PATHWAY 2 CAREERS

Education with Destination

Exploring High-Value Careers with Students

An Educator's Guide

NS4ed™ Pathway2Careers™ 2018 Trademark NS4ed, LLC

Career Pathways and Planning

Overview

- Building Career Pathways
- Components of Effective Career Plans
- Guiding Students Toward Employment Success

PATHWAY 2 CAREERS
Education with Destination

Dr. Danielle Tallent
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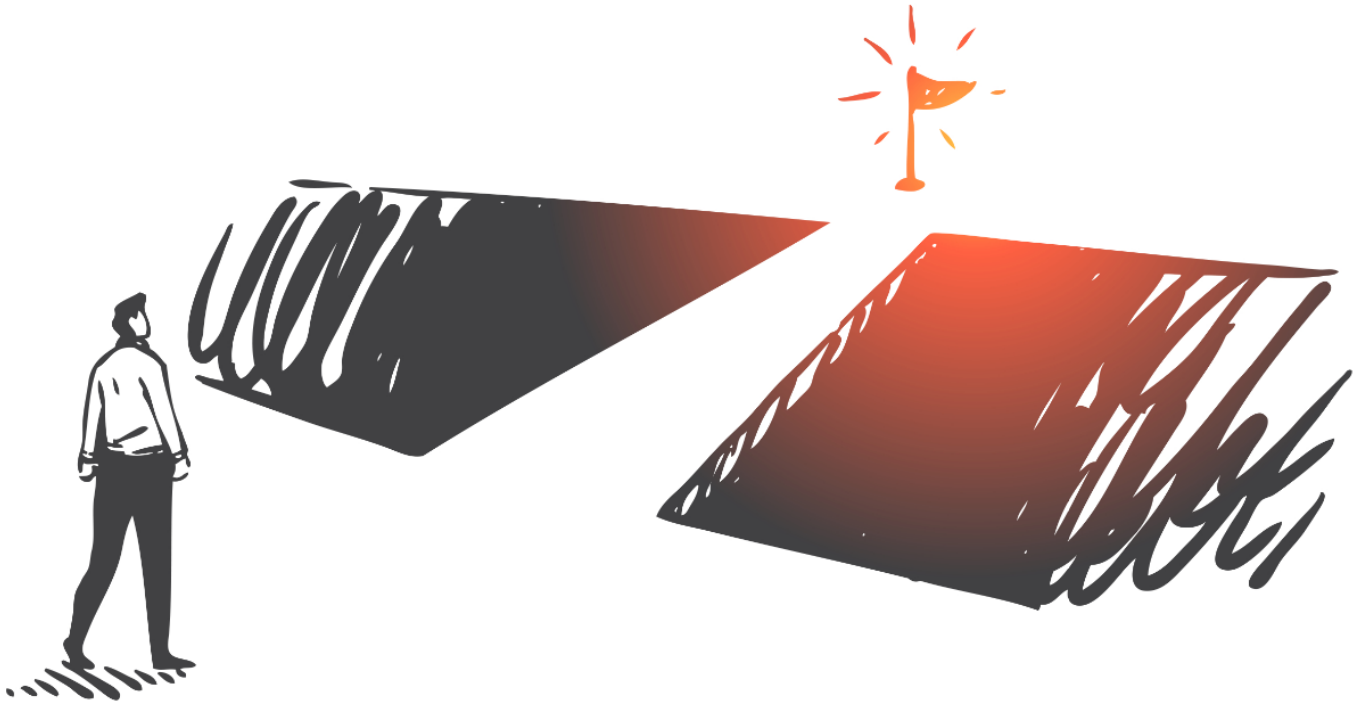
Building Career Pathways



Building Career Pathways

Template available at pathway2careers.com

Supporting Employment Success

- Informing students of high-value careers in their region, using high-value careers tables, is a solid starting point for incorporating LMI into career exploration activities.
- Developing and sharing career pathways is another method of helping students connect with regional career opportunities.

Local High-Value Careers

High-value careers are high-demand, high-wage careers that are stable or growing in demand.

School Name _____

School District _____

Workforce Region _____

All Career Clusters

Occupation & Career Cluster	Annual Openings	Median Wages	Career Pathway	Information Link

Agriculture, Food and Natural Resources

Occupation	Annual Openings	Median Wages	Career Pathway	Information Link

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Building Career Pathways

What are career pathways?

- Definitions of pathways vary.
- Information used in building pathways varies.
- There is no one “right” way to develop pathways.

National Career Clusters Framework

- Offers one approach to viewing pathways.
- Because this is a common organizational system used in education, P2C uses this framework to conceptualize and build pathways.
- Our discussion will center on building pathways using this approach.

Building Career Pathways

What are career clusters?

National Career Clusters Framework
careertech.org/career-clusters

Occupations are grouped into sixteen different clusters based on similarities in foundational knowledge and skills.

Building Career Pathways

What are career pathways?

Within each cluster, pathways have been identified that focus on smaller subsets of related occupations.

Courses and training programs are outlined that can guide students as they progress toward career goals.

Career Cluster	Career Pathway	Career Cluster	Career Pathway
Agriculture, Food and Natural Resources	• Agribusiness Systems • Animal Systems • Environmental Service Systems • Food Products & Processing Systems • Natural Resources Systems • Plant Systems • Power, Structural & Technical Systems Architecture & Construction	Hospitality and Tourism	• Lodging • Recreation, Amusements & Attractions • Restaurants & Food/Beverage Services • Travel & Tourism
Architecture and Construction	• Construction • Design/Pre-Construction • Maintenance/Operations	Human Services	• Consumer Services • Counseling & Mental Health Services • Early Childhood Development & Services • Family & Community Services • Personal Care Services
Arts, Audio/Video Technology and Communications	• A/V Technology & Film • Journalism & Broadcasting • Performing Arts • Printing Technology • Telecommunications • Visual Arts	Information Technology	• Information Support & Services • Network Systems • Programming & Software Development • Web & Digital Communications
Business, Management and Administration	• Administrative Support • Business Information Management • General Management • Human Resources Management • Operations Management	Law, Public Safety, Corrections and Security	• Correction Services • Emergency & Fire Management Services • Law Enforcement Services • Legal Services • Security & Protective Services
Education and Training	• Administration & Administrative Support • Professional Support Services • Teaching/Training	Manufacturing	• Health, Safety & Environmental Assurance • Logistics & Inventory Control • Maintenance, Installation & Repair • Manufacturing Production Process Development • Production • Quality Assurance

