Kentucky State Apprenticeship Expansion (SAE) Grant
May 2017-2018 Final Report

Interapt, LLC
Tax ID: 26-3323656
Prepared June 10th, 2018

Project funded by U.S. Department of Labor ETA
Grant Number: AP-30079-16-A-21
TABLE OF CONTENTS

Executive Summary.................................................................................................................................. 3
State of Kentucky Technology.................................................................................................................. 4
SAE 2017-2018 Contract Objectives and Evaluation........................................................................... 5
Interapt Skills Overview.......................................................................................................................... 6
Curriculum Design (Related Training Instruction).................................................................................. 7
Registered Apprenticeship Program Design............................................................................................ 8
Apprenticeship Model for Military Personnel (Transitioning Soldiers & Veterans) and Spouses........... 9
High School Program Design.................................................................................................................... 10
Registered Apprenticeship/Workforce Service Program Results.......................................................... 11
Registered Apprenticeship Narrative....................................................................................................... 12
High School Program Results.................................................................................................................. 13
State Apprenticeship Expansion (SAE) May 2017-May 2018: Demographic, Ethnicity and Race Statistics ........................................................................................................................................... 14
Future Occupation Tracks & Related Training Instruction...................................................................... 16
Final Conclusion and Thoughts.................................................................................................................. 17
Appendix.................................................................................................................................................. 18
Hiring Partner, Apprenticeship Certification and Training Partners.......................................................... 18
Earned Media Exposure and Coverage.................................................................................................... 19
2018 High School Program Special Events, Visitors, and Speakers....................................................... 20
Barren County Press Release................................................................................................................... 22
Executive Summary

Commissioner Ervin Dimeny &
Deputy Commissioner Deborah Williamson
Kentucky Labor Cabinet
Division of Apprenticeship
1047 US Highway 127 South, Suite 4
Frankfort, KY 40601

To Commissioner Dimeny and Deputy Commissioner Williamson:

The following document contains Interapt LLC’s final report for our 2017-2018 Kentucky State Apprenticeship Expansion grant, generously bestowed by the Kentucky Labor Cabinet and Office of Apprenticeship. The purpose of the 2017 Kentucky State Apprenticeship Expansion grant was to provide innovative and high-demand professions in a manner that allowed high-aptitude individuals with little experience the opportunity to develop careers in the technology sector.

Interapt LLC is dedicated to developing technology talent in the State of Kentucky through our IT Apprenticeship program, Interapt Skills. We need this kind of creative thinking and new ideas to open new pathways so that unemployed and underemployed people can learn software development and the skills that set them up for long-term professional success. This kind of creative thinking and progressive ideology opens new pathways to technology jobs in software development to unemployed and underemployed people. This, in turn, sets them up for long-term professional success. This elevated expectation is one of the main differentiators of our program. We motivate trainees to work harder and set loftier goals, which helps them understand the lifelong demands of being a software developer.

This document provides data about the individuals served through our programs; the types of programs the students worked within; the existing and new curricula (related training instruction) developed for Kentucky residents; commitments from partner companies; leveraged resources for our public-private model; and finally, Interapt Skills’ future plans for both the expansion of our Kentucky-based apprenticeship project, as well as developing the IT apprenticeship model itself.

In March 2018, through our Registered Apprenticeship model, 14 of our students graduated from our program, successfully completed their apprenticeship requirements, and are now working in software development positions. It’s also important to note that prominent companies like Humana, GE, and Chase bank have hired several of our graduates. Moving forward, companies that proactively seek new ways of identifying talent and fit will eventually view training programs like ours as a necessary and beneficial recruiting channel.

Finally, on behalf of Interapt LLC and the Interapt Skills and Services teams, I would like to thank the Kentucky Labor Cabinet and the Division of Apprenticeship for allowing us the chance to develop this new and exciting model. It is your dedication and commitment to our Commonwealth that will allow ourselves and future companies to grow a truly innovative and motivated workforce. We look forward to building this relationship over the many years to come.

Sincerely,

Ankur Gopal
CEO and Founder, Interapt LLC.
State of Kentucky Technology

State Industry Statistics

Kentucky’s technology industry is growing. However, the tech industry contributes less to the state’s economy than most other states, and its growth has lagged behind the national average for this sector.

