

Introduction

Youth Apprenticeship Programs are not a new concept. As of late, they have reemerged into the education policy conversation as the dynamic and demand of the workforce is rapidly changing. Because of this, the education landscape is prompted to adapt in order to better serve those needs, especially as they pertain to career and technical education. RYAs can play an important role in the development of students and the creation of alternative pathways to success.

The “future of work” is constantly being refocused on early workforce training and job-ready learning. The framework for a youth apprenticeship program should combine academic and technical classroom instruction with work experience, allowing youth to explore a career and develop industry-specific workplace competencies and knowledge while still enrolled in high school (Uvin 2017). This literature review will discuss the current state of youth apprenticeship programs, describe the efforts currently in place to improve and expand them, and the importance of connecting high school students to youth apprenticeship programs.

Review of Literature

History

Attempts at expansion of youth apprenticeships in the United States teach us a few things about what is and is not effective. In a policy paper created in collaboration with the Institute for the Study of Labor in Germany, Robert Lerman, current Professor Emeritus of Economics at American University and fellow at the Urban Institute in Washington D.C., takes a close look at how the United States has not managed to sustain a “significant apprenticeship initiative” despite well-researched recommendations to do so by institutions like the OECD (Lerman 2012). Youth apprenticeship expansion has been an American public policy priority just a few times in the past, inspired by a skills gap in the job market. In the late 1980s and early 1990s, there was a federal push for more youth apprenticeships that saw its peak in the School-to-Work Opportunities Act. Although this Clinton Administration initiative was short-lived largely because many of the nation’s school leaders, families, and employers could not get over the stigma of tracking toward a career too early, the possibility of more unions and the push for direct college enrollment, some states went about apprenticeships in their own way and found success using intentional, collaborative tactics (Lerman 2012). Additionally, Lerman supports researcher Alan Hershey’s claim that the limited scope of the types of apprenticeships, like job shadowing and traditional mentoring, that

STWOA led school leaders to create did little for students' work-based learning that linked to school – the crux of the youth apprenticeship model.

The State of Wisconsin has had their own Youth Apprenticeship program since before the introduction of STWOA. In 1991, it was one of the first states to receive grants to sustain the expansion of apprenticeships. Wisconsin's smaller-scale initiative effectively brings together school system partners, employers, the Department of Workforce Development, and the state's Youth Apprenticeship consortium. Each partner within this system has a list of clearly defined responsibilities for participating in the youth apprenticeship program. The State of South Carolina has also taken a systemic approach to their youth apprenticeship program. Since at least the late 1990s, research has underlined the importance of mentorship as a key tenet of apprenticeships for youth. South Carolina has been incorporating this element in their youth apprenticeships since at least 1995, when researchers conducted a study on two of registered apprenticeship programs and high school students' experiences with them. The study found that mentors to these apprentices were able to effectively “instruct, demonstrate, coach, explain how or why tasks are completed, initiate apprentices into the culture of the workplace, and affirm a learner's value as an employee and as a person” (Evanciew & Rojewski, 1999). Now based in the state's technical college system, Apprenticeship Carolina has given over 12,000 student apprentices a clear pathway between their work in high schools, their work-based learning, and a degree from any one of the state's 16 technical colleges (Berube & Parilla 2018).

Importance of Youth Apprenticeships

Youth apprenticeships carry positives with them for participants who choose these pathways in place of others. Youth apprenticeships can be described as motivating for those who prefer learning by doing as opposed to purely school-based settings (Lerman 2015). Additionally, in another piece, where Lerman talks about how apprenticeships can be used as a tool to help Baltimore youth, he says that apprenticeships help young people develop independence and self-confidence through their ability to perform difficult tasks (Lerman 2015 (2)).