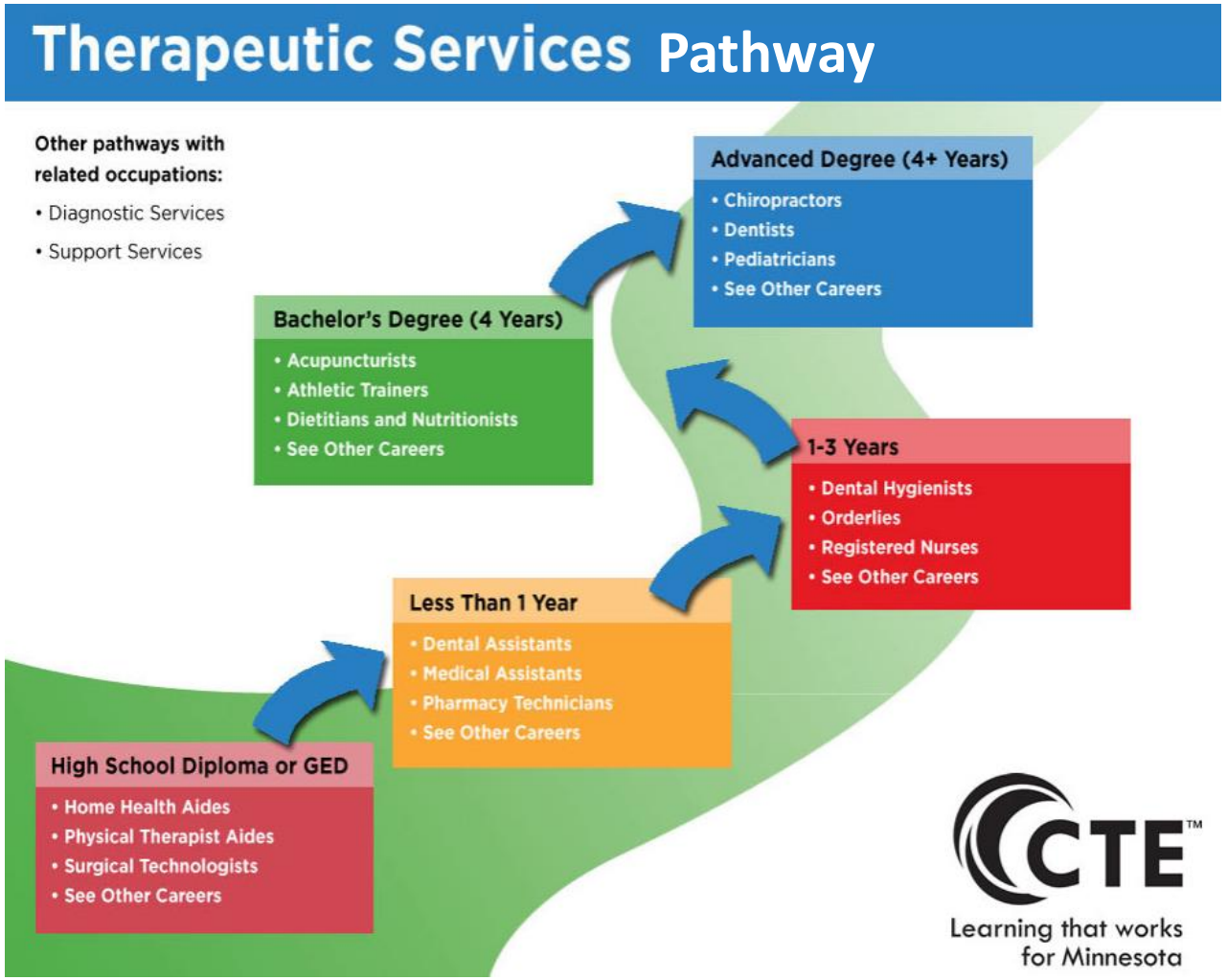
Building Career Pathways

What are career pathways?

Career pathways can have multiple entry and exit points.

Some careers have minimal education requirements, while others require advanced degrees.

Health Sciences Cluster



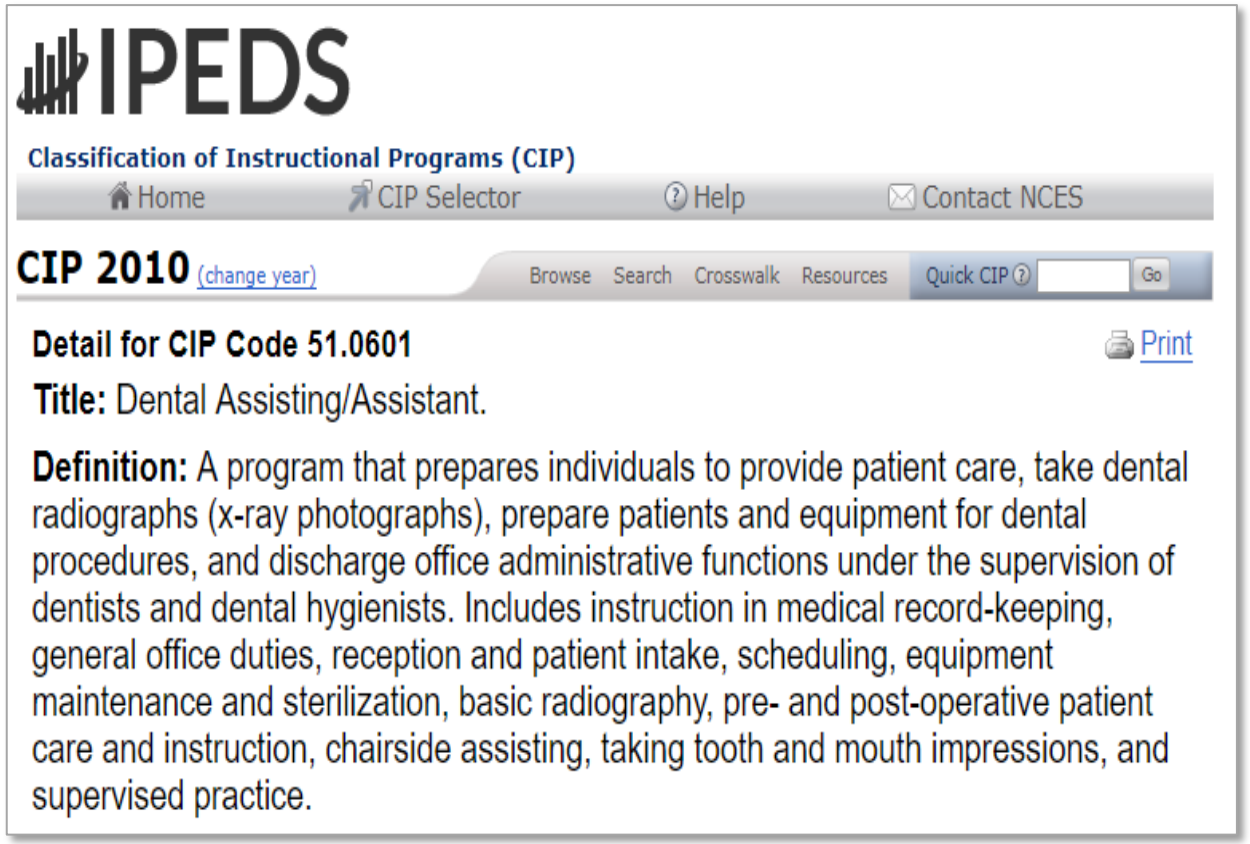
Source: Minnesota State CAREERwise Education

Building Career Pathways

What are programs of study?

