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STRENGTHENING THE FOUNDATIONS OF REGISTERED APPRENTICESHIP

Investing by Underpinning the Million-Apprentice Goal

Prepared By:
Jennyfer Ambe, Dr.PH and Padma Arvind Ph.D

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Introduction

The net.America Corporation (net.America) has been in workforce development for almost a decade. The foundation of the net.America team and partners is in the workforce development space. net.America has been as an intermediary on two contracts with the US Department of Labor and a sub-contractor on one. The first contract was as a sub-contractor on the AHIMA contract in 2017 where net.America was able to support the partners and met and/or exceeded *all* the contract deliverables forging lasting partnerships with organizations, through the years. The second contract was the Youth Apprenticeship Intermediary (YAI) contract. This contract lasted for 5 years, from June 2019 to June 2024 and was focused on youth between the ages of 16 and 21 years of age. net.America's third contract, Expansion Registered Apprenticeship Program (ERAP) Industry Intermediary Contract (Industry Contract) started in September 2020 and will end September 2025. This paper highlights the strengths of the work of net.America as an Intermediary.

Industry Intermediary

As an Intermediary with the United States Department of Labor, Division on Workforce Development, the main goal is to expand Registered Apprenticeship across the United States through technical expertise. net.America's Workforce Development Division provides assistance and support for workforce challenges and supports partners while they develop RAP's that enable apprentices to grow their skills and capabilities. Training providers are equipped with the

support they need to work with target populations, to provide career readiness, develop industry specific skills, and career pathways.

The Industry Intermediary Contract project focuses on the following industries; Healthcare, Energy and Information Technology. The Senior Director for Workforce Development, and project lead, Dr. Padma Arvind, and her team, have been successfully outreaching and creating awareness through, conducting sector-based outreach and recruitment to individuals and organizations. Social media is used as a platform to share information and the Hopin platform is used to host events. Outreach and informational sessions are targeted to include all of the following entities: Organizations, Businesses, Professional and Trade Organizations and Associations, Work Force Boards and Institutions. Outcomes are tracked, including the number of people engaged and RAP adoption as a result of these sessions.

One Million Registered Apprentices

A recent executive order with the goal of expanding apprenticeship programs in the United States to one million annually was released (April 2025). This push for increased apprenticeships is a great support for the goals of net.America's workforce development team who have hoped for the continuation of work and sustainability of programs that were launched by net.America's teams over the past decade.

Breakdown of the key aspects

Goal of 1 Million Apprenticeships:

The core objective is to reach and surpass 1 million new active apprentices. This signifies a substantial increase in the number of individuals participating in these programs.

Focus on Skilled Trades.

A significant emphasis appears to be placed on newer technology jobs but still promoting skilled trade jobs. This addresses labor shortages in sectors like construction and manufacturing, which are crucial for infrastructure development and economic growth.

Modernizing Workforce Development.

The executive order calls for a review and modernization of federal workforce development programs. This includes streamlining existing programs, improving efficiency, and aligning them with the needs of emerging industries, such as those in the technology space.

Strengthening Connections,

A key component involves enhancing connections between apprenticeship programs and the education system. This aims to create clearer pathways for individuals to acquire valuable skills and transition into well-paying jobs.

Emphasis on Registered Apprenticeships.

There are many apprenticeship programs however, the focus is on registered apprenticeships, that are recognized by the United States Department of Labor. These programs have standards that are approved by the US DOL and follow the *"earn and learn"* model of apprenticeships.

Addressing Workforce Needs.

The initiative seeks to address current and future workforce needs, particularly in light of factors like the growth of modern technology including the use of artificial intelligence and the reshoring of manufacturing.

Challenges with Registered Apprenticeship

Although success stories are celebrated, they may not be the norm if one looks at the evidence-base for registered apprenticeship. Through this paper, the authors take a candid look at some of the barriers and challenges faced by registered apprenticeship programs. Surprisingly, there is dearth of current literature that addresses registered apprenticeship from an intermediary perspective, therefore, this paper will also take into account some of those challenges from a practical perspective, as an intermediary. Intermediaries can provide a global, holistic view as practitioners and technical experts who bring together the components for a registered apprenticeship program (RAP).