- The technology sector’s estimated direct contribution to the Kentucky economy was $7.2 billion in 2017 (up from $6.5 billion in 2016), or 3.8% of the total economy in 2017 (up from 3.4% in 2016). (CompTIA, 2018 Cyberstates)
- Kentucky ranks 45th in tech economy as a portion of total Gross State Product. (CompTIA, 2018 Cyberstates)
- Kentucky ranks 32nd in percentage growth in technology companies, with a total gross of 15 new companies in 2017. (CompTIA, 2018 Cyberstates)

State Workforce Statistics

While its economy shows a substantial demand for technology workers, Kentucky’s workforce is not evolving at a fast enough rate to remain nationally competitive and innovative. New workforce models for technology jobs, such as apprenticeship, must be adopted at a statewide level to maintain national competitiveness and relevance.

- The most recent reports by the Bureau of Labor statistics indicate that Kentucky is 44th in overall workforce participation rate by state. (2018 Bureau of Labor Statistics)
- Net tech employment* in the United States reached an estimated 11.5 million workers in 2017, an increase of nearly 200,000 new jobs. (CompTIA, 2018 Cyberstates)
- However, Kentucky was 29th in Net Tech Employment and total tech occupation jobs, losing 200 total jobs in 2017. (CompTIA, 2018 Cyberstates)
- Kentucky was 42nd in Net Tech Workforce as a % of the total workforce in 2017. (CompTIA, 2018 Cyberstates)

*Definition: Net Tech Employment is calculated by the net of tech industry job, technology occupations in industries outside of technology, and self-employed technology workers. (CompTIA, 2018 Cyberstates)
Interapt LLC’s contract with the Kentucky Labor Cabinet focused on five specific areas to expand Kentucky’s technology workforce through Registered Apprenticeship Program and Service expansion. The five focus areas were:

1. Reach, recruit, prepare, train, and place potential or new apprentices (both youth and adult) from underrepresented and underserved populations in the Commonwealth into Registered Apprenticeship opportunities that will yield gainful employment in the industry or related field. This includes additional opportunities for women, disabled persons, Veterans that are returning to civilian life, and returning citizens.

2. Train new apprentices in our specialty of Information Technology, with an immersive model that brings coding talent to journeyworker status in a year.

3. Engage local businesses to recruit talent, train new & existing employees, and develop community-based workforce strategies that include Related Technical Instruction (RTI) incentives and/or tuition reimbursement for businesses.

4. Leverage resources and partnerships (including existing agency resources and partnerships) to ensure access to innovative training programs that are required for successful completion of Registered Apprenticeship opportunities.

5. Develop statewide curricular materials that are customizable, in order to meet a company or organization’s training needs for registered programs.

Evaluation Methods

To determine the impact of our new Registered Apprenticeship program from May 2017 – June 2018, and its potential to expand over the next few years relative to the objectives set above, evaluation over the following data:

- Analysis of the individual demographic data from students who complete the training and apprenticeship programs to determine overall number of individuals served and effectiveness of the program.
- Future placement and hiring commitments from local and national companies.
- **NOTE:** All programmatic and individual data is up-to-date as of May 28th, 2018.
**Overview**

Launched in 2017, Interapt Skills was developed as Interapt LLC’s workforce development arm. Interapt Skills trains and mentors capable individuals, many of whom have had little or no experience with software development prior to the program. These individuals join the local workforce as junior developers in one of the following ways: (1) Working directly for Interapt as part of our Products & Services team; or (2) joining local firms to fill their IT needs. Interapt Skills executes a ‘Closed Loop Model’. This model is our way of ensuring that students are constantly being assessed, monitored, mentored, and trained in relevant skill sets and coding languages.

**Mission**

Interapt delivers innovative technology solutions that solve client business challenges, while training and empowering individuals to participate in the global technology economy.

**Values**

- **Excellence** - We strive to deliver high quality, timely, and valuable work.
- **Integrity** - We endeavor to do the right thing, acting with honor and truthfulness.
- **Servant Leadership** - We empower each other by building trust and putting others first.
- **Excitement** - We bring passion to our work and celebrate our achievements.
- **Impact** - We create measurable, positive results for employees, trainees, clients and communities.

**Apprenticeship Models**

<table>
<thead>
<tr>
<th>MODULE 1 Beginner</th>
<th>MODULE 2 Intermediate</th>
<th>MODULE 3 Advanced</th>
<th>CAPSTONE Month 1</th>
<th>CAPSTONE Month 2</th>
<th>CAPSTONE Month 3</th>
<th>APPRENTICESHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,640 hours required for certification</td>
</tr>
<tr>
<td>4 hours/day for 4-½ months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,500 hours required for certification</td>
</tr>
<tr>
<td>Earn 360 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,280 hours required for certification</td>
</tr>
</tbody>
</table>

- **Apprenticeship (Military)**
  8 hours/day, 4 days per week, for 4 months
  Earn 500 hours

- **Apprenticeship (Adult/Workforce)**
  6 hours/day for 6 months
  Earn 720 hours
The Interapt Skills curriculum is an immersive learning experience, meant to ingrain software development and life skills through its intensive technology courses. Our model encourages separation from traditional educational environments in order to emphasize mirror a professional setting. During our program, students attend a 4 to 8-hour session, 5 days per week throughout the instruction phase of the RA program or high school program.