Programs of study offer a more comprehensive and focused outline of courses and trainings that lead to specific careers.

Programs typically result in a certification or degree that provides entry into a field of work.



https://nces.ed.gov/ipeds/cipcode/

Building Career Pathways

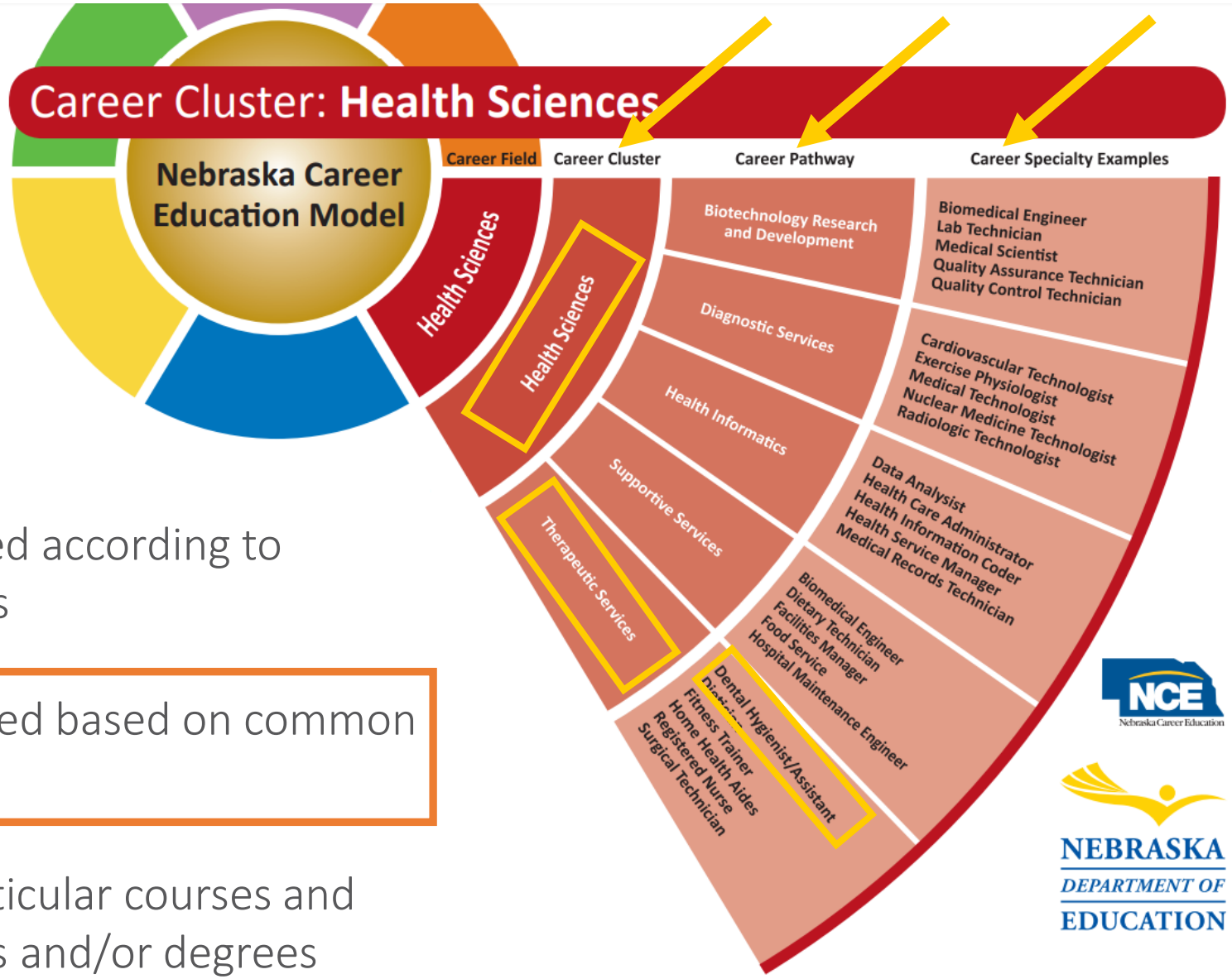
How does it all fit together?

The Career Clusters Framework moves from general to specific.

- Career Clusters = jobs are classified according to foundational knowledge and skills

- Career Pathways = jobs are grouped based on common courses and training programs

- Programs of Study = describe particular courses and sequences needed for certificates and/or degrees

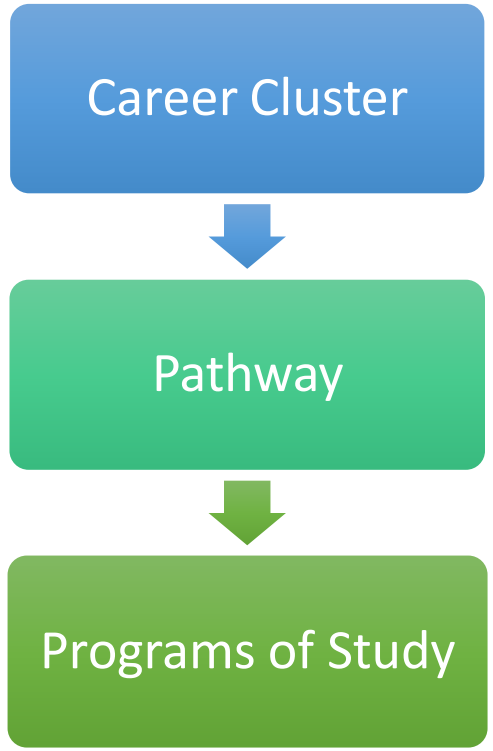


Source: Nebraska Career Education Model and Resources

Building Career Pathways

P2C Approach to Pathways

- National Career Clusters Framework is used to provide a basic foundation for understanding the relationship between clusters, pathways, and programs of study.
- Emphasis is placed on identifying pathway careers and the education opportunities aligned with these careers.
- Objective is to outline career opportunities at various levels of education – entry and exit points.
- Secondary and postsecondary education opportunities and requirements are summarized to help students make informed decisions about courses and training programs.