According to the United States Department of Labor, "Registered Apprenticeship combines supervised on-the-job training with Related Technical Instruction (RTI) specific to the apprentice's

chosen occupation." Registered Apprenticeship Programs (RAPS) are successful when there are is a range of participation. This means that all individuals have access to and are actively engaged at all levels pertaining to the program. There is ample evidence to show that programs promoting fairness and acceptance tend to be successful in attracting a wide range of participants, to include individuals from all communities within the United States. When this is possible, all important criteria bring together a fair and just approach to registered apprenticeship programs which can be highly successful.

Upon completion, this also leads to skilled individuals who bring expertise to the workforce, apprentices also find better job opportunities, and employers benefit, as do the broader economy. Other key criteria for successful RAPs are; strong employer/industry partnerships and commitment, a curriculum that is not only comprehensive but also relevant, mentorship, positive outcomes for apprentices such as completion, career and employment pathways, and on-going evaluation and improvement.

Workforce Innovation and Opportunity Act, Section 188

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"Prohibits discrimination based on race, color or national origin and religion, among other biases, and applies to recipients of federal funds under WIOA Title 1, such as state workforce agencies. Section 188's prohibition against discrimination based on religion protects individuals who belong to traditional, organized religions and to individuals who have sincerely held religious, ethical or moral beliefs."

The Workforce Innovation and Opportunity Act (WIOA) serves as a framework for federal investment to develop the workforce to create a more skilled workforce which will meet the needs of the economy, making it stronger nationally. WIOA helps job seekers who may have barriers to employment. It increases access to education, training and support services which individuals need to thrive in the workplace. This also meets the needs of employers who would have the ability to retain these skilled workers. This increase in economic sufficiency in turn support American workers to compete in a global economy.

Identifying Gaps: Registered Apprentices

Why is it important to write about the barriers for apprentices? Here are several specific reasons why the authors felt it was important to write about the barriers and challenges for apprentices to access the Registered Apprenticeship Programs: need to raise awareness, inform policy and advocacy, improve program design and how the programs are rolled out and sustained, promotion of RAPs, supporting economic and workforce development, encouraging employer participation, and empowering apprentices.

Raising Awareness:

As an intermediary, we have witnessed and have ample evidence as seen from the case studies below, some of the challenges faced.

Case studies

Below are actual case studies that show workforce barriers experienced with net.America's Registered Apprenticeship Program partners. These cases were highlighted in the Promising Practices Guide for 2024 (net.America's Youth Apprenticeship Intermediary).

Christ the King Manor (CKM) is a retirement community in DuBois, Pennsylvania and one of net.America's partners. This retirement community has an active Registered Apprenticeship program linked to youth, as young as 16 years old. The students enroll in the program and follow a pathway from Feeding Assistants and other similar, relevant jobs that lead to the Certified Nursing Assistant occupation.

One of the key benefits of RAPS is that apprentices get hands-on training, and students have reported they enjoy this active experience. Tasks such as mechanical lift operations are undertaken only when they are over 18 years old due to insurance and other restrictions. This comes with other clinical responsibilities, as they mature and get older.

Candidates take their Nurses Assistant Certification only during their year on the job instead of at the time of start of the program. This structure allows for enrolment of high school juniors and seniors in the RAP while meeting all the training and certification requirements efficiently and in a timely manner.

Additionally, mentorship for the program is provided by the seasoned care nurses ensuring high quality support and learning. Many students learn better through actions and activities that are supervised through mentorship. Mentors are incentivized through special workshops and additional payment of $1 per hour spent mentoring. For the motivated CNAs in the program,

CTKM also provides a program pathway to Licensed Practical Nurse also through RAPS. CNAs trained and hired through RAP replaced the agency staff promoting loyalty and retention.

Christ The King Manor, Registered Apprenticeship Program Challenges

Some of the challenges they have witnessed is that sometimes apprentices leave prior to completion. Retention issues sometimes revolve around higher pay elsewhere. CTKM offers a retention bonus of $500 on completion of certification and an additional $500 after the 90-day probation. Candidates still leave for higher pay elsewhere. Providing growth through career pathways and building talent pipelines through pre-apprenticeships to apprenticeships with adequate support from the DoL, and DoE could help with retention.