In *The Means To Grow Up*, Robert Halpern says, “Apprenticeship provides a structure for adolescents' need to express, question, imagine, take risks, deconstruct, test limits and make their own meaning.” Apprenticeships provide the safe spaces for these structures with reasonable boundaries, with an “authoritative adult” committed to teaching and sharing his/her knowledge (Halpern 2009). Halpern continues to list the many reasons why apprenticeships make developmental sense for adolescents. Apprenticeships build capacity for trust and openness to learning, and youth learn more deeply about occupations they would not have considered otherwise. Likewise, apprenticeships provide students with

authentic experiences, giving them the opportunity to take on responsibility and tackle social and moral issues in the workplace (Evanciew & Rojewski, 1999). Apprenticeships also provide a healthy outlet to “decenter” youth. Students learn to focus on the work at hand, and their performance is evaluated within an explicit framework focused on their task rather than the student (Halpern 2009).

Current State

For generations, career readiness standards have been aligned to the connection of opportunity to higher education. The assumption was that if one graduated high school and attended a post-secondary institution, they would receive a high paying job to support themselves and their families, securely placing themselves in the middle class. However, over the last three decades we have seen the lack of affordable postsecondary options leading to high debt or low enrollments/completion into postsecondary institutions (Parton 2018). “While high school graduation rates are at historic highs, still nearly a third of students do not enroll in postsecondary education after graduation” (Parton 2017) Which would be assumed to have led America towards having a nationwide youth unemployment rate of 12.2 percent in July of 2015, more than double the general unemployment rate of 5.3 percent (Chang 2015).

Currently, the Department of Labor runs the Registered Apprenticeship (RA) program. This is the largest official apprenticeship system in the country with about 440,000 participants in 2014 (Chang 2015). RA programs are sponsored by employers, employer associations, labor organizations, and intermediaries. Intermediaries tend to be community-based organizations, nonprofits and/or community colleges (Rice 2016). Some RAs are connected to pre-apprenticeships programs which prepare participants, mainly youth, for RAs, but generally RAs are not targeted towards youth, with the average age of apprenticeships being 30 (Chang 2015).

Brent Parton at New America, while discussing policymakers attempting to connect educational learning and workforce training, noted that an “apprenticeship stands out as compelling, but an underutilized option”. Additionally, he found that the programs that are available tend to also be heavily concentrated in skills and trade fields rather than “white-collar” fields like financial services or information technology, (Parton 2017). One of the struggles of facilitating youth apprenticeships has been the lack of RAs industry diversity and the lack of opportunities available for partnerships. Robert Lerman confirmed that apprenticeships in the United States primarily focus on construction and manufacturing occupations, with large-scale programs in carpentry, electrical, machining, maintenance, pipe-lifting, shipbuilding, and welding (Lerman 2015). Historically, vocational training and apprenticeships have been associated with segregating and tracking minority and working-class students into “low-quality” education (Chang 2015).

Prior to 2018, there was no consensus on the definition for youth apprenticeships, and currently the landscape of youth apprenticeships is nowhere near a coherent system, but can be simplified to four frameworks:

Public Statewide infrastructure: *A state grants funds to regional consortia that work with employers and school districts to develop and manage youth apprenticeship programs (Parton 2017).*

Private-Franchising Model: *In this model, private, community organization and associations lead the expansion. Through this franchising model apprenticeship intermediaries independently operate and finance their programs but are governed for quality by the states RA system (Parton 2017).*

Statewide Public-Private Partnership: *A non-profit serves as a statewide intermediary between the school districts and employers across the state in order to build a system to support youth apprenticeships. This gives the private-nonprofit control over the creation of the program and the facilitation of relationships while also relieving the burden of creating the program from the districts and schools (Parton 2017).*

Registered-CTE Programs: *In districts we do not see established pre-apprenticeship or RYAs we may see Registered CTE Programs. In these programs students are enrolled in CTE coursework at their schools that the state has aligned to an RA program in high demand industries. Students taking these courses would receive credit towards and RA program but are not necessarily directly connected or supported in the transition to the RA (Rice 2016).*

Efforts to Expand

In September 2015, the Department of Labor announced a plan to provide \$175 million in grants to 46 different apprenticeship programs over 5 years. In 2016, while recognizing Governors' unique ability to create statewide strategies to expand apprenticeships, the Department has provided \$9.5 million for *ApprenticeshipUSA* State Accelerator Grants, to facilitate the process of apprenticeship expansion and diversification. Since then, in 2018, the Department of Labor announced "awards totaling \$183.8 million to support the development and expansion of apprenticeships for educational institutions partnering with companies that provide a funding match component" as well as the provision of "an additional \$100 million for efforts to expand apprenticeships and close the skills gap" (Department of Labor 2019).