Building Career Pathways

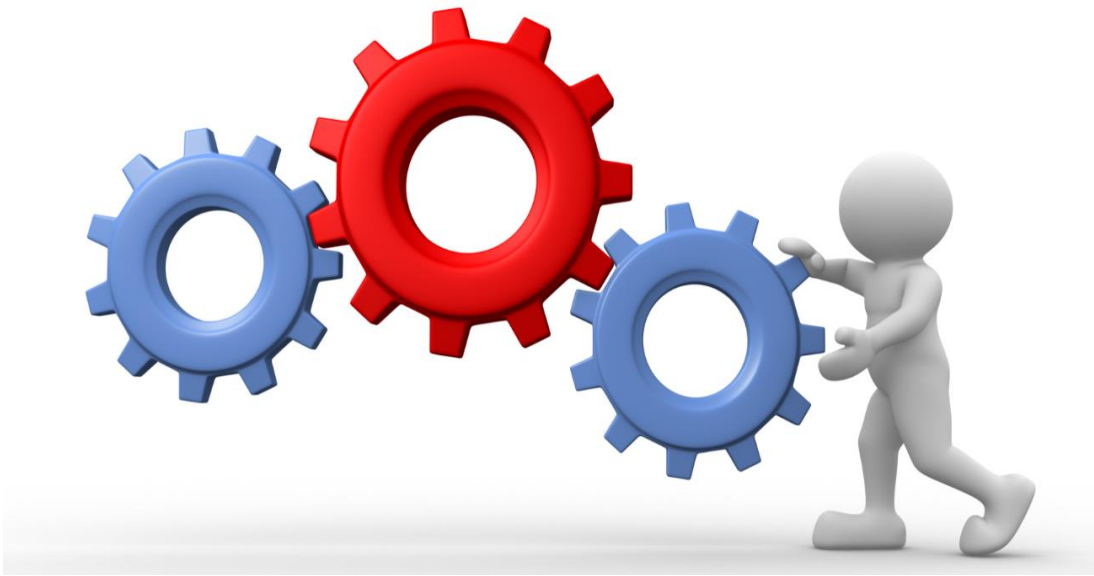
Components of a Career Pathway

Entry and Exit Points

- Employment opportunities at various educational levels

Education and Training

- Map of secondary and postsecondary education opportunities

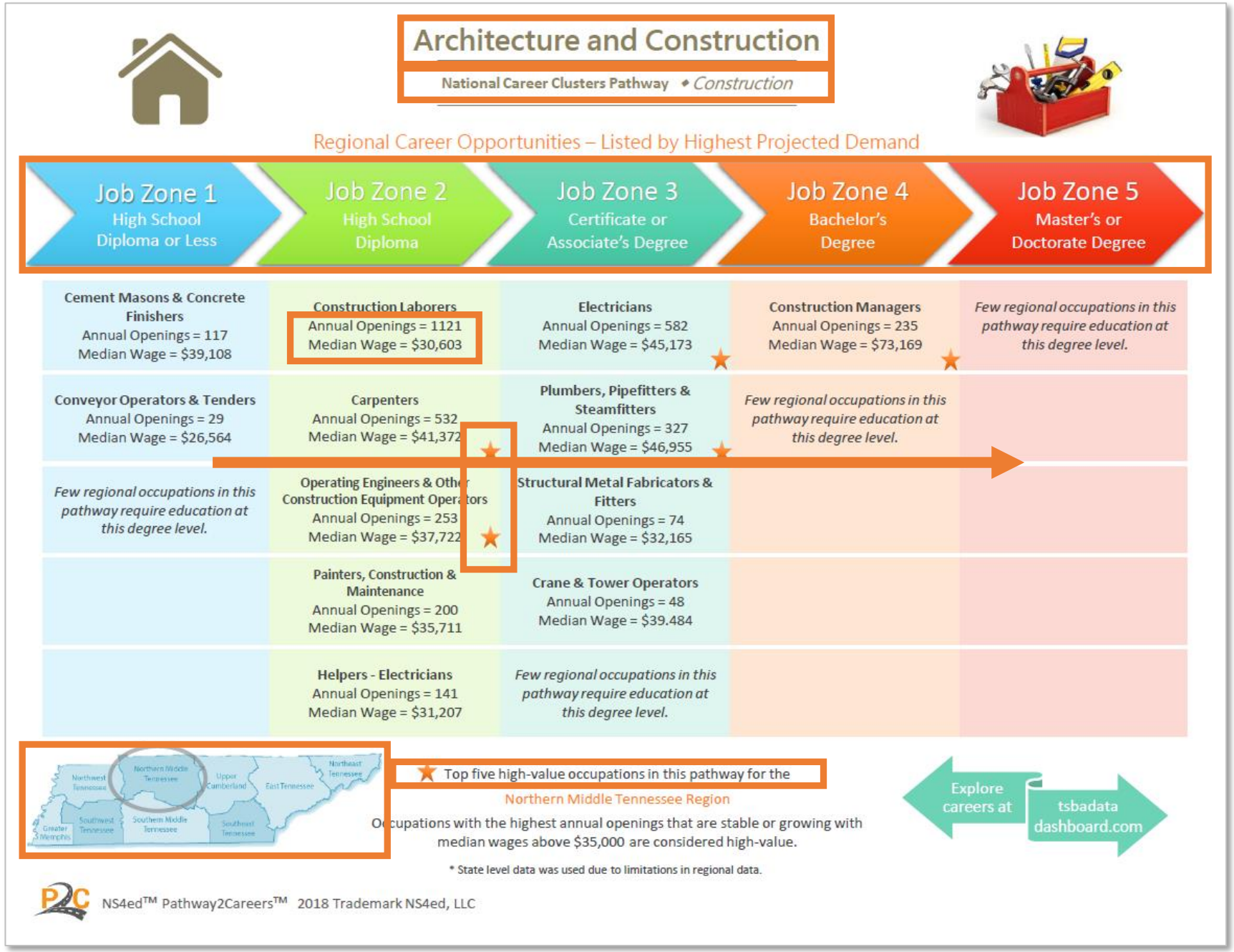


Entry and Exit Points

Employment opportunities at various educational levels

Pathway Sample

- Career Cluster Title
- Pathway Title
- Entry and Exit Points
- Labor Market Data
- High-Value Careers
- Focus on Regional Opportunities



Education and Training

Map of secondary and postsecondary education opportunities

Pathway Sample

- High School Requirements
- High School Career Programs
- Postsecondary Schools
- Postsecondary Programs of Study
- Focus on Regional Opportunities

Architecture and Construction

National Career Clusters Pathway ◆ *Construction*

Regional High School Requirements and Programs (Grades 9-12)

English Language Arts	Math	Science	Social Studies	Foreign Language	Physical Education	Fine Arts	Elective Focus
English I	Integrated I	Biology	World History and Geography	Foreign Language I	Lifetime Wellness	Fine Arts Selection	Minimum of Three Courses *See career programs and electives below.*
English II	Integrated II	Chemistry	U.S. History and Geography	Foreign Language II	Physical Education (.5)	------	
English III	Integrated III	Physics	Economics / Government	------	------	------	One Additional Elective is Required
English IV	Upper Level Math	------	Personal Finance (.5)	------	------	------	

