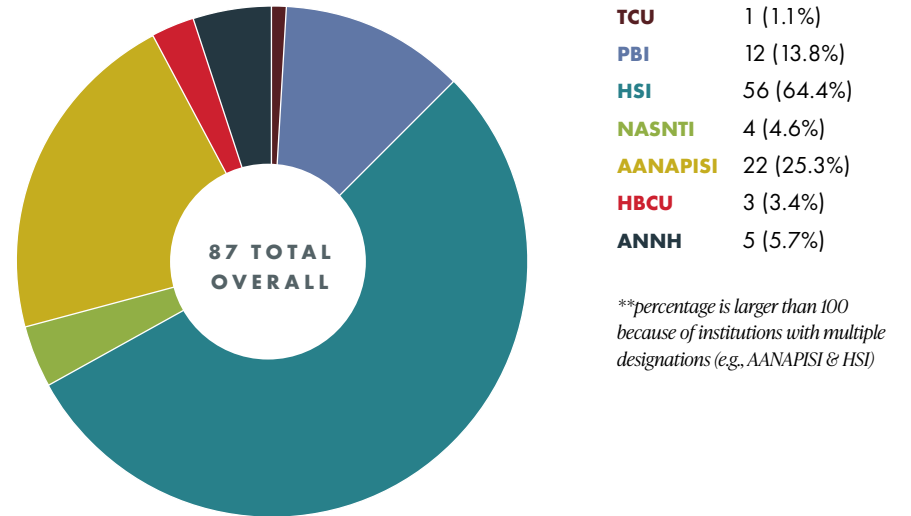
TCU
HBCU
HSI & PBI
HSI
PBI
ANNH
AANAPISI
NASNTI
ANNH & NASNTI
AANAPISI & ANNH
AANAPISI & HSI

AN UNTAPPED OPPORTUNITY: REGISTERED APPRENTICESHIP AT MINORITY SERVING INSTITUTIONS

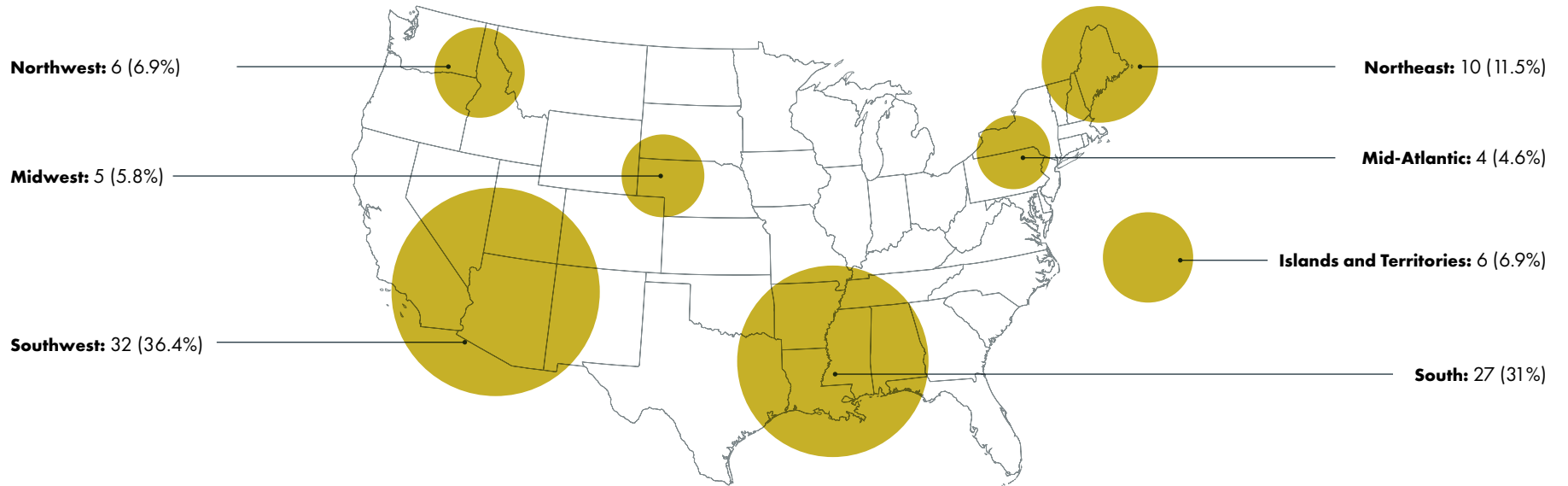
REGISTERED APPRENTICESHIP BY PUBLIC/PRIVATE MSI STATUS



REGISTERED APPRENTICESHIP BY MSI-TYPE



GEOGRAPHICAL CONCENTRATION OF REGISTERED APPRENTICESHIP AT MSIs





Looking More Closely at Registered Apprenticeship at Two-Year MSIs

Most RA programs are at two-year MSIs — **58** out of the **87** institutions hosting RA programs are located at two-year institutions.



Most of these programs are at:



These RA programs cut across a variety of topical areas including:



NURSING



ELECTRO-MECHANICS



PUBLIC HEALTH



MANUFACTURING



EDUCATION



CYBERSECURITY



CONSTRUCTION



ROBOTICS

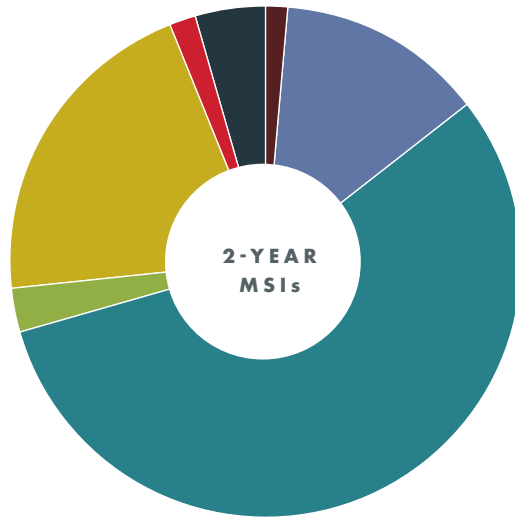


AUTO MECHANICS



SERVICE

REGISTERED APPRENTICESHIP PROGRAMS AT TWO-YEAR MSIs BY MSI-TYPE



TCU	1 (1.7%)
PBI	9 (15.5%)
HSI	38 (65.5%)
NASNTI	2 (3.4%)
AANAPISI	14 (24.1%)
HBCU	1 (1.7%)
ANNH	3 (5.2%)