During the session, students go through two to three modules of the Interapt Skills curriculum to learn either Java and Android or Swift and iOS. Students that complete the training portion of the program in Kentucky can receive 9 credit hours for courses at any school within the Kentucky Community & Technical College System (KCTCS) by taking a competency exam.

The curriculum is broken down into modules depending on the program structure. Each module has at least 4 projects that students build on their own with guidance from their instructor. Our curriculum results in the students completing real world software development and industry-level project work.

**Curriculum Approach**

The Interapt Skills curriculum is an immersive learning experience, meant to ingrain software development and life skills through its intensive technology courses. Our model encourages separation from traditional educational environments in order to emphasize mirror a professional setting. During our program, students attend a 4 to 8-hour session, 5 days per week throughout the instruction phase of the RA program or high school program.

During the session, students go through two to three modules of the Interapt Skills curriculum to learn either Java and Android or Swift and iOS. Students that complete the training portion of the program in Kentucky can receive 9 credit hours for courses at any school within the Kentucky Community & Technical College System (KCTCS) by taking a competency exam.

The curriculum is broken down into modules depending on the program structure. Each module has at least 4 projects that students build on their own with guidance from their instructor. Our curriculum results in the students completing real world software development and industry-level project work.

**Structure of the Related Training Instruction Program**

- 3 instructional staff for every 20-30 students
- Weekly and Monthly assessments to track progress and growth within the program
- Periodic speakers from the business community will touch on topics such as entrepreneurship, careers in technology, and interview techniques
- Graduation ceremony
- 1 Program Manager
- 1 Academic Advisor
Registered Apprenticeship Program Design

Overview

The Interapt Skills Registered Apprenticeship model is an intensive, one-year training program that begins with 8 hour academic days strategically mixed with project-based learning—a critical and effective component of adult-based learning. The academic session is followed by a guided, hands-on mentorship. Interapt Skills executes a ‘Closed Loop Model’. This model is our way of ensuring that students are constantly being assessed, monitored, mentored, and trained in relevant skill sets and coding languages. This innovative, high-touch training model is key to the effectiveness of our training, and is a differentiator from other programs that (1) do not focus on life and business skills, and (2) do not offer continued mentorship and monitoring post-program. Our 12-month program is broken down into 2 main phases over the course of the year:

Related Training Instruction Phase/On-the-Job Learning Blend

Students take part in a 3-module training phase that forks into 2 separate but parallel training tracks: an iOS (Apple ecosystem) training track, and an Android (Google ecosystem) training track. The first module is focused on development fundamentals, with a focus on Java and Swift coding languages. The second module is an introduction to iOS and Android. The third module, advanced iOS and Android, is the final training module for students.

Our classes are centered around a “learn and then do” approach to coding. Instructors introduce a concept during a morning session, which is then reinforced through pre-scripted, hands-on coding exercises developed by our curriculum team.

Specialized Apprenticeship Phase

Once students have completed the training modules, the focus shifts to getting experience in live client and product settings. Students spend their final 9-12 months in the program developing and maintaining software products for one of the following:

1. **Direct Hire with Interapt.** A junior developer or analyst apprenticeship track for Interapt towards a permanent role after completing the full 12-month track.
2. **Hire through official partner with Interapt as the Apprenticeship Sponsor.** Sponsorship from an official hiring partner company hires the Interapt Skills program students into a 9-12 month apprenticeship track towards a permanent role in software development after completion.

Apprenticeship Completion Requirements

1. Apprentices must complete at least 2000 hours (fifty full work weeks) of work.
2. Apprentices must have their hours and competency both certified by both their academic advisor and journeyworker supervisor to move them into the journey/junior developer level.

