Metropolitan Community College
Youth Apprenticeship Framework

Initial Partner: Northland Career Center
June 15, 2018

Statement of Need

The growth in skilled trades jobs and lack of a skilled labor force is putting significant downward pressure on further economic development in the Kansas City region. Currently Kansas City is at 3.7% unemployment (Bureau of Labor Statistics, 2018), considered to be nearly complete employment with a noted strong manufacturing sector growth, and is considered to be number one in transaction volume growth year over year (Federal Reserve Bank of Kansas City, 2018). Kansas City has a clear need for long term, advanced training opportunities which allow students to continue to earn and learn while businesses retain employees.

Work based learning such as CAPS and programs offered by career centers have done an amazing job offering more CTE focused options connected to the educational system. Metropolitan Community College will also continue to innovate and look to the future. More businesses and industries are looking for workers with associate degrees and stackable, industry-recognized credentials to fill their high wage jobs.

In contrast, schools and parents continue to push students to pursue bachelor’s degrees that offer (at best) a 39% completion rate (National Center for Education Statistics, 2018) while nearly 20% of graduates carry between $10,000 and $40,000 in debt (Perna, Kvall, & and Ruiz, June 2017). The Kauffman Foundation recently wrote about additional data that supports the urgency in progressing work-based learning (Ewing Marion Kauffman Foundation, 2018).

- By 2020, more than 60% of all jobs in the United States will require college or postsecondary training, but only 50% of those jobs will require a four-year degree, according to Georgetown University’s Center on Education and the Workforce.
- Currently, about 36% of all jobs in the Kansas City region require postsecondary education, but within 10 years, the percentage is expected to reach 50%.
- Perhaps more compelling, 73% of the jobs that pay an above-average wage will require postsecondary education in that same period of time.
- While policy agendas have been pushing toward postsecondary access and completion, graduation rates from two- and four-year institutions remain moderate to low, especially for low income, first-generation students.
- Student loan debt is more than $1.4 trillion nationally. It continues to place a burden on students just beginning their careers.
Scouts looking for the most talented baseball players go to great lengths to recruit the best. They aim to persuade players, and also the players’ parents, that they offer the greatest opportunity. Kansas City can learn from this model, creating a first-of-its-kind “high skill scouting program.” Businesses can use Registered Youth Apprenticeships to offer students work-based learning and a debt-free education that can lead to a bachelor’s degree.

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Kansas City Registered Youth Apprenticeship

Why Pursue Youth Apprenticeship?

- Allows for better business and industry input – they want solutions to gain skilled workers
- Aligns industry training needs with curriculum
- Uses existing dual credit structures, potentially increasing college completion rates
- Integrates apprenticeship training requirements with industry credentials approved by DESE
- Increases potential training sites – both at school and on the job
- Engages students with a more hands-on learning environment
- Allows businesses to participate in preparing students to be workers

What Are the Objectives of Youth Apprenticeship?

- Place students in high-demand, well-paying jobs with growth potential
- Provide debt free college credit for the student
- Increase use and visibility of DESE approved industry certifications, stackable credentials, and non-traditional educational pathways
- Encourage student engagement and business involvement in educational outcomes

What Are the Outcomes for Youth Apprenticeship?

- High school diploma
- 20-40 dual credit hours during high school
- Industry related certifications – example: MT1 and OSHA 10
- Associates degree and Department of Labor apprenticeship completion certificate
- Benchmarked work process schedule completion
  - 1,000 – 1,500 hours of paid on-the-job training during high school (at minimum wage, student will earn approximately $7,850 - $11,775; however, it is likely the wage will be higher.)
  - 4,000 – 6,000 hours of paid on-the-job training post high school (must be an increasing pay scale starting at minimum wage or higher)

The U.S. DOL and Education Department Initiative on Youth Apprenticeship

The U.S. Department of Labor and Education Department have provided a framework for high quality Registered Youth Apprenticeships for high school students. This framework benefits both education systems and businesses.

The Fair Labor Standards Act (FLSA) sets the minimum ages and occupations in which youth can be employed in agricultural and nonagricultural employment. In nonagricultural employment, 16- and 17-year-old apprentices are specifically permitted to do some hazardous work otherwise prohibited for that age group, provided certain requirements are met.
This framework provides an important opportunity for youth to finish high school and continue on a pathway toward multiple career and educational opportunities, such as entering a Registered Apprenticeship program, earning an associate's and/or a bachelor's degree, and obtaining sustainable employment. The framework helps businesses by connecting youth to work-based learning and encouraging them to develop in-demand skills and competencies so they are prepared to meet the business need for skilled workers. (United States Department of Labor, January 17, 2017)

**Future Opportunities**

**Missouri Community College Association – Grant Application**

As a part of the consortium group, Metropolitan Community College will apply for the *Scaling Apprenticeship through Sector-Based Strategies, H1B Grant*. Missouri Community College Association (MCCA) will likely ask for the full $12 million to expand Registered Apprenticeship programs; however, the specific sector has not yet been chosen. This grant will drastically expand apprenticeship programs in the state, including youth apprenticeships.