Career Programs	Career Program Courses	Additional Electives
❑ Residential & Commercial Construction ❑ Mechanical, Electrical, and Plumbing (MEP Systems) *See other Architecture and Construction pathways for additional career programs and opportunities.*	❑ Career Exploration ❑ Fundamentals of Construction ❑ Residential and Commercial Construction I & II ❑ Mechanical, Electrical, & Plumbing Systems (MEP Systems) ❑ HVAC ❑ Electrical Systems ❑ Plumbing Systems ❑ Work-Based Learning / Practicum	English Language Arts ❑ _____ ❑ _____ Math ❑ _____ ❑ _____ Science ❑ _____ ❑ _____ Other ❑ _____ ❑ _____

Regional Postsecondary Schools

Certificates and Associate's Degrees	Bachelor's and Advanced Degrees
Community Colleges • Motlow State Community College • Tennessee College of Applied Technology • Nashville State Community College	**Colleges and Universities** • Middle Tennessee State University • Tennessee State University • University of Tennessee • Vanderbilt University

Postsecondary Programs/Majors for Occupations in this Pathway

Certificate or AA	Electrician	Plumbing and Related Water Supply Services	Metal Fabricator	Mobile Crane Operation	Masonry
Bachelor's Degree	Construction Management	***	***	***	***
Advanced Degree	***	***	***	***	***

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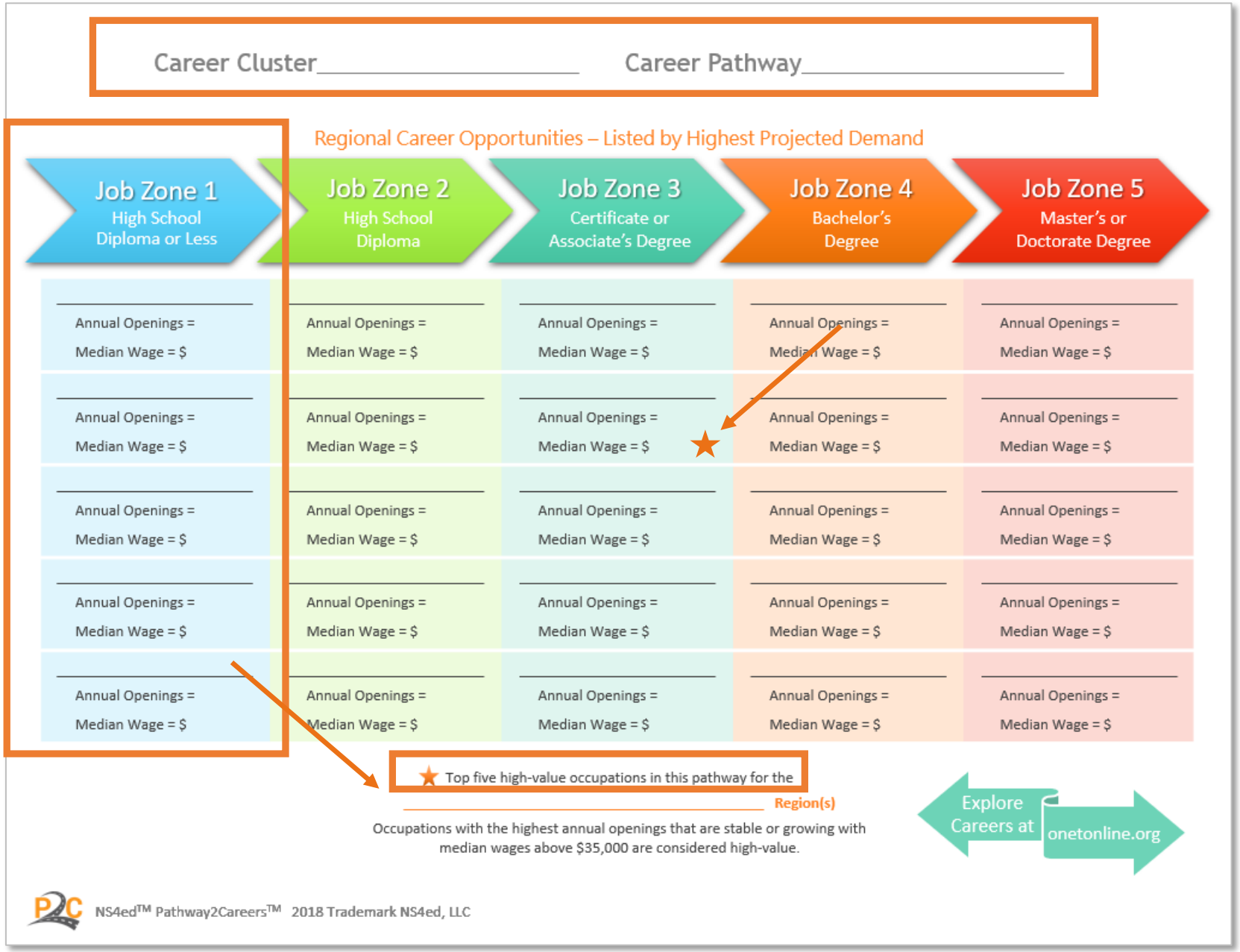
*** Few regional occupations in this pathway require education at this degree level.