***percentage is larger than 100 because of institutions with multiple designations (e.g., AANAPISI & HSI)*

Edmonds College

PRE-REGISTERED APPRENTICESHIP IN CONSTRUCTION

Edmonds College (EC) is an AANAPISI located in Washington State. The two-year, public, community college offers several registered apprenticeship programs, including an RA in occupational safety, and a pre-apprenticeship program in construction. While both programs are small given the number of students in each cohort, they are fulfilling a significant need for the surrounding community, reaching out to non-traditional and underserved populations, and forging innovative models for apprenticeship based on partnerships with non-profit organizations.

The pre-apprenticeship program in construction, for example, began with a [2019 study](#) that showed there would be a ten-thousand-person labor shortage at a time when Sound Transit was planning to build a rail system from several local communities to Seattle. Mayor Smith of Lynnwood and EC President Singh approached Sound Transit about forming a partnership that would prepare workers for these jobs, with a commitment to identifying potential workers from underserved communities and non-traditional populations, including apprentices who had no prior experience in construction.



After getting local unions on board, EC reached out to form partnerships with a diverse array of community-based organizations, including: The Community of Color Coalition, The Latino Technical Education and Training Institute, Housing Hope, and Refugee and Immigrant Services, among others. According to Larry Cluphf, Executive Director of EC's Aerospace and Advanced Manufacturing Program: "One of the key points of this [program] was to reach out to populations that do not typically look at this type of work. It is hard to reach all these populations. Different groups have different resources. That is why these partnerships are so important. There may be trust issues in communities." Shelia Dersham, Associate Director of EC's Washington Aerospace Training & Resource Center, a division of Advanced Manufacturing Skills Center, concurs – noting that: "If you are going to try to reach an 'at-risk' population, you need to have multiple avenues for them to get in. The more people who know about the program, the more referrals we are going to get. If they are referred to us by a trusted person, they are much more likely to try it." The inclusivity and diversity of the program attracted companies like Black and Decker, who gave the college a \$25,000 grant to raise awareness about the program in underserved communities.

Cluphf adds that many younger workers are not choosing to go into manufacturing trades and larger companies are losing people: "The need for these programs is so great. Plus, these are fantastic paying jobs. When a person goes into a paid apprenticeship program, they can make \$28-\$30 an hour as they are learning their trade. It is a great way to get a skillset and have a career." The construction program at EC includes a variety of diverse trades such as carpentry, plumbing, and roofing. It is a free, non-credit program in which apprentices participate in 300 hours of education and skill-building. Because EC is an MSI, it is very intentional about offering students "wrap-around" services. According to Cluphf:

We have what we call a retention specialist, but what they are is really a student services coordinator. And that person will meet with the individual and they will say: 'OK how are you planning to get there? You have issues with your car? Let us see if we can do something about that. You need daycare? We can work with this group. Housing? Here is Housing Hope, one of our partners. They help families and individuals find housing.'

The program also works in close partnership with an organization called Respect, Inclusion, Safety and Equity in Construction Trades (RISE UP). RISE UP provides the apprentices with training on implicit bias, emotional intelligence, coded language, and diversity, all of which are incorporated throughout the pre-apprenticeship program. This diversity, equity, and inclusion work is supplemented by guest speakers from RISE UP and from the unions. According to Cluphf: "Edmonds is committed to diversity. It is not enough to say you are committed. You must bring the people to the table. If you look from our president down, you will see that these are values that they hold." This commitment to diversity can be seen throughout the apprenticeship program. For example, the program's sole instructor is a woman, which according to Cluphf, allows the apprentices to "see themselves being reflected in the instructor."

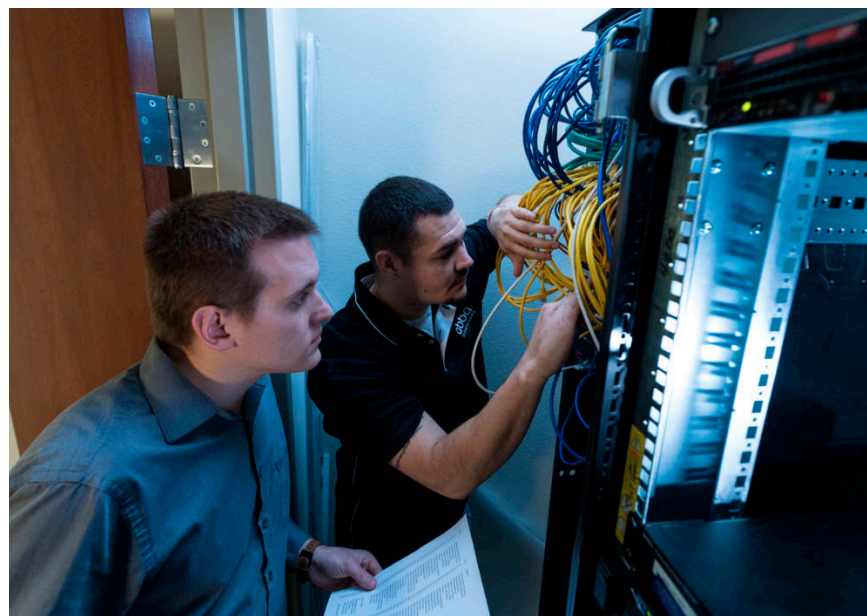
When asked about the future of the program, Cluphf explains: "We recently got our recognition from the Apprenticeship Council of L&I. That is a big step. Now we are looking for articulation agreements with these unions. Before the unions said about our apprentices, "We will just interview them." Now we say: "Well it is nice that you are willing to interview them but let us move that a little further. If we are not teaching them what they need to get into their trades let us fix that. And if we are teaching them, why aren't you accepting them?"