*All records will be kept for at least 5 years.*

<table>
<thead>
<tr>
<th>MODULE 1</th>
<th>MODULE 2</th>
<th>MODULE 1</th>
<th>CAPSTONE</th>
<th>APPRENTICESHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>Intermediate</td>
<td>Advanced</td>
<td>Project</td>
<td>Work at a company to complete remaining hours</td>
</tr>
</tbody>
</table>

6 hours/day for 6 months
Earn 720 hours toward apprenticeship

1,280 hours required for certification
Interapt Skills is developing a new Registered Apprenticeship model to fit the very structured format of military scheduling and transition existing soldiers, veterans, and spouses. The program is still in preliminary development, but a sample apprenticeship hourly-based model has been developed to match the already existing schedules for military personnel and provide an opportunity to a highly motivated and highly reliable workforce. The program contains both the blended academic/on-the-job training component as well as the specialized apprenticeship phase.

### Preliminary Military Apprenticeship Model

<table>
<thead>
<tr>
<th>MODULE 1</th>
<th>MODULE 2</th>
<th>MODULE 1</th>
<th>CAPSTONE</th>
<th>APPRENTICESHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>Intermediate</td>
<td>Advanced</td>
<td>Project</td>
<td>Work at a company to complete remaining hours</td>
</tr>
</tbody>
</table>

8 hours 4 days per week for 16 weeks
Earn 500 hours toward apprenticeship

1,500 hours required for certification

### U.S Army Partners for Interapt Skills

[LOGOS]
One of the primary issues impacting our pipeline of software development talent is the lack of formalized, at-scale technical training that occurs prior to an individual entering the workforce. The formal education system is often not agile enough to stay current and keep pace with changes in technology and requirements of programmers, resulting in training that is outdated before it is even delivered. Interapt views our high school training program as a compliment to the traditional workforce development model.

It is with these challenges in mind that Interapt decided to adapt its traditional workforce development program to a high school audience. The goals of this program are:

- To give software development experience to high school students, creating the possibility of a new and exciting career that they may never have considered.
- To give students applicable training in mobile app development that they can leverage for future careers.
- To increase the pipeline of local talent with exposure to, and skills in, the technology sector.

While our high school training is aligned with the state’s overall mission of creating a significant tech sector and generating a workforce capable of participating in the sector, the benefits of this program will be accrued over a longer window than in Interapt’s workforce development program.

Curriculum (Related Training Instruction/On-the-Job Training Blend)

Interapt Skills High school program follows many of the same design principles as our workforce development program. The curriculum is focused on experiential and project-based learning, encouraging students to immediately test out the skills learned during classroom sessions and create real world products as a result.

The high school program only covers two of the three modules covered during the workforce development program: module one (Java and Swift) and module two (introduction to iOS and introduction to Android). This is due to (1) constraints of the high school calendar and schedule, and (2) the different purposes and outcomes of each program. However, students obtain apprenticeship credit if they complete the program, because they complete and engage in the software development life cycle, which requires non-academic software development and job-related tasks in order to complete the project.

The selection of students who participate in the cohort is aided and guided by teachers and administrators from each participating high school. The program seeks students with a core set of skills and the mentality required to dedicate time and energy into learning to code, and on-the-ground school leaders are best equipped to provide that guidance on students.

High School program toward Full Apprenticeship Model

<table>
<thead>
<tr>
<th>MODULE 1</th>
<th>MODULE 2</th>
<th>MODULE 1</th>
<th>CAPSTONE</th>
<th>APPRENTICESHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>Intermediate</td>
<td>Advanced</td>
<td>Project</td>
<td>Work at a company to complete remaining hours</td>
</tr>
</tbody>
</table>

4 hours per day for 4½ months
Earn 360 hours

1,640 hours required for certification

815 West Market Street Suite 300 | Louisville, KY 40203 | www.interaptskills.com
Beginning in September 2016 in Paintsville, KY, 54 individuals entered with 32 individuals completing our first training program with a combination of both industry relevant academic curriculum and structured on-the-job training with the program ending in May 2017. In September 2017, our first rendition of our IT Registered Apprenticeship program that initially included 16 of these individual in the first cohort.

These individuals came from specific underemployed/unemployed environments, and as a result have entered into occupations that have high associations with future earnings, health, standard of living and future dependent standard of living.

- **16** entered the Registered Apprenticeship program with **87.5%** of the cohort (**14** individuals) completing the full program in March 2018, certified by the Department of Labor in completing their one-year program.

- The average salary for those who completed the Registered Apprenticeship program was approximately **$39,400**, with immediate expected increases in six-month review (rising from **$10** to approx **$20** at the end of the program). Additionally, all **14** individuals currently work in tech-related jobs either with Interapt or similar companies/settings.

- **18** additional individuals completed approximately 144 hours in related training instruction during this time period and have 1000 hours of official n-the-job training credit on record with Interapt until 2022.