**Missouri Youth Apprenticeship Grant**

Dr. Oscar Carter, Director of Skilled Technical Sciences at the Office of College and Career Readiness at DESE is working on developing the federal grant request to start a Youth Apprenticeship Program in Missouri. He has focused his grant on Cisco because it is offered in high schools across the state, has centers of excellence at Community Colleges, and is a high-need area for a wide variety of employers and industries.
DESE Administrative Memo

The state has already provided an administrative memo granting Career and Technical Education (CTE) programs additional APR points for each apprenticeship program they start, as well as a guidance document for designing a youth apprenticeship. They are in the process of working on a memo addressing workman’s compensation insurance laws as well as Federal Child Labor Laws.

Work Based Learning Spectrum

Kansas City is truly experiencing a renaissance in employer-led, student-based workplace learning. The GradForce KC Education Asset Inventory noted that “industry involvement is critical to educating a workforce that meets employer needs” (Workforce Development Program Manager, 2014). These programs can easily become siloed and isolated experiences for both students and businesses. Instead there is a framework for them to work on a spectrum, allowing students and businesses to increase both their engagement and ultimately the outcomes. Metropolitan Community College will work together with educational and industry partners to help increase overall access, participation, and degree completion for students.
**Barriers/Questions FAQ**

**How will a student be identified for an apprenticeship opportunity?**

Northland Career Center will identify the students who have the qualifications and desire to participate in a program like this. Key performance indicators such as grades, attendance, interest, and employability skills will be carefully considered. Metropolitan Community College and Northland Career Center will work to find interested businesses, develop the programming for approval from the DOL, and facilitate an interview process.

**How will the schedule work?**

Each program will be slightly different. Attached is a draft framework developed specifically for Metropolitan Community College and Northland Career Center.

**How will transportation work?**

Transportation will be addressed on a case-by-case basis. However, if students are attending industry tours or regular classes on Metropolitan Community College campuses, the Northland Career Center will be required to provide transportation. Unless students are grouped in larger clusters, students will need to provide transportation to and from their workplace.

**Workman’s Compensation Insurance**

The State of Missouri Workman’s Compensation law is regulated by the Department of Labor and industrial relations, and is found in Chapter 287 R.S.Mo. 2005. Workman’s compensation must apply to any person in the service of an employer under contract of hire, appointment or election, including officers of corporations. Some exclusions apply, but are not related to internships, youth employees, or apprenticeships. To date, the state has not released any specific documentation regarding insurance for youth apprenticeships – however, according to the Missouri Department of Labor, per the lack of Missouri statute on child and youth labor for 16-17 year olds, Missouri explicitly follows the Federal Register which allows for exemptions from Certain Hazardous Occupations for Registered Youth Apprenticeships.

*What does this mean?*

Employers have the choice of several workman’s compensation carriers in the state of Missouri. Regardless, a youth apprentice, while on the job, would be considered a “part-time” employee so they automatically fall under workman’s compensation. The only thing that might affect coverage is premium, which is based on the ratio of full-time and part-time employees. Any business interested in a youth apprenticeship should contact their carrier and let them know what they are planning. Metropolitan Community College and Department of Labor can help field questions or concerns individual carriers might have.

*Considerations*
The Wisconsin Youth Apprenticeship Office and Colorado Youth Apprenticeship Office have provided the documentation they use when working with employers, students and parents. The Missouri Apprenticeship Office is working on similar documentation.

Colorado’s Youth Apprenticeship program (CareerWise) is working directly with Colorado’s leading workman’s compensation insurance carrier Pinnacle Assurance. Because of this relationship, not only is the insurance carrier hosting youth apprentices within their business, they are also offering special pricing for companies willing to do the same. CareerWise has claimed believe their quick growth and success has been directly related to this partnership.

Managing the cost of workman’s compensation insurance will be crucial in promoting youth apprenticeship programs to many industries and businesses. We must have options specific to youth apprenticeship ready for businesses to review.