Central New Mexico Community College

REGISTERED APPRENTICESHIP IN INFORMATION TECHNOLOGY (IT)

Across the nation, jobs in Information Technology (IT) continue to grow at a pace where there are not enough qualified workers to keep up with the demand. In New Mexico, which has long been at the center of technology innovation, this demand was such that many employers had to actively recruit employees out of state and even internationally. Between 2018 and 2022, it was estimated that there would be over 5,000 unfulfilled jobs opening in IT fields in New Mexico alone. This shortage was the impetus for Central New Mexico Community College (CNM), an HSI, to develop its IT apprenticeship program in 2016. The program, referred to as New Mexico IT Apprenticeship Program (NMITAP), was the first RA program in IT in New Mexico, and was funded by a \$3 million grant from the U.S. Department of Labor. More than a dozen local employers signed on to participate in the program at its inception. The original goal in 2016 was to train 300 apprentices over a five-year period.

As a community college, CNM was interested in developing NMITAP because they believed it would supplement their degree tracks, giving two-year students a leg up and making them more competitive against students with four-year degrees. The program drew its apprentices from a wide group – including first-time college students, unemployed workers, and veterans looking for civilian careers – intentionally seeking to locate and recruit IT apprentices from underrepresented groups. NMITAP is especially appealing to these non-traditional students because the program provides them with on-the-job training, free college-level classes, and free learning materials. The program also covers the cost of industry certifications that are necessary to work within the field. Of note, apprentices in the program do not have to tap into financial aid, GI Bill money, or Veteran’s Administration (VA) benefits, allowing them to keep those resources if they want to pursue other



educational paths. When they finish the program, apprentices are eligible for high-paying jobs that start at \$50,000 and go as high as \$85,000. Many participating employers have indicated that they already plan to hire the apprentices full-time once they complete the program. According to one IT employer: “Developing strong talent within the company is not something we can do on our own.... It is a win-win situation for everyone involved.” Typical of programs at MSIs, apprentices in NMITAP are provided with additional support to ensure their success. For example, the NMITAP program assigns each apprentice a personal “Career Coach” and an “Academic Coach,” as well as a mentor at the company where they work.

These coaches ensure that apprentices are not having problems keeping up with the workload and are learning the skills covered in their classes. Most of the courses that apprentices take are in CNM's Business and Information Technology school. While apprentices have the option to take classes on campus, the program is primarily online, allowing apprentices to work full-time. Apprentices also have input into which courses they take, based upon their skillsets coming into the program. This is partially because CNM's program is competency-based rather than hourly-based, meaning that apprentices need to master a set of skills identified by employers as essential in the various IT fields before they can complete the program. Employers work closely with the college to define these competencies.

According to Senior Program Manager, Sarah Pratt: "It is a way to grow your own. We have seen that it creates at least some amount of loyalty. If you are willing to mentor and invest in someone as they are learning, they are more likely to stay with you." One of the exceptional features of the NMITAP program is that the college itself employs apprentices in its own internal IT departments. Pratt notes that: "This is a bit unique because we as the college are the sponsor of these registered IT apprenticeships, and we're the RTI [Related Technical Instruction] provider, and in some cases, we're the employer." According to Pratt, the college has already hired seven of their own IT apprentices.

In January 2018, the NMITAP program expanded to include two new fields for apprentices and employers: cybersecurity and medical coding. Given the need for skilled workers in these fields, the college already had dozens of candidates who were interested in taking part in the program, which provided the opportunity for employers to review their resumes and select apprentices they would most like to interview. According to Pratt: "From the college's perspective, what we ended up learning is the program helped us reach a new type of student. We ended up reaching people who were looking to change careers. Right now, we are seeing a lot of that coming out of COVID." While the college receives funding from the

CARES Act, it has also made a minimum three-year commitment to scaling up its apprenticeship program using general operating funds if necessary. According to Pratt: "The goal is to see if we can really make apprenticeship a cornerstone of our work-based learning initiative and scale it. So, by scale do we add more people just in our registered tracks? Do we try to register tracks in new industries?"

NMITAP's success served as the inspiration for U.S. Senators Martin Heinrich (NM) and Cory Gardner (CO) to create the CHANCE in TECH ACT, designed to expand IT apprenticeships and create a pipeline of new talent in the field across the nation. According to New Mexico State Senator Martin Heinrich: "Post-secondary education is increasingly important for success in the modern economy. However, not every tech career requires a four-year degree — and that includes numerous positions at our national labs. For many career paths, complementing classroom training with practical on-the-job experiences is the most effective and efficient way for workers to develop the skills necessary to thrive." Senator Heinrich further noted that: "Community colleges have a significant role to play in this effort because they understand the needs of local employers and can design programs and courses that are responsive to employers' current and future needs."

When asked if she thought MSIs have a unique role to play in offering and expanding RA programs to low-income, first-generation, students of color and other underrepresented groups, Pratt replied:

We are an HSI, but we are also in a majority-minority state. You put all the things together, and obviously, the answer is yes. We are already serving these populations. We should be the best example of how to do these things because we have the most opportunity to do it and hopefully do it well. I think we should really be pushing ourselves to set that standard and be a good model so that we can then help other institutions do something similar and have better outreach to these groups that need us the most.