High School District 214 is in Illinois with campuses in Buffalo Grove, Arlington Heights, Elk Grove Village, Rolling Meadows and Wheeling. The District has approximately 11 different Registered Apprenticeship programs which allows the high school seniors to take dual credit health science and general education courses on the Harper College campus full-time. They can earn up to 30 college credit hours during their senior year, whether they are interested in preparing for an associate degree program or pursuing an industry certificate.

Motivated students in the Certified Nursing Assistant RAP with Northwest Community Healthcare (NCH) are offered an opportunity for direct employment through the Certified Nursing Assistant (CNA) Program. This is a great opportunity for career development and advancement as they earn and learn. The NCH Foundation also provides scholarships in support

of their employees' personal education and growth. Of the many individuals who have participated in Harper's apprenticeship programs, more than 80% stay beyond their initial commitment. Apprenticeship programs have been a game changer in addressing attrition.

District 214 Registered Apprenticeship Program Challenges

One of the key challenges faced initially with respect to program implementation was chronic absenteeism. Mentoring the students consistently and preparing them for the workplace through the career readiness boot camp has helped address this issue. Some students also face burnout, juggling the course work and the rigors of the job. The program has strong mentors at all levels providing guidance and support to the students helping them to stay on course.

Independent Electrical Contractors, Chesapeake (IECC) is based in the mid-Atlantic region with offices in Maryland, and Virginia. The membership is made up of over 250 contractors in all facets of the electrical industry. Offering a 4-year registered apprenticeship in Delaware, Washington, D.C., Maryland, Virginia and West Virginia, individuals are able to register for workforce programs that start as early with pre-apprenticeships for students.

Upon successful completion, students graduate high school with their diploma and Year 1 of their 3/4-Year Journey worker Training in either the Electrical or Low Voltage program. After completing all years required of on-the-job training, apprentices are eligible to obtain an industry recognized credential or Journey worker's Electrical License based on the apprenticeship program they complete. IEC also supports continuing educational efforts throughout the

duration of the apprenticeship. Most of the students enroll with the ambition of earning their Journeyman or Master Electricians License, and many graduates go on to become project managers, foremen, estimators, and business owners.

IECC RAP Challenges

The high school students in the IEC RAPS put in long days balancing high school work with that of electricians in training. Enduring this tight schedule is the most pressing challenge that the students encounter. However, the benefits ranging from lucrative pay to steady career growth far outweigh the hardships providing the motivation to the candidates steering them towards completion.

Challenges: Case Studies

One can deduct from the three (3)Case Studies highlighted above, that workforce barriers for Apprentices show up in various ways. These challenges Apprentices face can inhibit and impact their ability to access programs, to enter, remain in the program, and/ or complete registered apprenticeship programs.

The key barriers are: Financial barriers, educational barriers, workplace barriers (culture and language included), geographic and other types of logistical barriers, social and personal barriers, safety barriers, and job advancement barriers. Financial barriers can be seen through low entry-level wages.

Educational and Workplace Barriers

Lack of Language Support

There is a growing aging population who are cared for by healthcare aids. May of the healthcare aides work with populations in their communities. For example, there are many healthcare aides that are of African heritage who are not fluent in English. They also care for aged individuals who are also not fluent in English, for example, from West Africa. These health care aides are often middle- aged women who are not able to join RAPS for example, to become a Certified Nursing Assistant because of a language barrier.

Barriers Created Through Lack of Language Support

When a person is denied the right to information and is met with a lack of materials in a language they speak/ understand fluently, this is an explicit bias, especially if they live and work in a community where that language is spoken. Explicit bias is a refusal to support and assist the individual within a community. It can take the form of not supporting translations and alternate languages, such as Twi, or even Hindi in the immigrant Indian population. This creates significant barriers to entry and success in Registered Apprenticeship Programs (RAPs).