Although this funding is not uniquely allocated toward the expansion of Youth Apprenticeship programs, these grants have a significant ability to diversify the opportunities available within apprenticeship programs, as well as their power to provide states with more pathways to post-graduation

opportunities. With the increased industry diversity in the RA program, we can see a shift in opinions towards apprenticeships. According to Brent Parton of New America, “well-designed apprenticeship programs can smooth transitions between high school and postsecondary education by helping students acquire skills, experience, and credentials with value in the labor market...For employing citing “soft skill” deficits. Out-of-date education programs or the need to tap into younger, more diverse workforce, youth apprenticeships offers another way forward” (Parton 2017).

Furthermore, experts find that there is less of an investment needed for apprenticeship programs than community and technical colleges because employers take on most of those costs on their own, (Chang 2015). This allows for youth apprenticeship programs to be used as selling points to schools knowing that they will not have to take on costs associated with incorporating these types of programs. Also, in addition to low costs being passed onto schools with apprenticeship programs, the students get the unique benefit of “earn-and-you-learn”, making money while also working toward certifications and credits (Chang 2015). As the Century Foundation report and others recount, apprenticeship programs greatly benefit students who have limited resources and are seeking opportunities that allow them to hit the ground running and begin building for their future in a way that is more practical to them than entering a college program directly after years of strictly classroom-based learning.

Today, the Center on Education and Skills of New America has launched the Partnership to Advance Youth Apprenticeships (PAYA). PAYA’s first initiative was to set clear definitions and guidelines for what high-quality youth apprenticeships look like. The definition and principals can be found [here](#). In January, PAYA launched a grant initiative to support the expansion of youth apprenticeship programs in cities and states across the United States. At the close of the submission period in March 2019, there were 223 applicants, representing 49 of the 50 states and Puerto Rico (White 2019).

Examples of Youth Apprenticeships (Case Studies)

In 2014, the Maryland Economic Development and Business Climate Commission met and recommended that the state of Maryland create an apprenticeship preparation program. Founded in October 2016, the Maryland Apprenticeship and Training Program was awarded a grant of 2.2 million dollars with the goal of “aligning apprenticeships with Maryland’s workforce system” (Youth Apprenticeship Advisory Committee Annual Report, 2018). Since its creation, the program has developed a total of 45 Registered Apprenticeship programs, 22 programs were reactivated, and participants have worked in over 34 occupations throughout the state. While focusing on skills in Science, Technology, Engineering and Math, Maryland apprentices have the opportunity receive an industry recognized

credential, but they also may receive credits towards an associate degree. Since the pilot program began in 2016, “the number of Registered Youth Apprenticeships has increased by 145% and MATP has over 44 eligible employers (a 215% increase from the first year of the pilot program)” (Bottalico 2016).

In Chicago, After School Matters, a nonprofit focused on creating youth apprenticeships throughout the city, has developed them since 1991. Beginning in 2001, the program has impacted more than 300,000 teens. ASM not only encouraged student reflection but identified “six dimensions to help them reflect on the program experience” (Health 2001). A study on the program conducted in 2006 reported that “At one level, apprentices echo many of the issues raised by instructors [including] not realizing how much work their apprenticeship would be but describe liking the reality of feelings evoked by what they have to do and struggle with” (Halpern 2006). Today, After School Matters is seeing results from their participants, noting that “After School Matters’ Freshman On-Track rate has risen from 79 to 89 percent, participants miss fewer school days (7.5 days missed versus 9.6) and 90% of our high school seniors recently graduated making participants 2.7 times more likely to graduate than nonparticipants” (Goerge, Cusick, Wasserman & Gladden 2007).