Riverside City College

A CONSORTIUM OF REGISTERED APPRENTICESHIP PROGRAMS

Riverside City College (RCC) is a Hispanic Serving Institution with over 64% Latinx students. Located in California's Inland Empire, RCC was one of several area community colleges that was interested in supporting Registered Apprenticeship programs, but like many community colleges, did not have the resources to develop its own program. In 2018, RCC solved this problem by helping to form a consortium of local educational institutions called the LAUNCH Program Network (Local Apprenticeships Uniting of Network College and High Schools). The LAUNCH consortium includes several other MSIs, such as: Moreno Valley College (HSI), Barstow Community College (HSI), Chaffey College (HSI), Mt San Jacinto Community College District (HSI), Norco College (HSI), and San Bernardino Valley College (HSI).

What makes LAUNCH especially notable is that it provides a streamlined process for both the colleges and the businesses seeking an apprentice. According to RCC's Director of Regional Apprenticeships and Work-based Learning, Charles Henkles, LAUNCH helps diverse educational institutions get out of their silos. Henkles notes that: "We can share best practices and get the programs expanded and get more of an outreach to students and employers. So, by doing that, we are working together. The region is better when the schools work together. They can rely on each other's expertise to place students in quality apprenticeships." For example, RCC, as a member of the LAUNCH Consortium, could place its students in San Bernardino College's RA program.

Without membership in LAUNCH, a college could wait over a year for approval to start a new RA program. Instead, LAUNCH serves as the sponsor to get students placed quickly in the field of their choice and provides employers a one-stop shop for finding interested apprentices. According to the LAUNCH website: "Joining LAUNCH unites your school

to a network of industry partners, workforce and economic development initiatives, educational leadership, and community organizations. Partners within LAUNCH work collaboratively on the same mission: solving the Inland Empire's skills-gap."

Another advantage of the apprentice program for RCC and other members of LAUNCH is that it helps students better understand and identify different career options. This is important because students – especially first-generation students who may have no role models or mentors in the professions they are interested in -- often find that career pathways and career titles are unfamiliar. For example, many students do not know the difference between cybersecurity technology and being a data technician. According to Henkles: "Businesses often comment that community colleges do not properly prepare students for the workforce. We not only provide the jobs, but we need to educate students about the differences in careers before they choose one. A salient goal is to supply industries with well-prepared and informed skilled workers."

LAUNCH is also a very effective model for businesses interested in participating in or creating an RA program. LAUNCH's "Ready-Made" RA programs allow businesses to easily enter the RA space; however, LAUNCH also offers companies the option to "Design Your Own" wherein LAUNCH staff will consult with organizations to design new apprenticeship programs specific to a company and industry. RCC Apprenticeship Director John Wilson underscored the tremendous value of collaboration and membership in LAUNCH, sharing that: "We are talking about a huge regional initiative here, and we are seeing that more schools are starting to take note." The LAUNCH model aligns with the California Governor's goal to have 500,000 apprentices by 2029.

Aaniih Nakoda College

REGISTERED APPRENTICESHIP PROGRAM IN NURSING

The mission of Aaniih Nakoda College, a Tribal College in Montana, is to provide quality post-secondary education for residents of the Fort Belknap Indian Reservation and surrounding communities. Like other Tribal Colleges, Aaniih Nakoda seeks to both maintain and revitalize the Indigenous cultures of the local tribes, in this case, the Aaniinen and Nakoda Tribes. One aspect of reservation life that needs ongoing attention is healthcare, as issues of poverty and rural isolation can make it difficult for tribal members to get timely care and access to specialized services. This problem is complicated because most elderly tribal members, who are the most physically vulnerable, do not speak English and may be unfamiliar or uncomfortable with Western traditions. To address these issues, Aaniih Nakoda College worked with the Department of Labor to establish an apprenticeship program.

The focus of Aaniih Nakoda College's Certified Nursing Assistant (CNA) program is to train health practitioners who provide holistic and culturally informed service. According to the program website, this includes: 1) Upholding the Aaniih and Nakoda "Life Ways" by educating student nurses from the community who are steeped in the culture, history, and language that is place-based on the Fort Belknap Indian Reservation; and 2) Employing the Indigenous, holistic worldview, embedded in the Medicine Wheel as the teaching and learning paradigm. Upon graduation, students in the CNA will not only provide ethical service steeped in Aaniih and Nakoda culture, but they also further understand the professional standards for nursing and have a sense of the legal obligations for nurses.

According to the CNA Program Director, Brigit Hemmer, while the program is designed to educate certified nurses, it is crucial that graduates speak the language of the local tribes and understand the broader history of Native

Americans. Program requirements include three credits of Aaniih or Nakoda language and three credits of American Indian studies. To serve the local community, apprentices need to be proficient in the community's language and culture.



Hemmer underscores that while the CNA program has clinical partnerships with local nursing homes and hospitals – especially those with a large Native American clientele – the college is still selective in whom they partner with to ensure that the local culture is recognized and respected. The literature shows that every tribe is a sovereign nation with its specific culture and identity. Often, speakers from different tribes share in program development so that apprentices have exposure across tribal communities.

In addition to creating a pipeline of “homegrown” nurses who are committed to remaining in the community, the college also seeks to remove obstacles that have prevented tribal members from continuing their education. The local apprenticeship program held at the tribal college saves students from the hardship of having to travel hours to get to high-quality programs at other institutions. The program also enables them to remain close to their families

and communities who depend upon them. The CNA program also offers online options to provide the greatest availability and flexibility for both students and faculty.

Consistent with other indigenous communities, the tribal community has family members that need care which is often a great distance from their homes. The COVID-19 pandemic further challenges the healthcare system because many indigenous elders and other community members were turned away from healthcare facilities.

