

## ABSTRACT

Title of Document: THE ROLE OF DEGREE PROGRAM  
STRUCTURE IN PROMOTING ASSOCIATE  
DEGREE COMPLETION AMONG  
APPRENTICES

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Community colleges created apprenticeship-based degrees at the request of key stakeholders, but most eligible apprentices do not earn degrees. Degrees are associated with higher wages, career mobility, and non-monetary benefits. It may be a rational human capital decision that, in fields with high wages and career advancement even without degrees, a degree's benefits do not equal its costs. However, apprentices' rationality may be bounded and constrained by insufficient social, academic, and cultural capital. There may also be something in the structure of colleges or degrees preventing apprentices' completion.

Program length was the most consistently significant factor associated with colleges creating apprenticeship-based degrees. For apprentices completing degrees, the study's largest effect size was whether the degree was optional or required. Not everyone in degree-required programs completed degrees, but the likelihood of apprentices earning degrees dropped by 28.5% in optional compared to required degree programs.

Degree program structure variables that reduce the cost, or increase the benefit, of attendance were correlated with apprentices' degree completion. Awarding credit (for non-credit apprenticeship coursework) by request consistently had a statistically significant, positive

association with degree completion. Awarding credit automatically and customizing general education courses by location, schedule, and/or curriculum were consistently positive, and statistically significant with some datasets and/or fixed effects models. For apprentices, having no dependents and living in the same county as the apprenticeship college were positively associated with degree completion: 2-3% and 5-6% respectively.

Most degrees earned by apprentices (67%) were earned concurrently with apprenticeship program completion. A smaller percentage (13% of all degrees and 11% of first degrees) were earned post-apprenticeship, suggesting that most apprentices who do not earn a degree by the time they complete their apprenticeship program are unlikely to do so in the future.

Practitioner recommendations include awarding credit automatically or as a block by request, sharing educational expectations within the apprentices' career path, incorporating general education into apprenticeship where appropriate, encouraging apprentices to take general education throughout their program; and customizing courses by location, schedule, and/or content. The study recommends that policy makers include apprenticeship programs in data tracking mechanisms, performance funding models, completion goals, and summits.