If an individual does not have access to information, such as *recruitment materials* so that the individual can be recruited into a RAP or *application forms,* these are barriers to access. Once an individual is part of a program, if they do not have access through language support to *training* and *instruction*, *learning materials*, or have difficulties *communicating with trainers* who do not speak their native language and are unable to share information, this will lead to misunderstanding and/or learning challenges. Other language challenges can be seen in a lack of workplace integration. Individuals are unable to access *safety instructions and* have meaningful *team collaboration* due to language barriers which takes away from effective communication.

Without effective communication, collaboration with team members will affect individuals from being assimilated into the work environment, the work culture and productivity.

Mentorship is a crucial part of the Registered Apprenticeship Program. For non-native speakers, this is a barrier to having meaningful engagement with their mentors.

People with DisAbilities

Some challenges faced by people with physical disAbilities, such as those who use wheelchairs, are physical barriers, visual accessibility, design and font, also play a role in inability to access information. With visual accessibility, this has to do with the height of where information is placed. Posters, job advertisements and opportunities on bulletin boards may be too high on the walls and out of the line of sight for a person in a wheelchair. When text is placed higher up, it is also further away therefore smaller print may be harder to see. There are also physical barriers where views can be obstructed if there are people in front of the bulletin board. Inability to reach interactive boards and screens that require one to interact by swiping or entering information, for example, is also a huge challenge. Other access challenges are how small the font size is. If a person is viewing from a greater distance, and lower down, the font needs to be an appropriate size so that it can be read. Color contrast also needs to be adjusted.

Geographic Barriers

Urban Communities

Many apprentices from certain communities are earning money to help support their parents and other family members. Therefore, a low training wage can be a deterrent for individuals regardless of age. For those who are not supporting family, the lower wages may not be

substantial enough to cover living expenses especially in areas of higher costs in the United States of America. Another reason is economic pressure that apprentices may experience. They must learn to balance financial obligations and family support on an apprentice's wage. This puts on undue financial pressure especially for the younger apprentices who may not be yet able to navigate in this space due to limited life experiences.

During our work with Registered Apprenticeship, the Youth Apprenticeship Intermediary contract allowed for certain uses of incentive funds. However, often with other funding, out-of-pocket expenses such as uniforms, certifications and other occupational tools may have to come from out – of- pocket expenses. It was not uncommon to hear that there was limited and restricted funding, unlike in college, where students are able to access financial aid and other resources to offset costs.

Many Registered Apprenticeship Programs, have entry requirements that are not flexible. An example is that most RAPS require a high school diploma. If an individual does not have that, they are disqualified. A better alternative would be to provide resources on where/how the individual could complete their GED. Other requirements can be for specific skills, or prior experience, which excludes individuals without any pathway to remediation. This can especially be seen when candidates may lack some foundational knowledge in math or literacy which are needed for the successful completion of the program.

Rural Communities

Rural communities are often unaware of opportunities that are available with Registered Apprenticeship.

It has been found that often, RAPS in rural areas face challenges that lead to a lower quality of training due to the several factors. Evidence shows that geographically, there may be challenges with rural areas as well as an isolation that occurs around certain communities even if they are in urban areas. This can be seen also in the cases of "food deserts" and can be superimposed in urban areas to highlight the lack of access to multiple resources, including RAPs. This is known as geographic isolation.

Rural areas often have fewer training centers, community colleges, or technical schools that can provide the necessary classroom instruction and hands-on training. This can result in apprentices receiving less comprehensive or specialized training. In this case, it could be that the distances to the training sites are beyond reach due to long distances for travel, transportation challenges (lack of reliable options) all add to the difficulties Apprentices may have attending regularly scheduled trainings and on the job sessions. There are fewer training facilities in rural areas. Community Colleges and Career Technical Institutions may not be readily accessible for the classroom instruction as well as a dearth of skilled instructors for the technical programs. This shortage of qualified instructors in rural areas leads to inconsistencies with the quality of training that can be provided.

Hybrid training is an option, that promotes access to those who are unable to attend in person. However, this could create challenges for those with a lack of digital literacy. Other challenges would be the availability of laptops, ipads or internet access. It was also found that internet access usages during the pandemic, when/where available showed gender bias within households (UNESCO, 2021).