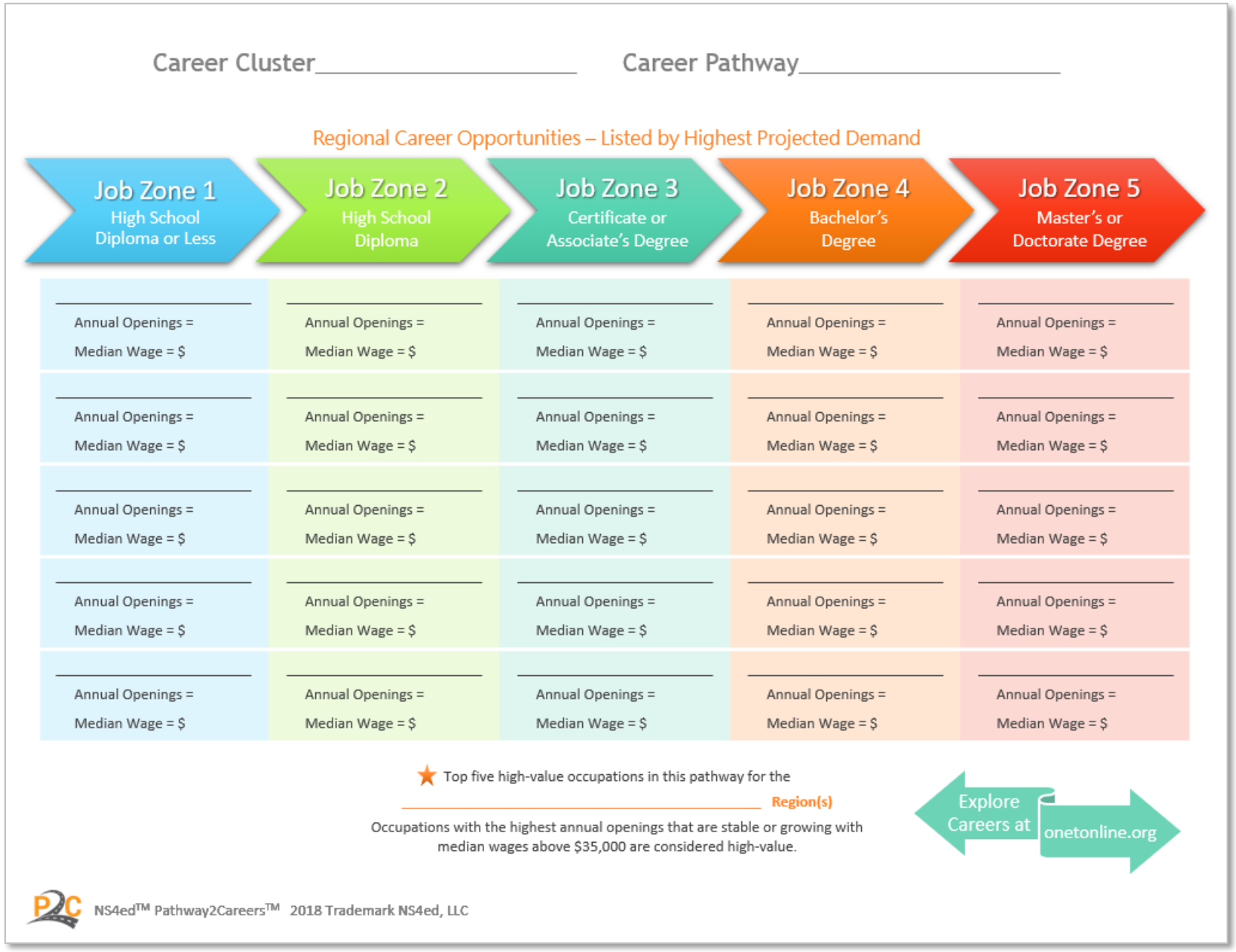
Creating Pathways

1. Identify a cluster and pathway.
2. Use the P2C dashboard to explore labor market data for your district.
3. Use filters in the P2C dashboard to search within a specific cluster, pathway, and job zone.
4. List occupations highest in demand for each job zone.
5. Add ★ stars next to the top five high-value occupations for the pathway.
6. List the workforce region(s) at the bottom of the template.

Template available at pathway2careers.com



Let's give this a try…



Career Cluster_____ Career Pathway_____

Regional Career Opportunities – Listed by Highest Projected Demand

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
Annual Openings = Median Wage = $	Annual Openings = Median Wage = $	Annual Openings = Median Wage = $	Annual Openings = Median Wage = $	Annual Openings = Median Wage = $
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★ Top five high-value occupations in this pathway for the _____ Region(s)

Occupations with the highest annual openings that are stable or growing with median wages above $35,000 are considered high-value.

Explore Careers at onetonline.org

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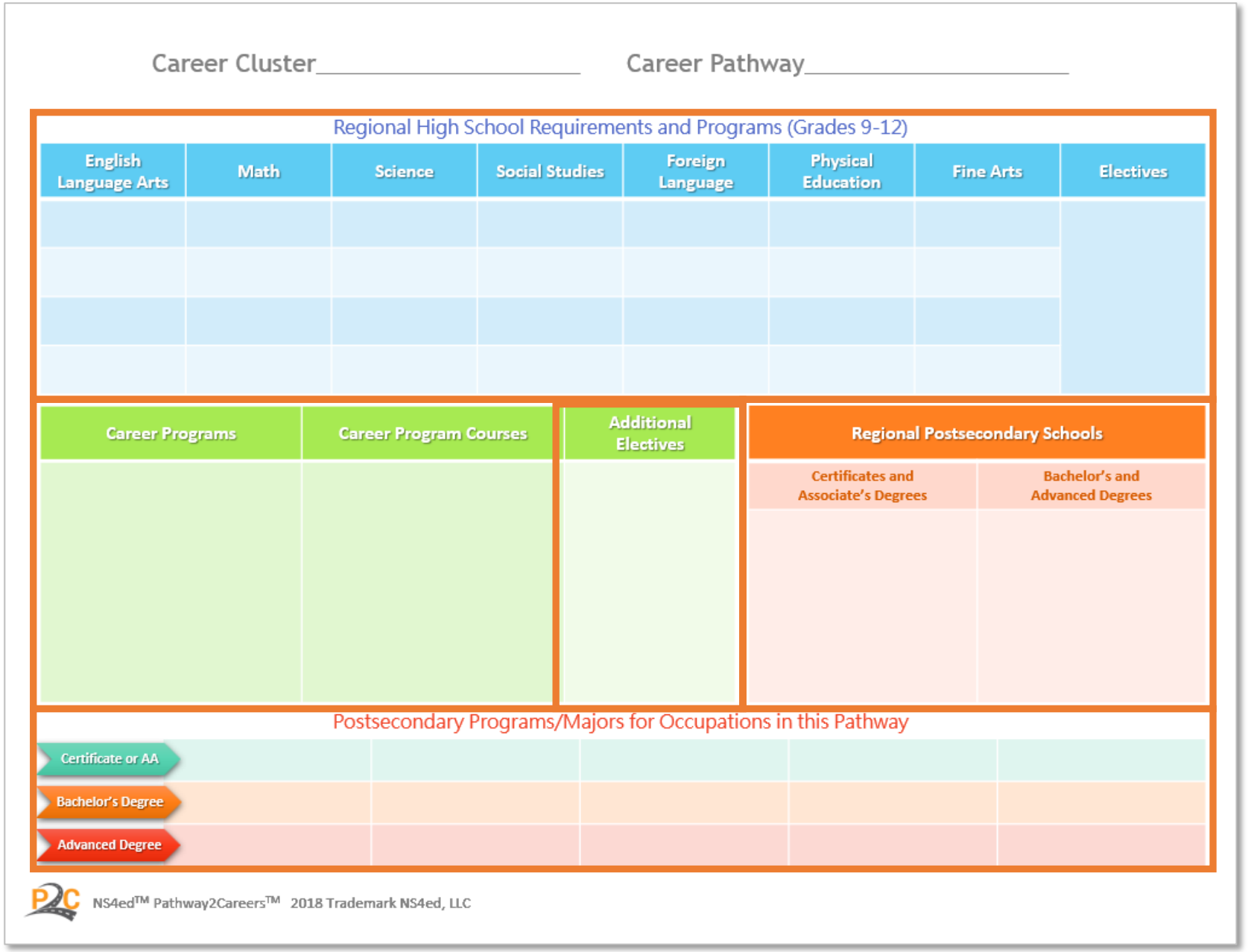
Template available at pathway2careers.com

Creating Pathways

1. Add high school requirements.
2. List career programs and courses.
3. Include additional pathway-related electives.
4. Mention regional postsecondary schools.
5. Identify postsecondary programs of study for pathway occupations.

