Measuring What Matters: Evaluating Wage Gains for Graduates of Merit America

By Dr. Ben Castleman and Dr. Kelli Bird, University of Virginiia

Introduction

Against a backdrop of rising college costs and economic volatility in the wake of the pandemic, policymakers and consumers alike are paying increased attention to the value of postsecondary education and training. A growing body of policy and research efforts seek to clarify the return-on-investment of education programs in order to equip prospective students with a better understanding of what they can expect in exchange for the time and money they spend learning new skills.

At the same time, the past decade has seen the continued emergence of innovative models to provide students with a combination of employer-demanded skills and training, industry-valued credentials, and individual- and cohort-based supports in a substantially shorter time frame than credential programs offered at traditional colleges and universities. An important question about these models is whether they generate meaningful and lasting improvements in labor market outcomes for participants, both to inform public and private investment in these programs and to support potential students to make informed choices about whether they enroll in these programs.

In 2021, one such provider, Merit America, engaged Professor Ben Castleman and the Nudge[4] Solutions Lab at the University of Virginia in a multi-year evaluation partnership to investigate the impact of Merit America programs on participants' employment and earnings. In the first stage of analysis, Dr. Castleman and colleagues leveraged a combination of administrative, survey, and Merit staff-collected data on participants pre- and post-program wages to generate initial evidence on Merit participants' wage changes over time. Subsequent stages of the evaluation partnership will use quasi-experimental and experimental methods to more rigorously identify the causal impact of Merit America programs on participants' labor market outcomes.

Project Scope

Merit America served 1,203 unique learners from December 2018 - September 2021. 84% (1,013) of those learners graduated from the Merit America program. These 1,013 learners are the focus of the current analysis. Merit America provided individual, anonymized data for all 1,013 graduates, with complete pre- and post-program wage data available for 68% of all learners and for 76% for graduates who were at least one year post program completion. Table 1 provides the share of learners with wage data, based on the time since learners' program completion.

Table 1

Number of learners and % with pre- and post-wage data by time horizon

Time since completion	N of learners	% with pre and post wage data
All learners	1013	68.02%
>/=90 days	745	68.99%
>/=180 days	630	70.32%
>/=365 days	315	75.87%

Methodology

For pre-program wage data, Merit America collected and reported participants' wages over the 12 months prior to starting the program, using a combination of participant self-reported wages and a role-by-role re-creation of their work history over the prior 12 months ("Trailing 12 month wage"). Dr. Castleman and team used the Trailing 12 Month Wage as the source of pre-program wages for 93% of learners; for 7% of learners that measure was unavailable and the UVA team relied instead on a participant self-reported pre-program wage at the time of program start.

For post-program wage data, Merit America provided paystubs and offer letters for the majority of its graduates with post-wage data, as well as self-reported data from post-program surveys and learner <> coach meetings. Dr. Castleman and team privileged the highest post-program wage data if multiple data points were available; however, there were no meaningful changes to the results when privileging administrative data sources over self-reported data, regardless of which was higher.

For learners across four time horizons (all learners, >/=90 days post-program, >/=180 days post-program, and >/=365 days post-program), the UVA team calculated the mean pre-program wages, post-program wages and wage gains, for both all graduates and for the subset of graduates experiencing a positive wage gain.

Wage Changes over Time

Table 2 below shows the results for all graduates by time horizon; Table 3 below shows the results for all graduates experiencing a positive wage gain by time horizon, as well as the share that experienced a positive wage gain.
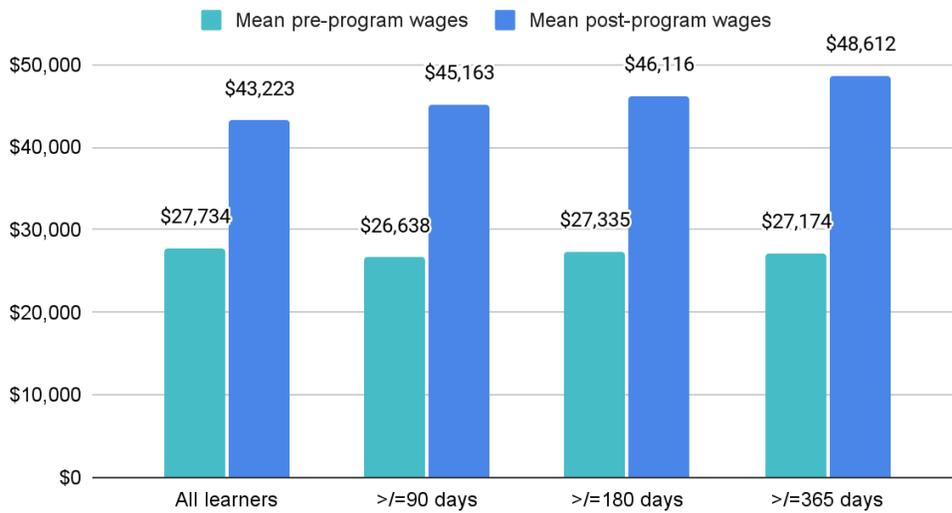
Table 2

Graduates mean pre-program wages, post-program wages, and wage gains

Time since completion	Mean pre-program wages	Mean post-program wages	Mean wage gain
All learners	$27,733.79	$43,223.26	$15,858.80
>/=90 days	$26,637.68	$45,163.23	$18,710.77
>/=180 days	$27,334.92	$46,116.39	$18,714.38
>/=365 days	$27,174.04	$48,612.12	$21,284.64