“I had been working as a summer maintenance guy at our local pool. Never did I think I could be developing programs and software for a company that makes apps for people all around the world.”
“Before the program, I was a developmental instructor for individuals with developmental intellectual disabilities who had various life goals, and it was my job to help them attain those goals. The Interapt Skills program has been a great opportunity to learn something I thought I would never have the ability to learn—not because of a lack of intellect or anything like that, because we’re all smart here, but rather a lack of opportunity. I live in Eastern Kentucky, Magoffin County, which has the highest unemployment rate in the state at 17%, so you never expect this kind of program to come here.

What was essential to my learning in this program was my mentor, Holden Easley. So we came in and we had an educational phase, and I learned a lot. It was great that I had someone that experienced to pad my educational skills. Holden was that guy, he took what I already had and refined it so that I was following best practices, learning about how things currently were in the Android world so I could keep up with current developers.

The best part of the program for me was the beginning. We had a project to make a website. Now I came into the program pretty lacking in confidence, and I made a website called Beatle Bargains which sold mock Beatles gear, and it was one of the better websites and it was a real confidence booster, and it convinced me that I can do this.”

Travis Tressler, March 2018

Registered Apprentice Graduate

JP Morgan Chase Android Developer
Beginning in January 2018 in Louisville, KY in partnership with Transform Education Kentucky, 31 individuals entered and completed our first high school training program with a combination of both industry-relevant academic curriculum and structured on-the-job training. In additional partnership with Jefferson County and Shelby County Public Schools, students were training in an environment that is intentionally disassociated with the traditional classroom setting. Students are coached through the entire lifecycle of a software product, receiving equivalent on-the-job training experience that the standard Registered Apprentices receive, while also contributing to the continuing development of the Interapt Skills curriculum.

As a result of this training, students are equipped to both personally create software applications in their respected track, as well as to immediately be implemented into an applicable and relevant Registered Apprenticeship program.

- **31** students entered the high school program, with **83.87%** of the cohort (26 individuals) completing the full program in May 2018.

- **2** individuals from the Interapt Skills High School program will be immediately entered into Interapt’s full apprenticeship program with 500 hours of on-the-job training already completed. *More employment data to be reported in coming months.*

- **24** additional individuals completed approximately **504** hours in related training instruction and on-the-job training during this time period, earning **360** hours of official credit that will be on record with Interapt until May 2023.
### Section I: INFORMATION ON INDIVIDUALS SERVED BY THE GRANT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Demographic Information</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Male</td>
<td>27</td>
<td>14</td>
<td>34</td>
<td>32</td>
<td>49</td>
</tr>
<tr>
<td>b. Female</td>
<td>5</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>c. Did Not Self-Identify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age (Apprenticeship and High School Data not including additional workforce services)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a. 16-24</td>
<td>-</td>
<td>4</td>
<td>29</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>b. 25-54</td>
<td>-</td>
<td>12</td>
<td>13</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>c. 55+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Disability Status</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a. Yes</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. No</td>
<td>32</td>
<td>16</td>
<td>42</td>
<td>40</td>
<td>58</td>
</tr>
<tr>
<td>c. Did Not Self-Identify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Veteran Status</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a. Yes</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. No</td>
<td>32</td>
<td>16</td>
<td>42</td>
<td>40</td>
<td>58</td>
</tr>
<tr>
<td><strong>B. Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Hispanic</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a. Yes</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>b. No</td>
<td>32</td>
<td>16</td>
<td>37</td>
<td>37</td>
<td>55</td>
</tr>
<tr>
<td>c. Did Not Self-Identify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C. Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Black/African American</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2. Asian</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. American Indian/Alaska Native</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Native Hawaiian/Other Pacific Islander</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. White</td>
<td>32</td>
<td>16</td>
<td>34</td>
<td>32</td>
<td>50</td>
</tr>
<tr>
<td>6. Did Not Self-Identify</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Cumulative is calculated by total number served not by sum of quarters.*
### Section II: INFORMATION ON SERVICES PROVIDED TO INDIVIDUALS UNDER THE GRANT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D. Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Pre-Apprenticeship</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. OJT (as part of RA program only)</td>
<td>32</td>
<td>16</td>
<td>16</td>
<td>40</td>
<td>58</td>
</tr>
<tr>
<td>3. RTI</td>
<td>32</td>
<td>0</td>
<td>26</td>
<td>26</td>
<td>58</td>
</tr>
<tr>
<td>4. Supportive Services</td>
<td>32</td>
<td>16</td>
<td>42</td>
<td>40</td>
<td>58</td>
</tr>
<tr>
<td>5. Other (Describe in Section IV)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Section III: INFORMATION ON PROGRAMS/SPONSORS ‘SERVED’ UNDER THE GRANT