“If you are willing to mentor and invest in someone as they’re learning, they’re more likely to stay with you.”

–Sarah Pratt, Senior Program Manager, Apprenticeship, New Mexico Community College.



Looking More Closely at Registered Apprenticeship at Four-Year MSIs

Twenty-nine **(29)** Registered Apprenticeship programs are located at four-year MSIs, with most of them at HSIs and AANAPISIs.



Of note, when observing the spread of fields for the four-year institutions, there are fewer technical and vocational trades represented. The focus leans toward more “white-collar” professions such as culinary science, business, government work, robotics, social work, and aeronautical engineering.

Much like their two-year counterparts, RA cuts across a wide spectrum of areas, including



BUSINESS



ADVANCED MANUFACTURING



PUBLIC HEALTH



ELECTRICAL ENGINEERING



INDUSTRY

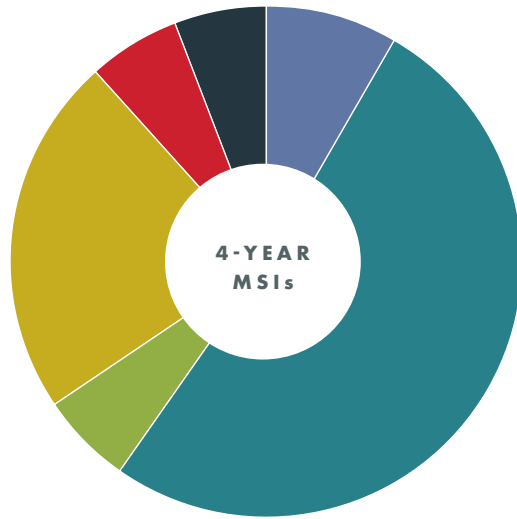


CONSTRUCTION



TRANSPORTATION

REGISTERED APPRENTICESHIP PROGRAMS AT 4-YEAR MSIs ACCORDING TO MSI-TYPE



TCU	0 (0%)
PBI	3 (10.3%)
HSI	18 (62.1%)
NASNTI	2 (6.9%)
AANAPISI	8 (27.6%)
HBCU	2 (6.9%)
ANNH	2 (6.9%)

**percentage does not equal 100 due to overlap of HSIs and ANNAPISIs.

Alabama A&M University

REGISTERED APPRENTICESHIP IN SOCIAL WORK

The master’s degree level Social Work RA Program at historically Black Alabama A&M University (AAMU) evolved from a behavioral health workforce grant from the Human Resources Services Administration (HRSA). This grant provided resources for the college to train paraprofessionals to work with families that are affected by opioid addiction or substance abuse. Researchers have found that, due to lack of services, residents of Alabama must travel far distances to get treatment, including over state lines. A component of this grant was that the university prepares social work students as paraprofessionals to work in the behavioral health field, especially in underserved communities whether they be rural or urban, by working with the Alabama Office of Apprenticeship to start an RA master’s program in Social Work.

Katina Lang-Lindsey is an Assistant Professor of Social Work at AAMU where she also serves as the Principal Investigator for a nationwide Opioid Impacted Family Support and Apprenticeship Program. According to Lang-Lindsey: “The reason that was so important is because we have had four counties in Alabama that have the highest opioid prescription rate than any other area in the United States. This is where being an HBCU has come in. We want to be able to meet that need.” She shared that: “I had always heard about apprenticeships in the past, but my perception of apprenticeship was different than this model that we are using. In the past, we have always known that apprenticeship had a lot to do with technical schools. You become an electrician, or you work in automotive. I have often said that our program is a paradigm shift because social work is a profession, it is not a technical trade.” Sam Choi, Associate Professor of Social Work at AAMU, and Co-PI on the nationwide study agreed, explaining: “Our model is unique. There is a lack of master’s level social workers while there is an increasing number of drug or opioid-impacted families, especially in our area. Historically, social work is internship-based, so it is like apprenticeship. Our program is designed to work with populations with limited resources.”

To participate in the program, apprentices first need to apply and get accepted to AAMU’s Department of Social Work, which has two concentrations: child welfare and mental health. The RA program is competency-based, meaning that apprentices work to achieve specific skill sets. The nine core competencies in the RA program are aligned with those of the school’s existing social work program and with those created by the Council on Social Work Education (CSWE). According to the Alabama

Department of Mental Health: “At the successful completion of the apprenticeship program students will have credentials that demonstrate mastery in the field, including a Targeted Case Management Certificate from the Alabama Department of Mental Health, Alabama State Board licensure, a master’s degree in social work, and on-the-job training that sets them up for success.”

As with other RAs, students can continue to work at their job while getting their master’s degree. Typical of MSIs, AAMU’s program is very student-centered, and faculty help each student produce an individualized learning plan aligned to their professional goals. The program also allows students to graduate anywhere between one year (full-time) and four years (part-time). Classes are offered in the evenings, hybrid, online — synchronous and asynchronous. According to Lang-Lindsey: “Everything is organized to fit the student’s work schedule.” The program also provides students with tuition assistance and a stipend to assist with their schooling needs. Employers who hire apprentices pay them a wage with the intention to hire them full-time after they finish the program. Even though students are getting personal benefits, the apprenticeship agencies benefit as well with an incoming pool of experienced workers. In this way, the program also reduces recruitment and retention costs for employers.