CIP to SOC Crosswalk

nces.ed.gov/ipeds/cipcode/resources.aspx?y=55



Template available at pathway2careers.com

Building Career Pathways

Architecture and Construction

National Career Clusters Pathway • *Construction*

Regional Career Opportunities – Listed by Highest Projected Demand

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
Cement Masons & Concrete Finishers Annual Openings = 117 Median Wage = $39,108	**Construction Laborers** Annual Openings = 1121 Median Wage = $30,603	**Electricians** Annual Openings = 582 Median Wage = $45,173 ★	**Construction Managers** Annual Openings = 235 Median Wage = $73,169 ★	*Few regional occupations in this pathway require education at this degree level.*
Conveyor Operators & Tenders Annual Openings = 29 Median Wage = $26,564	**Carpenters** Annual Openings = 532 Median Wage = $41,372 ★	**Plumbers, Pipefitters & Steamfitters** Annual Openings = 327 Median Wage = $46,955 ★	*Few regional occupations in this pathway require education at this degree level.*	
Few regional occupations in this pathway require education at this degree level.	**Operating Engineers & Other Construction Equipment Operators** Annual Openings = 253 Median Wage = $37,722 ★	**Structural Metal Fabricators & Fitters** Annual Openings = 74 Median Wage = $32,165		
	Painters, Construction & Maintenance Annual Openings = 200 Median Wage = $35,711	**Crane & Tower Operators** Annual Openings = 48 Median Wage = $39.484		
	Helpers - Electricians Annual Openings = 141 Median Wage = $31,207	*Few regional occupations in this pathway require education at this degree level.*		

★ Top five high-value occupations in this pathway for the Northern Middle Tennessee Region

Occupations with the highest annual openings that are stable or growing with median wages above $35,000 are considered high-value.

* State level data was used due to limitations in regional data.

Explore careers at tsbadata dashboard.com

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Architecture and Construction

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Bachelor's Degree	Construction Management	***	***	***	***
Advanced Degree	***	***	***	***	***

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*** Few regional occupations in this pathway require education at this degree level.

Building Career Pathways

Not All Pathways Lead to Employment Success

Some pathways are limited in high-value career opportunities.

- **Example:** Government and Public Administration Pathways – *low-demand*
- **Example:** Hospitality and Tourism Pathways – *low-wage*

Solution

1. Explore labor market data within clusters and pathways.
2. Select clusters and pathways that offer several high-value careers.

Building Career Pathways

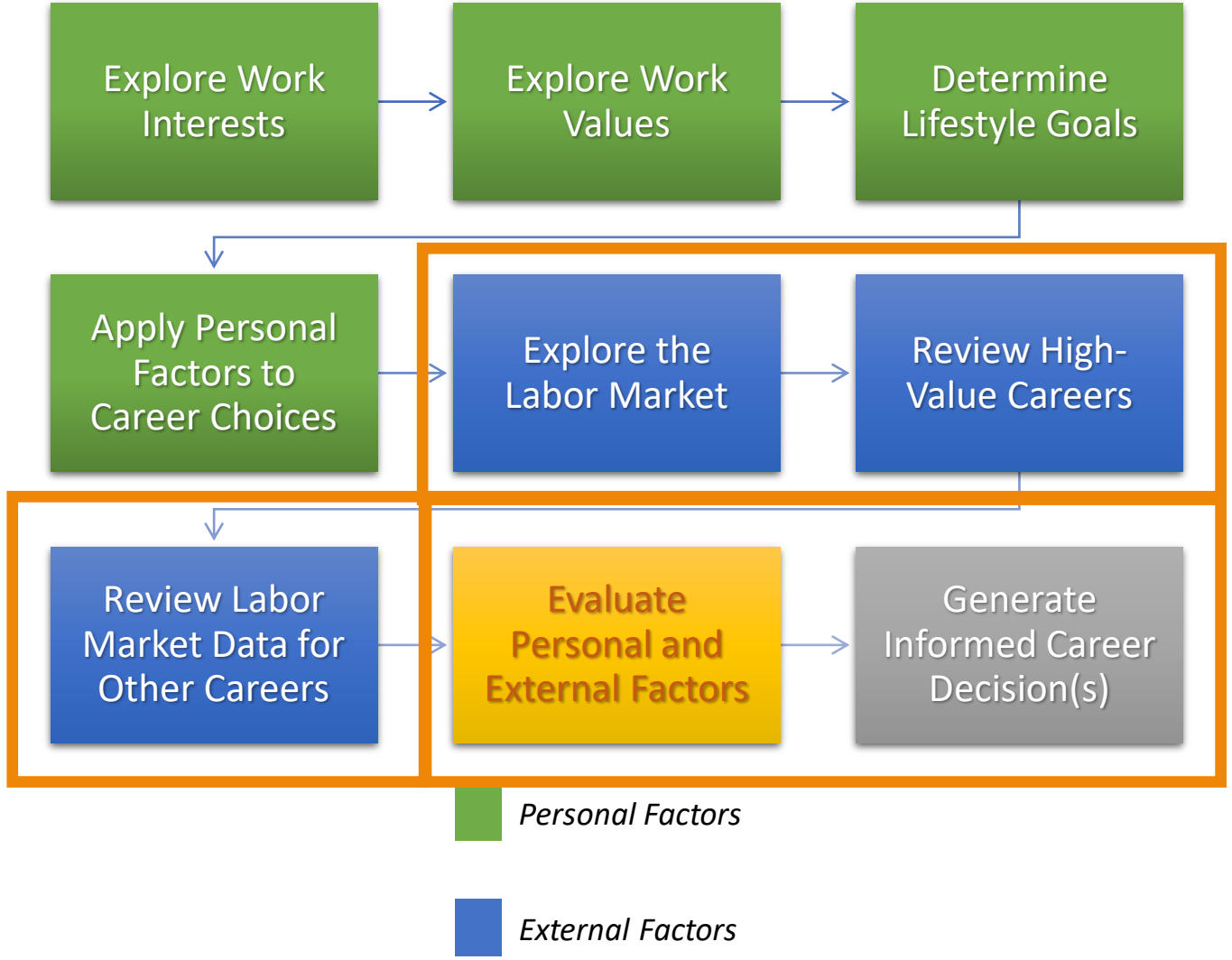
Using Pathways with Students

- Incorporate career pathway maps into career exploration activities.
- Use student interests, values, and goals to help them select a pathway.
- Assist students in understanding the labor market data displayed in the pathways.
- Help students identify a career target within the pathway.
- Use the education portion of the pathway to outline a plan for achieving career goals.