<table>
<thead>
<tr>
<th></th>
<th>Cumulative Total (May 2017-May 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> # of new businesses engaged</td>
<td>30</td>
</tr>
<tr>
<td><strong>2</strong> # of new RA programs</td>
<td>3</td>
</tr>
<tr>
<td><strong>a. Time-Based</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>b. Competency-Based (Assisted)</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>c. Hybrid</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>3</strong> # of existing RA programs expanded</td>
<td>1</td>
</tr>
<tr>
<td><strong>4</strong> # of sponsors receiving WIOA-funded support</td>
<td>-</td>
</tr>
</tbody>
</table>

*Cumulative is calculated by total number served not by sum of quarters.
Interapt Skills, in partnership with the Urban Institute, contributed to the overall development of a new apprenticeship track titled “Software Developer” which will provide flexible standards that will help define the specialized training required by the in-demand roles in programming. These are roles that may not fit our existing Application Developer Track. The finalized apprenticeship description should be available by end of year, 2018.

Interapt Skills, in partnership with the Urban Institute, contributed to the overall development toward a new apprenticeship track titled “Database Administrator”. There are some significant applications to Interapt Skills and Service’s current directions, but further resource investments will be necessary to create training programs around this occupation.

Interapt Skills is currently developing a new front-end software development/web application development curriculum and associated RTI guide to be associated with our existing Application Developer occupation and future technology occupation tracks.

Interapt Skills will update our existing occupation track “Application Developer” and related training instruction material to further specialize the specific tracks including iOS and Android development.

Interapt Skills, in partnership with the Urban Institute, contributed to the overall development toward a new apprenticeship track titled “Database Administrator”. There are some significant applications to Interapt Skills and Service’s current directions, but further resource investments will be necessary to create training programs around this occupation.

Additionally, Interapt will make use of existing, approved apprenticeship track from the Department of Labor’s database including roles such as the IT Generalist track that was created by the Urban Institute to quickly implement individuals into technology oriented roles. There are a variety of technology orientated apprenticeable occupations that haven’t been updated to meet current industry standards that Interapt may potentially look to revamp.
Final Conclusions and Thoughts

When examining the initial primary objectives of this expansion project, we must acknowledge that additional resources and cross-industry commitment are required to ensure Kentucky IT Apprenticeships thrive and flourish for decades to come. This will require local analysis of cross-industry demand for technology workers, and determination of future wage scales for these apprenticeships. The energetic response to what currently exists is very encouraging. While Interapt continues to develop new occupational IT apprenticeships, without the aforementioned cross-industry partners to help evaluate and specify the scalable tracks, sustainable economic growth will be difficult to achieve. To best position Kentucky for success vis a vis the seemingly limitless economic growth technology offers, there must be local investment and a healthy state-wide risk appetite.

**Interapt Registered Apprenticeship Outcomes May 2017-2018**

<table>
<thead>
<tr>
<th>Individuals Served</th>
<th>Businesses Engage</th>
<th>Completed Apprenticeships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>58</strong> total individuals served over the course of three KY-based programs.</td>
<td><strong>30</strong> local and national committed companies to hiring and placing students.</td>
<td><strong>14</strong> fully completed KY Registered Apprenticeships with a exit salary of <strong>$39,400</strong>.</td>
</tr>
</tbody>
</table>

While this is an exciting beginning to a new model for Kentucky, it is paramount that a significant number of Kentucky-based public, private, government, and educational organizations continue to support IT Registered Apprenticeships. This report provides significant evidence of Interapt Skills’ continuous expansion of Kentucky-based Registered Apprenticeships in the technology field. Again we thank the Kentucky Labor Cabinet, the Division of Apprenticeship, and the Department of Labor for your hard work and guidance during this project. As our first 14 apprentices achieve the success they deserve, we are determined to embark on the journey to apprentice the next 14,000 for Kentucky’s technology workforce.
Hiring Partners

Apprenticeship Certification/Training Partners
Earned Media Exposure and Coverage

**TEDx Palo Alto**

Interapt CEO Ankur Gopal delivered a TEDx Talk to a sellout crowd in Silicon Valley about igniting human potential through new apprenticeship pathways and opportunities.