While social work is a profession dominated by women, AAMU is also actively working to integrate more men into the program. According to Dora Cook, Program Coordinator of the Opioid Impacted Family Support Program at Alabama A&M, while social work is remarkably diverse compared to other professions, “When you get to leadership roles and masters’ level

social work, African Americans are still a minority.” When asked what they think being an MSI, specifically an HBCU, adds to the program’s offerings, Lang-Lindsey shared: “As an HBCU, we are in the position to train paraprofessionals in [the] behavioral health workforce because everything that we do is in alignment with our mission, which is to develop competent professional leaders who serve vulnerable populations in the state of Alabama. That is exactly what we are trying to do. Historically, HBCUs have had partnerships in underserved communities. It makes sense for us to be doing a project like this and working with those different partners in the community.” Cook added that:

I am a graduate of Alabama A&M as well. It makes me proud to say that we can train our students with this grant. HBCUs are less funded, but we do not let it hinder us. We still strive on, and we still provide our students with great opportunities and wonderful things. We have students from all backgrounds and ethnicities. Even our professors come from diverse backgrounds, other countries. It is like students, when they see that, they know they are not alone. You are not the only one. We are very excited that we had those keys to open the door for social work behaviors and registered apprenticeship. With Alabama A&M University, our motto is: *Start here and go anywhere.*

According to Cook: “We’re one of the first programs in Alabama to be a professional apprenticeship. Those that come after us will model us or come to us for assistance since we are the first to do it.”

“HBCUs are less funded, but we do not let it hinder us. We still strive on, and we still provide our students with great opportunities and wonderful things. We have students from all backgrounds and ethnicities. Even our professors come from diverse backgrounds, other countries. It is like students, when they see that, they know they are not alone.” —Dora Cook, Program Coordinator of the Opioid Impacted Family Support

University of Houston

REGISTERED APPRENTICESHIP PROGRAM IN COMMUNITY HEALTH

The University of Houston (UH), an HSI and an AANAPISI, is the third-largest university in Texas, serving over 47,000 students. People of color make up over 70% of its student demographic. In 2020, just as the pandemic hit, UH began offering an RA program for community health workers. Community healthcare workers are defined as individuals from underserved communities who can provide health education, access resources, and tap into hard-to-reach populations. The program manager, Cindy Paz, stated:

This is typical because they are individuals who share lived experiences with their neighbors. UH found that when the community trusts the RAs, these apprentices are more successful in delivering quality care, are trusted by their peers, and are seen as trusted resources of health education and advocacy. Many of the students in the RA program want to advance their careers and want to help their respective families with healthcare. We have always been looking for ways to better help our students get employed, stay employed, just because we understand that a lot of our students come from a low socioeconomic background. If they are going into this certification course, it is because they want to provide a better future for their families.

Underscoring the ways in which community healthcare workers act as advocates for underserved populations, Paz further reflects: “They’re seen as individuals that can teach others how to speak to their doctors, how to ask questions, how to navigate the systems that are sometimes difficult to navigate for BIPOC populations.” Paz believes that the apprentices in the cohort are developing projects that will positively impact their community because they are “centered around the needs of their communities.”



The program uses project-based learning as a central teaching method. While not unique to MSIs, project-based learning represents the idea that education involves understanding and solving authentic problems from a social justice lens, rather than simply rote memorization of facts. According to Paz:

Project-based learning is like the guiding star of the class. Students are developing a project throughout the semester that they present at the end that is responsive to community needs. So, we have had groups develop projects around stroke prevention, food insecurity, STEM education, maternal health, and different types of topics that are responsive to negative social determinants of health in specific communities around the Houston area.... They developed logic models. They learned what grant writing is like. They developed budgets and timelines for their projects to be presented at the very end.

As with project-based learning, many elements of UH's RA program are reflective of the culture and mission of MSIs in general. For example, the program has a strong mentoring component, designed to support non-traditional and first-generation students. We built the community health worker apprenticeship to be supportive around those individuals through mentorships. Through continuing education units, they could stay on top of their certification and then also be part of a supportive network where they learn community health work tasks. Additionally, they get the opportunity to also be employed and make money and provide a better future for their families. According to Paz:

Week to week, it is just a lot of coaching and developing. Therefore, we are expanding our mentors, so that as we grow, there are more mentors. Because everyone needs that training and support. Support and mentorship are the biggest part of the apprenticeship. It makes the apprenticeship much more valuable to have someone that you can go to and talk to for any problems, someone that is always looking out for you.

Surprisingly, UH's RA program began with a single community health worker certification course that was offered by faculty member Daniel Price, who now serves as the Director of the Community Healthcare Worker Initiative. According to Paz, who participated in the course herself:

He started teaching the course in 2017 at a public housing complex across the street from the University of Houston. Participants included a mix of undergraduate students and community members. We all learned a bit about public health, a bit about building projects that have a positive impact on communities. And so, then it developed into where we were able to get people into

employment opportunities. These were people that had a history of unemployment or would be considered difficult to employ just because of low educational background or professional skills. We decided to develop an apprenticeship program and go through getting registered through the Department of Labor and then forming a connection with the Texas Workforce Commission.

The RA program at UH is notable in that it draws from a population that often faces workplace discrimination. Through their collaboration with the Texas Workforce Commission, the program gets reimbursed for the cost of RA that meets their eligibility requirements, such as "a history of unemployment, currently eligible for governmental assistance, SNAP, or a history of incarceration." The program also has students who received their bachelor's degree from UH and are taking a gap year before going to medical school. Paz shared: "They come with a fresh set of eyes or perspective on community health before they become physicians." She also believes that the program is effective in helping organizations understand what community healthcare workers are offering or "bringing to the table." She added: "We are seeing that organizations are beginning to understand better what the work of the community health workers is, which is then helping them with employment opportunities. According to Paz: "If they're going into this certification course, it's because they want to provide a better future for their families."