**What can a student do while on the job?**

Confirmed by the Missouri Department of Labor on 6/15/2018, per the lack of Missouri statute on child and youth labor for 16-17 year olds, Missouri explicitly follows the Federal Register which allows for exemptions from Certain Hazardous Occupations for classroom based instruction or Registered Youth Apprenticeships. (U.S Wage and Hour Division, February 2013)

<table>
<thead>
<tr>
<th>Hazardous Occupation</th>
<th>Work Activity</th>
<th>On-The-Job Apprenticeship Exemptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 1</td>
<td>Manufacturing and storing of explosives.</td>
<td></td>
</tr>
<tr>
<td>HO 2</td>
<td>Motor-vehicle driving and outside helper on a motor vehicle.</td>
<td></td>
</tr>
<tr>
<td>HO 3</td>
<td>Coal mining.</td>
<td></td>
</tr>
<tr>
<td>HO 4</td>
<td>Occupations in forest fire fighting, forest fire prevention, timber tract operations, forestry service, logging, and sawmilling.</td>
<td></td>
</tr>
<tr>
<td>HO 5</td>
<td>Power-driven woodworking machines.</td>
<td>X</td>
</tr>
<tr>
<td>HO 6</td>
<td>Exposure to radioactive substances.</td>
<td></td>
</tr>
<tr>
<td>HO 7</td>
<td>Power-driven hoisting apparatus, including forklifts.</td>
<td>X</td>
</tr>
<tr>
<td>HO 8</td>
<td>Power-driven metal-forming, punching, and shearing machines.</td>
<td>X</td>
</tr>
<tr>
<td>HO 9</td>
<td>Mining, other than coal mining.</td>
<td>X</td>
</tr>
<tr>
<td>HO 10</td>
<td>Operating power-driven meat processing equipment, including meat slicers and other food slicers, in retail establishments (such as grocery stores, restaurants kitchens and delis) and wholesale establishments, and most occupations in meat and poultry slaughtering, packing, processing, or rendering.</td>
<td>X</td>
</tr>
<tr>
<td>HO 11</td>
<td>Power-driven bakery machines including vertical dough or batter mixers.</td>
<td></td>
</tr>
<tr>
<td>HO 12</td>
<td>Power-driven balers, compactors, and paper processing machines.</td>
<td>X</td>
</tr>
<tr>
<td>HO 13</td>
<td>Manufacturing bricks, tile, and kindred products.</td>
<td></td>
</tr>
<tr>
<td>HO 14</td>
<td>Power-driven circular saws, bandsaws, chain saws, guillotine shears, wood chippers, and abrasive cutting discs.</td>
<td>X</td>
</tr>
<tr>
<td>HO 15</td>
<td>Wrecking, demolition, and shipbreaking operations.</td>
<td>X</td>
</tr>
<tr>
<td>HO 16</td>
<td>Roofing operations and all work on or about a roof.</td>
<td>X</td>
</tr>
<tr>
<td>HO 17</td>
<td>Excavation operations.</td>
<td></td>
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</tbody>
</table>
How will students be awarded college credit?

Northland Career Center and Metropolitan Community College currently maintain and build college credit options in several high skilled programs for high school students. However, by directive of Chancellor Beatty, Metropolitan Community College, Northland Career Center and other area Career Centers are collaborating on a standardized and streamlined approach to offering college credit to high school students through concurrent enrollment. This approach will not only uphold the high standards Metropolitan Community College must keep for accreditation, but allow for greater transparency in awarding the credit. A defined approach is due September 2018.

In addition, DESE offers guidance on college classes that can be counted toward high school graduation, here: https://dese.mo.gov/sites/default/files/Graduation_Handbook.pdf.

What is the 7th grade pathway to an apprenticeship, degrees, and a career?

One outcome from the Chancellor’s Workforce Visioning meetings is the development of a visual guide to alternative pathways to prepare for jobs in industry sectors specific to Kansas City. The objective is to easily illustrate the various pathways to solid careers based on the educational and industry opportunities.

Below is a rough draft for what this might look like in Building Construction and Engineering. Once this is fully vetted and updated, it will be applied to the following Mid-American Regional Council industry clusters: Advanced Manufacturing, Engineering and Architecture, Information Technology, and Life Sciences.
Will an apprenticeship lock a student into one company and one experience?

No, not at all. An apprenticeship can be transferred to companies in similar industries at any time. Both the state and federal apprenticeship offices are interested in creating robust and quality programming. If the relationship between a company and apprentice does not work out, the apprenticeship can be transferred to a related industry type company to finish the program.

As a requirement of the Department of Labor, each work process schedule must be designed to give apprentices rotation capability in various facility locations and businesses departments. The Department of Labor recommends the rotation include even front office work when relevant.