**The World Forum**

Interapt CEO Ankur Gopal spoke on a panel discussing apprenticeship as a pathway for workforce development at the 2018 World Forum for Foreign Direct Investment in Liverpool, U.K.

**The Daily Show with Trevor Noah**

Interapt’s workforce development and IT apprenticeship program in Paintsville, KY, was featured on Comedy Central’s The Daily Show.

**Silicon Valley Community Foundation**

Interapt was invited to speak at the Silicon Valley Community Foundation’s Innovation Conference 2018 in San Francisco.

**Interapt/Skills**

KY Economic Development Sec. Terry Gill and Labor Sec. Derrick Ramsey joined Interapt to celebrate the launch of the Interapt Skills high school program.

**The New York Times**

The New York Times featured Apprentice Nichole Clark in a story about technology skills becoming an alternative to college degrees for open tech job opportunities.

**Apprenticeship KY**

KY Labor Secretary Derrick Ramsey joined other Commonwealth officials to present Registered Apprenticeship Certificates to KY’s first ever IT Apprentices from Interapt Skills.
2018 High School Program
Special Events, Visitors, and Speakers

- Jan. 9, 2018 – Orientation week with TEK. Thirty-six students enrolled for our Skills Spring Cohort.
- Jan. 19, 2018 – State Representative John Will Stacy and Jonathan Gay visit.
- Jan. 22, 2018 – Tyler Glick, TEK PR Guest.
- Jan. 23, 2019 – Barren County Schools Superintendent and Principal visit.
- Jan. 25, 2018 – VIP Event, 30 guests including VIP speakers: Derrick Ramsey (Secretary of Labor), Terry Gill (Secretary of Economic Development), Brook Smith (President of Smith Manus), Ankur Gopal (CEO & Founder of Interapt), Barbara Bellissimo (CEO of Transform Education Kentucky).
- Feb. 1, 2018 – Open house where students and parents, along with any persons from participating High Schools, visited the facility and spoke with our instructors about the curriculum.
- Feb. 14, 2018 – Arlie Russell Hochschild, an American sociologist and academic as well as NY Times bestselling writer, visited and spoke about the impact of education.
- Feb. 22, 2018 – During Louisville’s first major flood in 30 years, Skills location was inaccessible. Classes moved to Interapt’s headquarters. Students loved this transition, as they were able to observe professional developers working in their natural habitat.
- Mar. 9, 2019 – Mike Crowhurst visited from Pulaski Co. H.S.
- Mar. 12, 2019 – Office of Vocational Rehab, JCPS ECE, and Project Case toured the Skills facility, determined that they will recommend students for future cohorts and provide support for their students in the program. They also spoke with a few students.
- Mar. 22; Apr. 12, 17; May 3, 10, and 17 – Ankur Gopal, CEO of Interapt, taught a series of 1 hour classes about entrepreneurship to students.
- Mar. 28, 2018 – Skip Hanert, Associate Professor and Dean, School of Information Technology at Ivy Tech Community College visited to discuss curriculum maps, observe students, and talk to students. Agreed to give students of our program credit hours with Ivy Tech, and offered avenue for students studying Java to take certification tests.
2018 High School Program
Special Events, Visitors, and Speakers - Continued

- Mar. 29, 2018 – 10 Students attended “Grow with Google” event operated by Google. They were able to observe and learn about technologies Google offers now and plans to offer in the future.

- Apr. 17, 2018 – Ambassador Attallah Shabazz and Entrepreneur Anjali Chadha visited the Skills students and shared her experiences and advice about starting a business at a young age.

- Apr. 13, 2018 Startup Weekend – Two of our Skills students, Christian Lenberger and Elijah Estes, along with some Staff members, participated at this annual event, held this year at the Skills facility. Students worked with other entrepreneurs on a team project called “City Save.” The students said “The event was fast paced, but we got to learn a lot about whiteboarding, marketing plans, business models, and customer discovery.”

- Apr. 15, 23, & 30, 2018 – Martin Low, owner of On Plane Consulting (an HR consulting firm), helped students prepare for an upcoming career fair with local Skills business partners.

- Apr. 27, 2018 – Donna Brown, Recruiter for Sullivan University, visited to observe students. This resulted in a new partnership with Sullivan University, which will give credit hours to graduates of our program. Donna later attended the career fair and tried to recruit some of the students.

- May 7, 2018 – Benjamin Browne with Agent Ally and Jonathan Vanderford with Kizan spoke to students about software development and business. Both were impressed, and not only returned for the career fair, but hired several students as summer interns.

- May 10, 2018 – Arlie Hochschild made her second visit from California to observe program progress.

