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ABSTRACT

Does Stacking Work?

The Academic Value of Short-Term, Stackable Certificates

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Community colleges confer professional/technical awards so graduates might attain labor market benefits, including earnings advantages. Short-term certificates, generally defined as academic awards in these fields requiring less than one year of full-time, college-level study, are the quickest-to-the-job-market training solutions among these awards. Empirical studies of shortterm certificates, however, show that associated earnings advantages are often small or nonexistent. Stackable short-term certificates, however, attempt to offer a second benefit in addition to any meager labor market gains. Stackability is the concept that two-year degrees and other longer-to-complete academic awards can be broken into smaller, "stepping stone" awards, increasing the likelihood that a student will progress beyond the first short-term, stackable certificate, where earnings advantages are uncertain or meager, to a long-term certificate or degree where earnings advantages are larger and more certain.

Prior research examines the earnings outcomes and other labor market benefits associated with these awards. The present study focuses on the academic value of short-term, stackable certificates, defined as their ability to sufficiently attach students to an area or program of study so that they progress beyond the initial short-term certificate toward a two-year degree. The study also considers the earnings benefits of short-term, stackable certificates—largely to establish that certificates examined in this study do not have earnings outcomes that are notably different than those found elsewhere in the literature. This typical lack of earnings benefits is indeed what I find.

Multilevel modeling results of professional/technical students with no prior higher education (N = 3573) who began studies in 2007-08 in Washington State community and technical colleges (N = 33) showed that attaining a single short-term, stackable certificate significantly lowered a student's likelihood of earning a two-year degree while attaining two or more short-term, stackable certificates, called progression stacking here, more than doubled that likelihood. Based on this finding, a further multi-level model of a subset of students who earned at least one short-term, stackable certificate (n = 567) in the same entry cohort attending the same colleges (n = 29) showed that students who earned their first short-term award in Automotive Technologies and Auto Body were significantly more likely to earn the second short-term, stackable certificate in a sequence leading to a degree. No other significant predictors were found.

Short-term, stackable certificates correlate with academic value, but only when a student earns two or more of them. Automotive Technologies and Auto Body are two programs of study where the predicted probabilities of degree completion among all students examined and attainment of two or more short-term, stackable certificates among students who earned at least one were both positive and statistically significant. Potential implications for the design of stackable certificate sequences are discussed.

Key Words: Community colleges, short-term certificates, stacking