Further South in the state of Kentucky, the Kentucky Department of Education’s Office of Career and Technical Education and the Kentucky’s Office of Apprenticeship convened and created Tech Ready Apprentices for Careers in Kentucky. Piloted in 2015, the program places high school students in over 16 career clusters across the state including government and public administration, finance, marketing, and transportation/logistics. In 2017, the US Department of Education named TRACK as an exemplar Youth Apprenticeship model in the nation in the Opportunities for Connecting Secondary Career and Technical Education Students and Apprenticeship programs. The report highlights the program’s full instructional alignment and full program articulation, stating, “in 2014-2015, the statewide TRACK program had 14 participants in its manufacturing program. It has a 100 percent high graduation rate and a placement rate of 25% in apprenticeships, 38% in postsecondary education and 37% in the workforce or the military” (Kreamer & Zimmerman 2017).

In Wisconsin, there has been an increased investment in strengthening the connections between the state’s technical College system, state industry association and connections with their longstanding RA system in order to expand the “YA to RA” bridge programs to offer more seamless transitions for youth. (Parton 2017). The department’s grants funded apprenticeship opportunities for approximately 2,500 high school students in the 2015-2016 school year (Beard et. al. 2015). Today, Wisconsin still trains more than 5,000 youth apprentices, with the highest-involvement industries being hospitality, health science, and agriculture, respectively (YODA Dashboard 2019). Similarly, there are pre-apprenticeship programs in Connecticut, Florida, Kentucky, and Washington. In a pre-apprenticeship, like

the “YA to RA” program, high school students participate in programs that prepare them to enter apprenticeships once they graduate while receiving technical instruction and classroom training in CTE courses (Rice 2016).

Regional youth apprenticeship consortia, such as those in North Carolina, set the precedent for expanding RYAs in a local setting. In the last 3 years, North Carolina has tripled the number of high-school apprentices. Although North Carolina also provides pre-apprenticeship opportunities, the number of participants in their RYA programs is three times more, thanks to the support of 12 regional consortia helping youth connect with careers in advanced manufacturing (Rice 2016).

Conclusion

Youth apprenticeships provide an alternative pathway for students to connect their in-classroom learning to potential future careers. It serves as a low-cost investment for employers and schools, as well as an immediate return on investment for students, as they can earn money as they continue to learn new skills. As referenced in the case studies above, these opportunities allow for growth in student success outcomes, as the chances for long-term success are compounded when students select different routes that better suit their long-term goals. As the future of work conversation continues in school districts, schools must be attentive to implementing these programs that provide options for students as resources for students who may view it as more practical and feasible to earn money, while also continuing to learn in a classroom setting. The federal government is taking a more active role in the expansion of registered youth apprenticeship programs, but there must also be a push coming from the schools themselves to bring these very programs to local communities to solve unique workforce skills gaps and benefit marginalized student populations. It is likely that the government will not only need to play an even larger role in youth apprenticeships going forward, but for them to thrive and be successful across the board, schools and employers will need to invest in them financially and strategically at a much higher level to allow students to have opportunities to grow that exist outside of college. Youth apprenticeship programs have been shown to be beneficial and successful. However, as outlined in the literature review, they are also underutilized, and this ought to change.

The limitations of existing literature on the expansion of Youth Apprenticeships are rooted in the changing dynamic of workforce needs. As youth apprenticeship programs have recently regained popularity, we have yet to see a substantial work with a longitudinal perspective of a program that still exists today. Most of research of this type is outdated and related to the needs of a much different workforce. Additionally, many of the government programs that have been put into action do not have completed reports on their results and impact, as they are still ongoing. This has been a barrier as well.

The existing research on youth apprenticeships also did not often focus on industry specific apprenticeships, although anecdotal evidence in some of the sources listed above shows a broad range of occupations in programs that were being implemented at state levels rather than school levels. This type of review would need to be done as more information becomes available.

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