The Community Health Workers Initiative at UH is one of the few MSI-based RA programs where the university serves as both an intermediary and an educator. This means that they can hire their own apprentices, such as a graduate of the RA program that was personally a member of the foster care system. Another graduate of the program is currently mentoring other apprentices. Paz concludes that the RA program is seen as a "place of opportunity" further noting that:

It is a place of opportunity for people who have traditionally faced barriers and challenges find opportunities through our program. And so, I see apprenticeships as a way to get closer at least providing equitable access to jobs, especially jobs that are meaningful and that help someone and that really do contribute back to the community whether it be through education, whether it be through support, building better cohesive social networks. So, I do think community health workers as advocates for their communities, as agents of change and the apprenticeship is a huge opportunity to be able to provide an avenue for others to be on a path where they are contributing to their community but also receiving income and providing something better for their families.

UH is poised to assist students of color with academics and job access. Further, students trained at UH often earn the community members' trust, which is a significant component in providing health service to the community. When asked about the role of MSIs in RA programs, Paz, also a first-generation student, replied:

Coming into the registered apprenticeship program some of the students, past undergraduate students that we have had were first-generation. They all aspire to go back to school, to go to graduate school. For some of them, going through the apprenticeship changes their perception of what they want to do. I remember one of our previous students was dead set on going to medical school.

The learning benefit supports students' academic goals. One student who interned with UH initially committed to a medical school pathway. After the apprenticeship, the student switched to public health. Another student decided to seek health care administration after her apprenticeship. In short, students who participate in the apprenticeship have a solid understanding of different aspects of public health and community health career paths. The Community Health Workers Initiative draws upon the strengths that an MSI offers and bolsters these strengths with opportunities for practical skill development and life-changing possibilities.



Tennessee State University

REGISTERED APPRENTICESHIP IN TEACHER EDUCATION

Tennessee State University (TSU), an HBCU, has partnered with 25 school districts to offer an RA program in teacher education, including specialties in early childhood education, elementary education, and special education. While the program is just getting started, it holds great promise for addressing Tennessee's statewide teacher shortage and providing a model for other states interested in creating RA programs in teaching.

TSU's program is aimed at paraprofessionals, meaning people already working in schools in support capacities, but that do not yet have degrees in teacher education or a license to teach. Many of them started out getting a degree in teacher education but were unable to pass high-stakes exams at the end of their second year in the program (Petchauer 2018; Petchauer and Mawhinney, 2017). TSU Education Dean Jeri Hanes, who is personally spearheading the program, shares that one of the goals of the program is to diversify the teaching profession, which is currently over 80% White (National Center for Educational Statistics, 2020). According to Hanes: "You've got to make sure that you create a pipeline where you will have enough teachers and especially minorities to represent the students that you serve in your K-12 settings."

Participants will receive 1,000 hours of training from the school district, in addition to a full array of academic support provided by TSU. As Hanes explains: "Our biggest issue is with retention because if you are in the program, we do not want to lose you. So, we have academic support, student support services, career planning, coaching, tutoring, and test preparation." When asked if it was a challenge to get districts to partner on the RA program, Hanes responded: "I just hit the road and I met with superintendents and I asked: 'What is it that you want? What is it that you need? And what can TSU do for you?' And it always came back to 'We need minority teachers. How can we recruit them?'" With a background in K-12 teaching, developing curriculum, school district administration and

"I would say if a Minority Serving Institution is looking for another mechanism to recruit, it is a great opportunity for them to recruit students and to provide them support as well because you know you may have people that have not been in school for 10 or 15 years, and they are trying because this is a goal that they started but somehow had to put on hold."

—Jeri Haynes, Dean of Education, Tennessee State University

workforce development, she added that:

"This is something we should do because we do have students in the traditional sense that have been trying to juggle working and going to school. If we want to identify minorities and get them because they cannot afford to quit their job, then here is the opportunity. It is another avenue to reach minorities and afford them the opportunity to become educators. I think so many times they have been misinformed. And the registered apprenticeship program allows you to live out your dream."

According to Tennessee Governor Bill Lee: "These apprenticeship programs will create a pipeline of experienced teachers with valuable on-the-job training and help ensure quality education for generations of Tennessee students." Tennessee Education Commissioner Penny Schwinn agrees, noting that: "We hope other states across the country will utilize this model to combat teacher shortages, remove barriers to becoming an educator for people from all backgrounds and continue to invest in the teaching profession." The Tennessee Department of Education estimates that the program will provide a tuition-free pathway to over 650 future teachers.

03 What We Learned

There is much to be learned from and about MSIs and RA programs. MSIs of all designations, types, and sizes are actively creating and running RA programs. They are leading the way in creating non-traditional RA programs that are not in the trades, such as social work (Alabama A&M University), teacher education (Tennessee State University), information security and technology (Central New Mexico Community College) and occupational safety (Edmonds College). MSIs tend to choose these professions because they see a current or future need in the workforce: such as shortages of teachers of color in Tennessee, an opioid crisis in Alabama requiring skilled social workers, a gap in the instructional technology sector in New Mexico due to technological advancement, or the building of a new railroad going through towns near Edmonds College in Washington State.

MSIs' close relationships to the communities in which they are embedded put them in a great position to reach underrepresented students and/or workers. RA programs are creating new pipelines from college to career that are enabling MSIs to expand their outreach and recruitment. On the one hand, these programs are attracting a younger student demographic, as many students realize they can get training and a significant salary without going into great debt to get a bachelor's or master's degree. On the other hand, these programs are attracting non-traditionally aged students, such as paraprofessionals who are already working in these sites and want to upskill without leaving their jobs or going into debt.

MSI RA programs are also attracting professionals who want to change careers. Changes in careers have been on the rise because of the COVID-19 pandemic, as people realize they can be more flexible than in the past. Additionally, because many RA programs offer coursework and technical training for free, candidates can save other grant money (such as financial

aid or Veteran Association benefits) for other/future educational ventures. As is typical at MSIs, the design of their RA programs tends to focus on wrap-around supports, such as providing funds for books, transportation, or childcare, as well as dedicated student success, academic, and career coaches. Many programs also pay for industry certifications, lowering the burden of fees for students. In addition, many institutions understand the lives of MSI students and offer RA coursework in flexible formats to accommodate working professionals, such as online and asynchronous learning.