Displaced Workers

These workers may have lost their job due to a variety of circumstances beyond their control. This may include: economic conditions and/or natural disasters affecting self – employment such as the fires in California earlier in the year, insufficient or abolishment of their position or shift, women may be displaced homemakers whose spouse may no longer be able to support them for whatever reason, being a military spouse who lost employment due to permanent change of duty station. There are more examples of displaced workers however note that being let go from a job or quitting a job does not constitute as a person being a displaced worker.

RECOMMENDATIONS

Advocacy and Awareness

Increased advocacy and awareness is needed for Registered Apprenticeship Programs. Without knowledge of registered apprenticeship programs, individuals are unable to apply to enroll in programs. These barriers about awareness of available opportunities (especially for those in rural areas) need to be addressed. Also, for those who have physical handicaps, when paper notices are

made and posted in buildings on notice boards, for example, those in wheelchairs have difficulty as the postings are above eye level.

Retention

To ensure higher rates of retention, it is suggested that there could be a possible monetary award attached to staying and finishing the program. It could be attached to the next stage of starting a job, but this is not always possible so the other suggestions may help with retention. The first one is ensuring that the mentor chosen fits well with the apprentice. We wrote about the issues around language here we would like to add that cultural norms should be taken into consideration. An apprentice, for example, who is an immigrant with certain cultures and traditions may benefit more from an adult mentor who knows about those cultural norms and traditions and is able to empathize with the apprentice. This may seem like common sense but often when students/apprentices are paired with mentors, it is not taken into consideration.

It is important to implement regular check –ins with the apprentices and mentors as well as the program coordinators to ensure that any issues that may arise are taken care of early. It is important to keep the apprentice engaged and to enable him/her to feel cared for. Having a clear career pathway that shows progression with clear understanding of what the apprentice needs to accomplish helps with retention.

When apprentices understand the opportunities for advancement within a company and/or an industry it motivates them to stay to completion to join as an employee. Personalized plans for the enhancement of skills provides a supportive work environment and a culture that nurtures

apprentices. Providing awards and recognition also tends to keep them committed to the programs.

Scheduling

There are several forms of scheduling that may help with schedules: flexible scheduling with flexible work hours, to accommodate apprentices' personal commitments, family responsibilities and trainings. Block scheduling with concentrated training periods could concentrate some of the classroom learning for specific periods to reduce schedule disruptions. Other types of scheduling can be explored with apprentices, these are online platforms, and automated reminders.

Burnout

Work life balance is extremely important to avoid burn-out. Trainers and mentors can advise apprentices through awareness campaigns and monitor apprentices for this. Providing resources, fun activities during the work week and teaching stress management techniques such as meditation, mindfulness and other relaxation techniques will help. When apprentices/students get to receive constructive feedback as they progress, they start to see the value they bring, and this could also reduce feelings of frustration that can lead to burnout. By celebrating achievements, this will boost morale and help them to feel of value.

This leads us to an important topic which is mental health support. Apprentices should have access to Counseling Services as well as Peer Support Groups that could have mediation and peer specialists.

Transportation

When possible, offering subsidized transportation through vouchers or subsidies help to cover the cost of apprentice's commute to work and training. Car/van pools make it easier for them so that they can commute together. Where possible, company provided shuttles or vehicles are a support for workers providing an easier commute to work. This is important especially where public transportation is difficult to find such as in the rural areas.

Rural Areas

Rural areas provide unique challenges. As local training programs are expanded, there would be a need to ensure local partnerships with businesses, community colleges, and technical schools to make Registered Apprenticeship Programs more accessible. This can be done by leveraging technology for remote training especially in the Information Technology space. Virtual classrooms and distance mentorships have been shown to work, during the Pandemic. More funding for rural Apprenticeship through grants/contracts that employers can use to establish Registered Apprenticeship Programs, stipends or scholarships for apprentices would help to support them with the associated costs.

Possible Solutions to Address Lack of Programmatic Support

Often, the lack of resources are cited and the excuse given is the unavailability of funding to get those materials. When there is a lack of language support, it can hinder non-native speakers. A lack of language support demonstrates acts as a barrier to non-native English speakers from enrolling in Registered Apprenticeship Programs. Education is key to addressing this since most of us are aware tha prejudices exist. Mandatory courses for trainers and mentors, discussion in

focus groups, and surveys offer ways to eliminate, enlighten and educate educators on how to prevent the exclusion of a vital part of the workforce.