In addition, the Metropolitan Community College and Northland Community College has built in twenty hours of facility tours at the beginning of each program. This gives students’ exposure to a wide variety of facilities and businesses within industry sectors.

How does practical application apply to theoretical experience?

Theory teaches students concepts through classroom experience with textbook curriculum. While much of the education world works to apply some experiential aspects to theory-based learning, much of a student’s application comes later in life, when start a career pathway.

Work based learning prepares students for high skilled jobs by exposing students to real-world environments where theory is directly relevant to challenges faced in the workplace. However, for many of these high skilled jobs, it is highly beneficial for the theory to be applied congruently to the theoretical learning. The benefit for this type of work based learning is the exponential growth curve and the commitment both the student and businesses then has in the overall success of the program. While programs such as CAPS or even internships give students great exposure to the working world, developing practical skill and familiarity with theory in parallel is not the priority. Registered Apprenticeships are specifically designed to do both, and they allow apprentices to apply theory to practical applications immediately.

The fact that the practical application and theoretical learning is predesigned, tracked, and reported helps create incentive for students and employers. Employers do not need to build their own custom training programs, and the specific requirements of an apprenticeship program provide a clear path that students, parents, and educators can understand. If an apprentice does want to pursue a bachelor’s degree, the terms of an apprenticeship and its credit coursework leave no uncertainty in how far an apprenticeship takes a student towards that goal.

Students need more than general and technical education to become highly skilled and reliable employees. An apprenticeship exposes them to the pressures of meeting a boss’s demands, building organizational agility, developing emotional intelligence, and navigating bureaucratic systems. When the apprentice learns these things in the context of a business that is investing in them, they are more likely to succeed and become a long term, valuable employee.
Can this be scaled up across the region?

Yes! And it’s needed. While it will take time to customize programming for both businesses and students, there are examples of successful scaled-up models, both in the United States and Europe. Both Wisconsin (State of Wisconsin Department of Workforce Development, 2018) and Colorado (CareerWise Colorado, 2018) are working to scale Registered Apprenticeship and Registered Youth Apprenticeship programs for both adults and youth. Brookings Institute has reported that South Carolina has one of the fastest growing and most successful apprenticeship program in the nation, seeing 700% company participation since 2007 (Parilla, 2015). Apprenticeship Carolina was launched in 2007, through a joint taskforce between the community college system, the state agencies, and local businesses. The main offices are now housed at South Carolina Technical College System’s Division of Economic Development.

More emphasis from industry sectors, politicians and society in general is being placed on student access to good jobs and a great education. These same entities parents are looking to apprenticeship as the answer. Metropolitan Community College, our many partners, and Kansas City are primed to step out as a leader in future workforce development.

How is this funded?

Two major requirements of Registered Apprenticeship programs are that the apprentice does not pay for the education, and that the apprentice receives a progressive wage. Since apprentices will be starting their programs in high school and then transferring to an adult apprenticeship program, the payment responsibility will be split.

- While in high school, the employer pays wages and the school district pays for dual credit coursework. Insurance could be covered by either the employer or school, depending on the school.
- After graduation, the employer pays wages, college class expenses (including fees and books), and any costs associated with certificate or industry credentials. The wage must be placed on a progressive scale, increasing as the apprentice’s education continues.

Grants can cover some of the costs businesses incur in starting an apprenticeship program. These grants cover part of the cost of educational resources, or part of the training costs. They are limited by both the student and businesses. The Missouri Department of Labor Apprenticeship Office has referred to this as “having skin in the game.” Businesses are encouraged to have a sense of investment and ownership in the apprenticeship program as they prepare apprentices to be skilled employees.

How is a mentor identified and trained?

Apprenticeships require commitment from the entire administrative line. Everyone from the senior management to the frontline supervisor and workers at the site must work together for an apprenticeship program to succeed (Bass, 2017). Careful planning with a long-term view went into the development of the program. Therefore, the key to an effective apprenticeship is the role of the experienced employee as a teacher or coach for the apprentice. While a mentor does not need to be a trained instructor, they do need to possess mastery of skill and patience to work with their apprentices. It is up to the businesses to
identify mentors, which can be rotated on a daily basis. To help businesses with mentoring, Metropolitan Community College has developed Train the Trainer curriculum to help mentors create a positive and successful experience for their apprentices.

DESE Approved Industry Certifications

The National Career Clusters® Framework provides an organizational structure for framing CTE programs through well-developed programs of study. Industry Related Credentials (IRCs) require both a knowledge and performance assessment as defined by the industry. IRCs are identified a year prior to the reporting year in order to give schools ample time to prepare for the assessments.

- Approved list here: https://bit.ly/2HWhM10

Bibliography