Figure 1

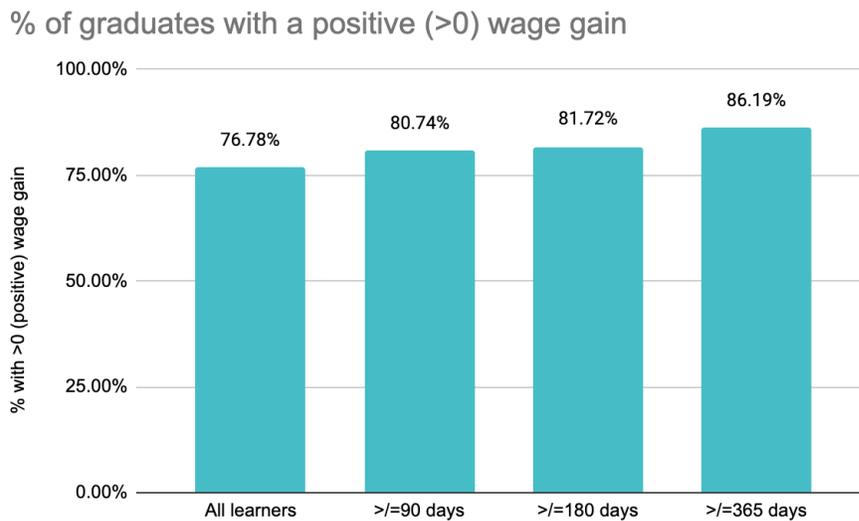Mean pre- and post-program wages for all graduates

Table 3

**Share of graduates with positive wage gains and their mean pre-program wages, post-program wages, and wage gains**

Time since completion	% with >0 (positive) wage gain	Mean pre-program wages, among learners with >0 wage gain	Mean post-program wages, among learners with >0 wage gain	Mean wage gain conditional on >0 wage gain
All learners	76.78%	$24,065.42	$48,593.01	$24,527.59
>/=90 days	80.74%	$23,883.02	$50,180.78	$26,297.75
>/=180 days	81.72%	$24,632.49	$50,552.55	$25,920.06
>/=365 days	86.19%	$25,115.31	$51,699.32	$26,584.00

Figure 2

% of graduates with a positive (>0) wage gain

Figure 3

Mean pre- and post-program wages among learners with >0 wage gain
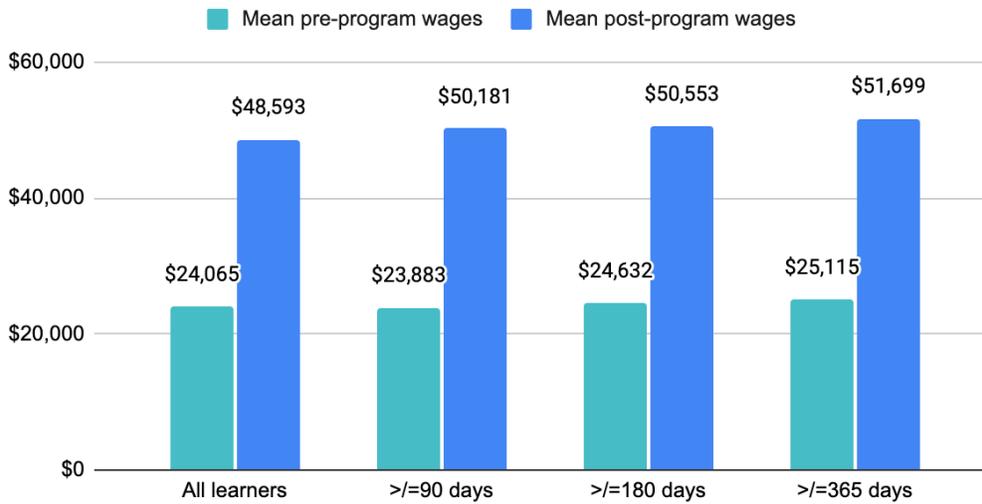
Conclusion

The findings of this analysis are a promising indication that accelerated learning models like Merit America may drive meaningful wage gains for participants. In the coming months, Dr. Castleman and team will continue working with Merit America to track longer-term wage gains, using increasingly comprehensive administrative data sources and experimental methods, with the joint goal of setting a new standard for rigorous evaluation in the workforce development space.

Appendix: Additional Contextual Notes

+ Merit America provides a 90 day placement phase (inclusive of additional coaching and career services) following the completion of technical learning; as such, learners >=90 days post program reflect those that have completed all aspects of Merit America's core programming.

+ Merit America uses a calculated trailing 12 month wage for learners' pre-program wage data, as opposed to learners' wages at the start of Merit America. Their goal in doing so is to provide a more robust pre-program wage comparison, as participant wages at the exact start of the Merit America program may reflect a life change - e.g., recent unemployment or wage loss - contributing to participation in Merit America.

+ Merit America learners have a financial incentive to underreport their wage data, given they pay for the program only if and when they achieve a successful job outcome above $40K or $50K (depending on track).

+ For the estimated <20% of graduates without a positive wage gain, a large share of respondents who completed a post-program survey still reported experiencing a positive career outcome (new job or promotion) post-Merit America, with further investigation revealing that some of those wage losses were for individuals who transitioned from higher paying roles in more limited mobility industries (such as cosmetology) to technology roles with lower initial salaries but potentially more upward mobility.