FROM TRAINED TO RETAINED:

AN ANALYSIS OF RETENTION OUTCOMES FOR RAP COMPLETERS

COLERIDGE INITIATIVE ARKANSAS TEAM

2
TEAM 2 MEMBERS

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RESEARCH QUESTION

What are the Employer retention outcomes for Arkansas Registered Apprenticeship Program completers?

What, if any, demographic variables are associated with higher retention rates?
Apprenticeship participants are looking for a long, stable career.

Employers are looking for a productive, engaged, high-functioning team.

Arkansas is looking to continuously advance and grow the state workforce.

National interest in retention as a potential outcome measure.
WHAT THE LITERATURE TELLS US

1. **POSITIVE EARNINGS OUTCOMES**
   
   Apprenticeship completion is primarily associated with higher earnings than those who did not participate in a RAP.

   Leads to increased tax revenue and decreased spending social safety net programs for these participants.

2. **GAPS IN RESEARCH**
   
   Retention is an important component of productivity and job satisfaction.

   Unfortunately, there is relatively little research focused specifically on RA post-completion retention.

3. **WIOA PERFORMANCE ACCOUNTABILITY**
   
   Retention with the Same Employer is one of the three pilot Effectiveness in Serving Employers measures required in WIOA’s performance accountability.

   Defined as the percentage of participants who exit and are employed with the same employer in the second and fourth quarters after exit.

   Measure has helped public workforce systems to improve effectiveness.
COHORT FOR ANALYSIS

REGISTERED APPRENTICES IN ARKANSAS WHO COMPLETED RAP IN 2014 - 2018

This date range gave us a group of completers with enough time in the future to perform retention analysis and avoid non-traditional outcomes from COVID staffing challenges.
CREATING OUR COHORT

**RAPIDS**
Registered Apprenticeship completers in Arkansas from 2014-2018

**UI WAGES LEHD**
Employment data from the end of Apprenticeship through 3 years after

**QCEW**
NAICS Industry Sectors and Subsectors
Starting point was the quarter the Apprenticeship was completed.

Calculated the number of quarters the Employee stayed with the same employer immediately post apprenticeship.

Assumptions: Employer at the end of RAP was their employer during RAP. If 2 employers, Primary Employer was higher wage.

Max length of time was 3 years or 12 quarters.
DATA CHALLENGES

SMALL SAMPLE SIZES
Subgroup analysis eliminated certain groups based on small sample sizes

MISSING DATA
Employers with more than one location did not have NAICS data, eliminating ability to look at industry level retention.

DATA RESTRUCTURING
Reworked and restructured data in a format that was usable for our analysis.
WHAT DOES OUR COHORT LOOK LIKE?

AGE GROUP

- 35+ 15%
- <25 50%
- 25-34 35%

RACE

- White 80%
- Non-White 20%

VETERAN STATUS

- Y 8%
- N 92%

SECTOR

- Construction 92%
- Other 8%
WHAT ARE THE RETENTION OUTCOMES?

3 Year Retention for Entire Cohort

- Retained: 560
- Not-Retained: 430
WHAT ARE THE RETENTION OUTCOMES?

3 Year Completion by Age Group

- Not Retained:
  - <25: 280
  - 25-34: 190
  - 35+: 80

- Retained:
  - <25: 210
  - 25-34: 150
  - 35+: 70
WHAT ARE THE RETENTION OUTCOMES?

3 Year Completion by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Not Retained</th>
<th>Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-White</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>White</td>
<td>460</td>
<td>340</td>
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</tbody>
</table>
WHAT ARE THE RETENTION OUTCOMES?

3 Year Completion by Sector

- Construction: 370 Retained, 540 Not Retained
- Other: 70 Retained, 20 Not Retained
WHAT ARE THE RETENTION OUTCOMES?

Average Number of Quarters Retained (Construction)

- Other: 7
- Construction: 11
INTERESTING OUTCOMES & PATTERNS

3 Year Completion by Veteran Status

<table>
<thead>
<tr>
<th>Retained</th>
<th>Veteran</th>
<th>Not Veteran</th>
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<tbody>
<tr>
<td></td>
<td>40</td>
<td>390</td>
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</table>

<table>
<thead>
<tr>
<th>Not Retained</th>
<th>Veteran</th>
<th>Not Veteran</th>
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<tbody>
<tr>
<td></td>
<td>40</td>
<td>510</td>
</tr>
</tbody>
</table>
INTERESTING OUTCOMES & PATTERNS

3 Year Completion with Multiple Jobs (Construction)

<table>
<thead>
<tr>
<th>Retained</th>
<th>Multiple Jobs</th>
<th>Not Multiple Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Jobs</td>
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<td>310</td>
</tr>
<tr>
<td>Not Multiple Jobs</td>
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<td>330</td>
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</table>

<table>
<thead>
<tr>
<th>Not Retained</th>
<th>Multiple Jobs</th>
<th>Not Multiple Jobs</th>
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<tbody>
<tr>
<td>Multiple Jobs</td>
<td>210</td>
<td></td>
</tr>
<tr>
<td>Not Multiple Jobs</td>
<td>330</td>
<td></td>
</tr>
</tbody>
</table>
INTERESTING OUTCOMES & PATTERNS

3 Year Completion by Race and Age Group

<table>
<thead>
<tr>
<th>Race</th>
<th>&lt;25</th>
<th>25-34</th>
<th>35+</th>
<th>&lt;25</th>
<th>25-34</th>
<th>35+</th>
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</thead>
<tbody>
<tr>
<td>Non-white</td>
<td>40</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
<td>240</td>
<td>170</td>
<td>150</td>
</tr>
</tbody>
</table>

- Not Retained
- Retained
CAVEATS

1. **DATA GAPS**
   UI Wage data does not cover all types of employment.

2. **PANDEMIC IMPACT**
   2017-2018 completers may have left employers due to pandemic during measured retention period.

3. **WORK SITES**
   Some Employers have multiple work sites.

4. **TIMEFRAME**
   Apprentices started, completed, or left at different times within the quarter.
NEXT STEPS

GENDER ANALYSIS

Gender data wasn’t large enough for us to extract. Future analysis could tell us if there are sectors with a growing number of females participating.

ADDITIONAL SUBGROUP ANALYSIS

Size of Employer, If Apprentice changed Employer or Industry during RAP, Length of RAP, If RAP was suspended, Education level, Activity prior to RAP

NEW COHORT ANALYSIS

Non Registered Apprenticeship Participants, Non-completers

Compare retention outcomes across different locations, sizes of employers. Can even help group completers based on outcome data.

CLUSTER ANALYSIS
REFERENCES