Solutions to Address Language Barriers

Recruitment. During recruitment, ensure that there are multilingual recruiters, translation of all the recruitment materials to include brochures, application forms and if possible, the website. Availability in Hindi, for example, will enable the reach to extend to a broader audience.

Training. Ensure that trainers and mentors are multilingual and/or pair apprentices with the appropriate trainers/mentors.

Learning Materials. Materials used for classwork, manuals, videos and other resources, need to be translated to different languages that reflect the diverse pool of apprentices.

Communication. By offering language learning and education, for example, on-line courses, this will help people to become proficient in a language. Also, cultural exchange programs provide immersive experiences that help cultural understanding and language could be used in context to help learners. Translation is an important form of access and may be needed for documents, meetings and other job-related activities.

Case Managers USDOL may consider offering funding to support case managers in these intermediary contracts. Case management can help increase completion and retention rates, especially for youth apprentices.

Conclusion

As a US DOL intermediary, net.America serves as a liaison between stakeholders. One of the main goals has been to assist with demystifying Registered Apprenticeship and providing support for the creation of programs, building a workforce with a focus of ensuring that certain populations can participate in Registered Apprenticeship Programs. It is important to be transparent and write about gaps that were experienced to raise awareness of some of the challenges that have been highlighted in this paper. Although these challenges may not be peculiar to Registered Apprenticeship Programs, this is from our evidence base and what has been experienced. By sharing evidence, it could also influence policy and advocacy which may in turn enhance Registered Apprenticeship Programs.

By addressing key areas of and offering possible solutions to; retention, scheduling, burnout, transportation and rural apprenticeship programs, it is evident that there is not one approach rather a multifaceted one that is required. This involves, financial support, flexibility with the design of programs, strong mentorship and support systems, integration of technology, and increased funding. If these recommendations can be implemented, this will make registered apprenticeship programs easier to access.

By promoting fairness, we attempt to address some systemic challenges, support awareness, training and education and provide some helpful solutions to some of the barriers. It is in this view that this paper has been written to examine and proffer solutions to some of the challenges encountered with Registered Apprenticeship Programs. This can serve as a strong foundation which underpins future work in building Registered Apprenticeship in 2025 and beyond.

Resources

net.America Podcasts

- Your Future with Tallo

https://podcasters.spotify.com/pod/show/netamerica/episodes/Your-Future-with-Tallo-e1e5v21/a-a7ciag1

- Future is now: Investing in Youth Apprenticeship Through Access to RAPS

https://podcasters.spotify.com/pod/show/netamerica/episodes/Future-is-Now-Investing-in-Youth-Apprenticeship-through-access-to-RAPs-e1e46u7/a-a7cbdt5

- Higher Education Aligning Education with Industry

https://podcasters.spotify.com/pod/show/netamerica/episodes/Hire-Education-Aligning-Education-with-Industry-e1e60mu/a-a7cihl8

- Future is Now: Promising Practices Guide

https://podcasters.spotify.com/pod/show/netamerica/episodes/Future-is-Now-Promising-Practice-Guide-e1e63j3/a-a7cisio

- Certified Alcohol and Drug Program

https://podcasters.spotify.com/pod/show/netamerica/episodes/Certified-Alcohol-and-Drug-Program--Management-and-Success-e1e64ev/a-a7civte

- Nursing Pathways and Industry Trends

https://podcasters.spotify.com/pod/show/netamerica/episodes/Nursing-Pathways-and-Industry-Trends-e1e64or/a-a7cj23m

- Workforce Development: Youth to Young Adults

https://podcasters.spotify.com/pod/show/netamerica/episodes/Workforce-Development-Youth--Young-Adults-ekv4f6/a-a3h4ltu

- Youth Apprenticeships in Home Health Aide Roles

https://podcasters.spotify.com/pod/show/netamerica/episodes/Youth-Apprenticeships-in-Home-Health-Aide-Roles-elk0ng/a-a3ljqv9

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