- May 15, 2018 – Interapt Skills hosts Career Fair. Representatives from: Kizan, JCTC, Sullivan University, Agent Ally, El Toro, and Interapt interviewed students. Résumés and GitHub portfolio links forwarded to employer partners after the event.

- May 24, 2018 – Interapt Skills Graduation Ceremony, featured speakers included JCPS Superintendent Dr. Marty Polio, Brook Smith, Kate Mayfield (TEK), and Ankur Gopal.
Press Release: For immediate release
May 18, 2018
Contact: Cortni Crews at 270.651.3787 for more information

Barren County High School Opens Recruitment for Interapt Skills Training

Barren County High School is now recruiting students and adults to enter an app development training program in partnership with Interapt Skills. The program will begin in August 2018 and will operate from 8am - 3pm until the end of the semester at the new career center on Trojan Campus. The training program is targeted to any student who will graduate in just a few days in addition to those who will graduate in the next school year. Furthermore, young adults will asked to apply for this training program as a means of “skilling up” the regional workforce.

“This opportunity is now possible due to the vision of Barren County Schools and collaborative efforts of philanthropists across the Commonwealth who see a need to diversify the workforce in the Barren River Region by creating a training program for high wage, high demand jobs.” stated Bo Matthews, Superintendent of Barren County Schools. “Barren County is leading the Commonwealth by having such a wonderful pipeline to apprenticeships in Computer Science. Beginning with coding in elementary school, continuing to middle and high school with opportunities with AP Computer Science and other tech related pathways, we can now take this momentum to the next level.”

Interapt’s coding program focuses on a rigorous introduction to computer science fundamentals, software engineering principles, and mobile development for either Android or IOS. Adult and student participants will learn about object-oriented programming, systems design, the software development life cycle, mobile frameworks, and how to deploy applications to the app stores. “We at Interapt Skills are excited to partner with Barren County and to bring our IT Apprenticeship program to the region. At the end of our program we are hoping for one of three outcomes: One, that they would choose to pursue Computer Science as a career and continue their education in college. Two, that they exit the program job-ready and are immediately involved in an apprenticeship. Or three, that any aspiring tech entrepreneurs are provided a great foundation to build on. We have been believers that our Apprenticeship approach can help the Commonwealth by creating net new jobs and opportunities in the tech economy, and are very excited to be in Barren County”, stated Interapt CEO Ankur Gopal.
“We are now in the recruiting and application phase, as we will be over the next two months.” stated Amy Irwin, District College and Career Coordinator. “But this project has been in progress since we partnered with local industry to create a Vision Team for Barren County, to help identify how to strengthen educational programs to help meet regional workforce needs.” Barren County Vision Teams from local business, industry, and school systems, along with the KY Education and Workforce Development Cabinet have identified priority workforce sectors based on economic trends and data. The Interapt Skills program will be a catalyst in building a regional technology workforce to address needs in the priority sector of information technology. The project will be the first hybrid of its kind in the Commonwealth of Kentucky, training both secondary students and adults.

“By adding this program to Barren County Schools, we are trying to create a trained workforce to attract business to the community and retain the current and future citizens to enter the workforce with a high-paying job. The ultimate destination for a student, no matter what further education pathway they choose, is a career. We want our students to be prepared for that!” stated CheyAnne Fant, Direction of 21st Century Community Programs & Nutrition Services.

Could this program be a part of the underemployment and poverty solution? Justin Browning, BC Computer Sciences Teacher, stated “the average salary for a computing occupation in Kentucky is $72,202, which is significantly higher than the average salary in the state, $41,760 according to statistics from Code.org.” Browning, who was invited to be trained by Code.org last summer in Houston and by Apple in Silicon Valley, jumped at the opportunity so he could help develop his computer science students. “Computing jobs are the number one source of all new wages in the U.S. and make up over half of all projected new jobs in the STEM fields. My thought is that the business is going to go somewhere...Why not Kentucky? Why not Barren County?” Browning commented.

“Making this happen in our community is a step in the right direction for training our workforce and attracting jobs to this area,” stated Browning. “I know we have adults and students who are ready for this challenge, and I hope that all those who are interested will apply online.” For more information about the program, please visit www.interaptskills.com/high-school/, the Barren County Schools website at www.barren.kyschools.us and select the Barren County High School link, and complete the interest survey found at https://goo.gl/forms/AkCVSNCtdLnzfrPW2.
Project funded by U.S. Department of Labor ETA
Grant Number: AP-30079-16-A-21