

POLICY BRIEF



CREDENTIAL STACKING TO DEGREE PATHWAYS

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As the 21st century job market continues to advance, more jobs are requiring post-secondary training. Recent reports indicate that eighty percent of the available job market requires a post-secondary credential (Duke-Benfield et al., 2019). Currently less than fifty percent of the United States population has a post-secondary degree or credential (Duke-Benfield et al., 2019). Thus, there is a need for expanding pathways to higher education to meet the needs of a changing workforce.

Community colleges have long been leaders in providing occupational training such as non-degree or non-credit bearing certificate programs. Non-degree certificate programs are occupationally driven programs that are offered in a variety of technical fields including medicine, culinary arts, computer science, cosmetology, and business (Price et al., 2021), many of which can be completed in a few weeks (Audant, 2016).

The benefits of completing non-degree certificate programs include shortened time to graduation, lower cost of tuition, and broadened career opportunities (Carnevale, 2012). Research concerning non-degree credentialing has shown monetary gains and increased opportunities for advancement in the workforce for men (Carnevale et al., 2012). Students in high earning fields such as computer science and allied health professions may out earn those with associate's degrees and four-year degrees in some cases (Carnevale et al., 2012; Duke-Benfield, et al., 2019). However, the benefits of certificate programs vary across programs and there has yet to be a nationally recognized definition of what comprises a quality non-degree program (Duke-Benfield, et al., 2019).

Demographic of Certificate Programs

Racially minoritized students are overrepresented in non-credit programs. More specifically, Black and Latinx students are more likely to be enrolled in



non-degree seeking certificate programs than their White peers (Xu & Ran, 2020). Women are also overrepresented in low paying certificate programs like clerical assistant, nurses aid, cosmetology, and early childhood education (Washington State Board for Community and Technical Colleges, 2017). Adult learners and those from lower socio-economic backgrounds are also more likely to enroll in non-credit programs rather than credit bearing programs (Xu & Ran, 2020). The presence of a significant population of low-income students is both encouraging and disconcerting. Despite noncredit certification programs being marketed as

pathways to gainful employment they are not currently eligible for federal financial aid (Xu & Ran, 2020). This is concerning as it indicates that those who are least likely to be able to afford to pay for coursework (i.e., low-income students) out of pocket are the most likely to be doing just that. However, this brief focuses on racially minoritized adult learners, a special population of students who are between the ages of 25-64 and identify as people of color. It is important to avoid conflating terms like “low-income” “adult learners” and “racially minoritized” even though these experiences are intersectional these terms are not interchangeable. This brief prioritizes racial equity as an essential and under researched aspect of credential-stacking pathways. Despite being overrepresented in certificate programs, racially minoritized students are less likely to complete vocational programs than those who identify as White (Washington State Board for Community and Technical Colleges (SBCTC), 2017).

Credential Stacking Pathways

Credential stacking is the idea of allowing post-secondary education to be segmented into manageable portions that can be earned in sections that build or “stack” onto one another (Willson, 2016). This modular model of education gives students more ability to modify their educational goals to meet their current needs and career interests (Perea, 2020). Specifically, this type of credential stacking is sequential in design and referred to as vertical credential stacking. Vertical credential stacking provides entry level employment and increasing employment opportunity with the addition of higher-level credentials all leading towards an associate and/or bachelor level degree (Williamson & Pittinsky, 2016). This type of pathway may have many entry and exit points allowing students to stop-out and reenter as needed, preventing loss of credits and the need to begin anew (Giani & Fox, 2017).

Certificate to degree pathways that embed credential stacking are gaining popularity in states like Tennessee and Colorado (Perea, 2020). One reason for this growing momentum may be that students who participate in credential stacking pathways are more likely to finish their programs of study and complete more than one credential (Valentine & Price, 2019). Additionally, like non-credit programs, the benefits of certificate to degree programs include lower entry cost than traditional college tuition programs, shorter time to completion, and provide guided structure to completion (Xu & Ran, 2020). One such example of vertical credential stacking is the Associates of Applied Sciences (AAS) degree first proposed by the American Association of Community and Junior Colleges (AACJC) in 1984 (Ignash, 1997). One year later the National Council on Occupational Education joined AACJC and together they published a 14-point policy statement in support of an occupation centric terminal associate's degree (Ignash, 1997). An AAS allows students to apply technical education courses for up to seventy-five percent of their total degree credits (Godley, 2017).

However, noncredit-to-credit credential stacking programs struggle with low completion rates. A quantitative study based in California found that only slightly over thirty percent of students transition to a for-credit program and overall, ninety-four percent of students did not complete an educational credential within six years (Xu & Ran, 2020). Low completion rates in noncredit to credit programs are concerning as credential stacking has proven to increase momentum for credit seeking students (Taylor & Giani, 2019). Attainment of an associate degree has positive effects on bachelor's degree achievement (Kopko & Crosta, 2015; Taylor & Giani, 2019). This effect holds true for those who earned the degree before and after transfer to a four-year institution (Taylor & Giani, 2019). Unfortunately, these effects are limited to associate of arts (AA) and associate of science (AS) degrees and do not generalize to associates of applied science (AAS) degrees which have traditionally served as terminal degrees (Kopko & Crosta, 2015).

Additionally, culminating vocational credit into an AAS is beneficial for students who do not continue their education right



away. Should a student choose to leave college after completing an AAS, they can reap the monetary rewards of a degree holder rather than a certificate holder. Those who hold an associate degree out earn those who hold some credit but no degree (Carnevale, et al., 2012). One study conducted in the state of Texas found that associates degree attainment was the most monetarily impactful for men and low-income students (Mountjoy, 2022). However, women were less likely to see these gains, and the earnings gap between associate and bachelor degree holders and was significant for this population (Mountjoy, 2022). Which may lead women to pursue a bachelor's degree after completing the associate's degree.