At least one RA, Edmonds College's program in construction, was intentionally designed to include partners such as The Community of Color Coalition, The Latino Technical Education and Training Institute, Housing Hope, and Refugee and Immigrant Services, as a way of building community trust during the recruitment and retention process. As part of their training, the Edmonds College program also included modules on diversity, equity, and inclusion (DEI) issues, as a way of not just preparing professionals with the necessary work skills, but also enabling them to experience job satisfaction and retention.

Employers are eager to hire those in MSI RA programs upon completion of the RAs and are particularly pleased that they are "homegrown," meaning that employees are trained to specific, local industry needs and competencies that the employers and partners themselves identify and verify. Employers also find that RA programs create loyalty in future employees. Some MSIs even employ RAs in their own departments. For example, New Mexico Community College placed IT RAs in their own IT departments. There are still few RAs at most MSIs across the nation. Whether that be due to a lack of awareness or a lack of funding, we aim to increase visibility to the immense benefits of RAs, for students, employers, and institutions alike.

04 Challenges Faced by MSIs around Registered Apprenticeship

MSIs experience many challenges in hosting RA programs. One issue is that in some non-traditional field RAs (e.g., social work, information security, or medical coding) need to frontload the coursework as the employer cannot risk putting them in a position that has a direct impact on people without being confident that they know the basics.

In addition, when we searched for RA programs on MSI websites, it was unclear whether the programs were active and how to find out more about them. Part of the confusion is that each program was created under different circumstances and initiated by different stakeholders. There does not seem to be a common process. This issue may affect student participation as information is usually difficult to find. Additionally, many RAs are offered by the college's "workforce initiatives" department rather than the specific RA discipline itself, which may create confusion and a lack of awareness for students.

Of concern, many of the staff members we spoke with were new to running an RA program and did not know a lot about them. Staff were also wearing many hats and oversaw other college programs at the same time, creating confusion and overload. These issues suggest that RA programs need a dedicated staff and a system for preserving institutional data and memory. Lastly, some of the program administrators with whom we spoke were not sure how they were going to staff and sustain the programs over the long term without ongoing government funding or grants.

Despite these challenges, we believe that RA is an important and viable option for MSIs and that with technical support and collaboration, these challenges can be overcome.



05 Recommendations

- 1 If an institution has an RA or multiple RA programs, be sure to create a webpage that clearly and succinctly describes what an RA is and what RA programs/trades you offer. Be sure to note specifically what students will gain from participating in the program. Highlight certifications students may receive and any additional benefits from each RA program. To ensure easy accessibility, make sure details about RA opportunities and any contact information are visible and clear on your institution's main homepage in some capacity. In addition, be sure to hold regular workshops and informational sessions about your RA program(s) so students and partners alike can know exactly what you offer and how it benefits them.
- 2 If an institution does not have an RA program, consider establishing one. Start small by contacting Jobs for the Future's [National Innovation Hub for Diversity, Equity, Inclusion, and Accessibility in Registered Apprenticeship](#) for technical assistance. Form a partnership with local employers and help your community as well as your students with their post-graduation plans. If you are worried about funding, [learn more about the Workforce Innovation and Opportunity Act](#) and how you can access federal funding to kickstart your apprenticeship program.
- 3 MSIs interested in RAs can begin the process by examining needs in the workforce in the surrounding area. For example: the Tennessee State University teacher education RA program is focused on expanding the diversity of teachers in the region; Edmonds College needs skilled construction workers for a new train line; and Alabama A&M University is responding to the local opioid crisis and the need for trained social workers.
- 4 Many MSIs make RA easier for students and businesses by providing career awareness options, so students get experience prior to making a commitment to a specific RA. Students can make informed decisions rather than locking into a long-term commitment with a RA that might not be the best fit for them or the business partner.
- 5 For RAs to keep expanding and diversifying, appropriate funding must be available. The Department of Labor (DOL) must strive to grow their funds and participation alike. MSIs are not participating due to a lack of awareness of both funds and programmatic benefits. The DOL must keep promoting RA and target MSIs directly. They can accomplish this by holding workshops, webinars, and partnering with exemplars in RA.
- 6 Researchers interested in RAs at MSIs should consider conducting one-on-one qualitative interviews with apprentices as well as focus groups with RA cohorts. In addition, further discussions with RA coordinators would be beneficial to the understanding of both the challenges and creative approaches that MSIs use to ensure RA experiences have an impact on students, employers, and the surrounding community.
- 7 Current RA programs could gather in each region (Northeast, Mid-Atlantic, Pacific Northwest, etc.) to learn about best practices and share strategies for reaching the desired populations. This could lead to consortiums, such as with the LAUNCH program at Riverside City College. So often, RA programs and their directors work in isolation and without guidance. Even if it is virtual, a meeting twice an academic year in regions could help support existing programs, provide guidance for emerging programs, and offer support as new people enter the field.

8 Through our analysis, we discovered no standardization or navigation assistance to learn about the respective RA programs. While institutions may like to maintain their autonomy in developing RA programs, some standardization even within regions could determine which elements could be presented on websites to minimize confusion for students and businesses seeking RA programs.

NOTE TO READERS: If you know of other registered apprenticeship programs at MSIs that we missed in our research, please contact us at rutgers.cmsi@gse.rutgers.edu and we will add these institutions to our analysis.



Want To Set Up a Registered Apprenticeship?

If you are interested in learning more about Registered Apprenticeship or want to set one up, please contact Jobs for the Future's [National Innovation Hub for Diversity, Equity, Inclusion, and Accessibility in Registered Apprenticeship](#).



05 References

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