Students who wish to continue after the AAS do so by enrolling in occupational focused bachelor's degree programs (Braggs et al., 2009). Originating in the 1970's and expanding rapidly in the 2000's, Bachelor of Applied Arts and Sciences (BAAS), Bachelor of Technology (BT), or Applied Baccalaureate (AB) degree are existing degree plans that permit technical education credits to be applied to a terminal four-year degree (Bragg et al., 2009; Bragg & Solar, 2017). BAAS or AB degrees-granting institutions are growing in popularity, and students may obtain a BAAS from at least one community college and/or four-year institution in all fifty states (Bragg et al., 2009). BAAS degrees allow many students with vocational credit to graduate, and students who attain BAAS degrees hold them in high regard (Braggs & Solar, 2017).

The Need for Equity

Many tout the importance of supporting underrepresented student populations yet putting this value into action proves to be more elusive. When asked how applied bachelor's degrees promote service to underrepresented students,

college administrators were unable to provide action items which supported their desires to promote equity (Braggs & Solar, 2017). Though the Bragg and Solar's research focused on underrepresented students broadly their finding is applicable to discussions of racially minoritized adult learners. Credential credit programs provide access to higher education for underrepresented students due to the open-access nature of community colleges (Jenkins et al., 2020). However, access is not equity. Without providing the necessary support for racially minoritized adult learners, access falls short of creating real change. Community colleges are often criticized for low retention rates, with more than 30 percent of community college students disenrolled before their second year of college (Jenkins et al., 2020). Credential stacking pathways are thought to bring needed structure to help students persist towards completion (Valentine & Price, 2019).

Though credential stacking pathways can provide a means to increased retention and social mobility, they are not being utilized at an equitable rate. Xu and Ran (2020) found that though many students who enrolled in nondegree programs intended to later transition into degree seeking programs, less than twenty-two percent were able to successfully transfer. Additionally, racially minoritized individuals are less likely to complete additional credentials along credential stacking pathways than their White peers (Giani & Fox, 2017). This finding suggests that at present racially minoritized adult learners are not experiencing the same effects of momentum building and upward social mobility that are commonly associated with credential stacking pathways.

Non-credit to degree pathways can become gateways to education for students of color and adult learners

"Credential stacking pathways are needed to provide social mobility for racially minoritized adult learners"

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(Xu & Ran, 2020; Jenkins et al., 2020). However, racially minoritized adult learners represent a significant gap in the educational research literature. One reason for this is that there is little tracking of student outcomes for adult learners in non-degree programs, and many states do not include this population in their strategic goals (Xu & Ran, 2020). The state of Texas is an example of one state which does not include age as a factor in tracking student outcomes (Godley, 2017). Demographic data such as age, gender, and race/ethnicity are essential parts of assessment and review of credential stacking pathways (Office of Career, Technical and Adult Education, 2021). The absence of tracking data on racially minoritized students only further complicates the ability to determine whether this population is being served.

Policy Recommendations

Credential stacking pathways are needed to provide social mobility for racially minoritized adult learners. Policy suggestions for creating credential stacking pathways include establishing and maintaining strong connections to industry to ensure the relevance of curriculum, including community college stakeholders in the creation of pathways, and ensuring multiple check points where students may stop-out and reenter as needed (Perea, 2020). These multiple entry and exit points allow students to enter the work force and fulfill economic

needs without hindrance to their academic futures should they decide to return to college in the future (Giani & Fox, 2017).

Tracking outcomes for credential completion by demographic factors such as age, gender, and race/ethnicity are essential steps in creating space for equity work to take place. Tracking allows researchers to develop necessary interventions and further policy work to promote equity for racially minoritized adult learners. However, additional work must be done to ensure that equity does not stop with tracking but provides a catalyst for further exploration and policy development (Stewart, 2018). Community colleges must not rest on their laurels by conflating representation with equity. Instead, community college leaders must prioritize the voices of racially minoritized adult learners, dismantle policies and practices that disproportionately hinder success, and incorporate actionable restorative practices which can be monitored for progress (Stewart, 2018).

One example of an actionable restorative policy is strengthening articulation agreements for vocational credit. Kansas is the only state in the union to mention AAS degrees in its guaranteed transferability policy, and even then, transfer is limited to institutions with applicable programs such as BAAS or AB degrees (Education Commission of

the States, 2018a). Strengthening the transferability of vocational credit centers the needs of racially minoritized individuals since they are overrepresented in vocational programs (Xu & Ran, 2020) and are consequently disproportionately affected by limited transfer options. Thus, increasing the transferability of vocational credit is not only an access-focused policy but is also a restorative policy as it seeks to reverse harmful effects of previous policies (Kopko & Crosta, 2015; Steward, 2018).

Conclusion

The popularity of credential stacking pathways is growing across the nation (Perea, 2020). Credential stacking programs increase access to higher education for racially minoritized adult learners. However, it is important to remember that access is not equity and that it is not enough to simply provide a pathway. One must also construct equity-minded policies that support racially minoritized populations through the process of credential completion. At present the conversation is primarily concerned with the economic advantages rather than the goals of individual learners. Racially minoritized adult learners are overrepresented in certificate programs and thus their needs and ambitions should be at the forefront of this movement. Student support is an important part of credential stacking and guided pathways, as there cannot be successful pathways without students completing them (SBCTC, 2017). Policy makers who are interested in credential stacking pathways must move the conversation toward learners and their goals.



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