Building Career Pathways

Using Pathways with Students

- Introduce career pathways when exploring external factors.
- Provide a foundation for exploring the pathways beforehand.
  - Introduce career clusters.
  - Explain basic terms and definitions.
- Provide opportunities for students to review the pathways and explore potential careers.
- Help students move to the final step of considering personal and external factors in the career selection process.



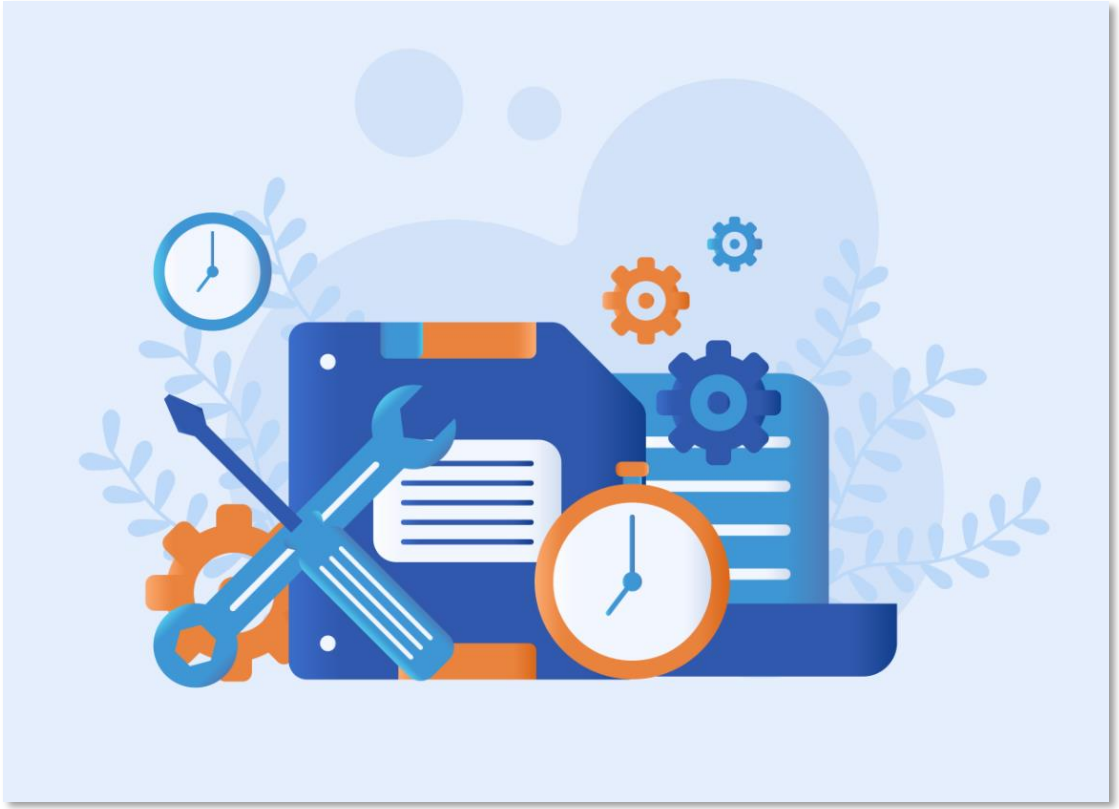
Building Career Pathways

Using Pathways with Students

Benefits

- Increase career exposure.
- Build an understanding of related careers.
- Promote awareness of entry and exit points.
- Increase confidence in understanding the education and training that aligns with career goals.

Components of Effective Career Plans



Components of Effective Career Plans

Education and Training

Financial Resources

Support Services

Work Experience

Job Search Strategies

Motivation and Drive

Components of Effective Career Plans

Education and Training

Support Services

Financial Resources

Work Experience

Components of Effective Career Plans

Developing Career Plans with Students

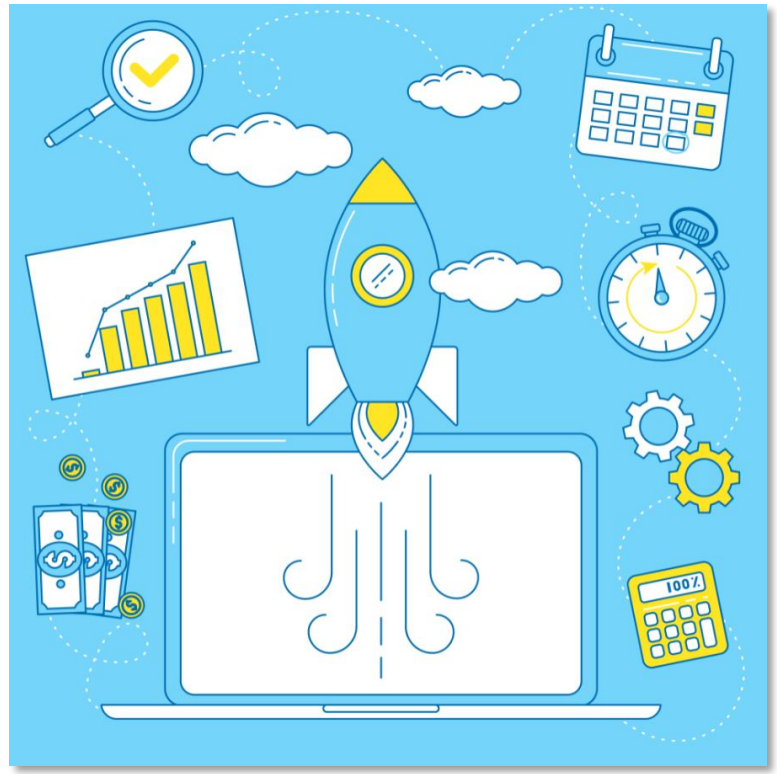
1. Explore each component.
2. Identify needs within each component.
3. List options and available resources that meet needs.
4. Include websites, contact information, and locations to gather resources.
5. Incorporate attainable goals and deadlines.
6. Set frequent check-in times for students to discuss progress, challenges, and resolutions.

Components of Effective Career Plans

Developing Career Plans with Students

Result of the planning process should be:

- List of the main components
- Needs clearly identified
- Relevant resources that meet the needs
- Attainable goals
- Check-in schedule for staying on track



Plans are Essential to Promoting Employment Success

- Identifying a career goal is often easier that developing a plan to achieve that goal.
- Students can benefit from a clear roadmap that outlines what they will need and how to get it.

Guiding Students Toward Employment Success

Guiding Students Toward Employment Success

Process of Achieving Employment Success

1. Career Exploration

- *Personal Factors*
- *External Factors*

2. Career Selection

- *Informed career decision*

3. Career Planning

- *Development of an effective career plan*

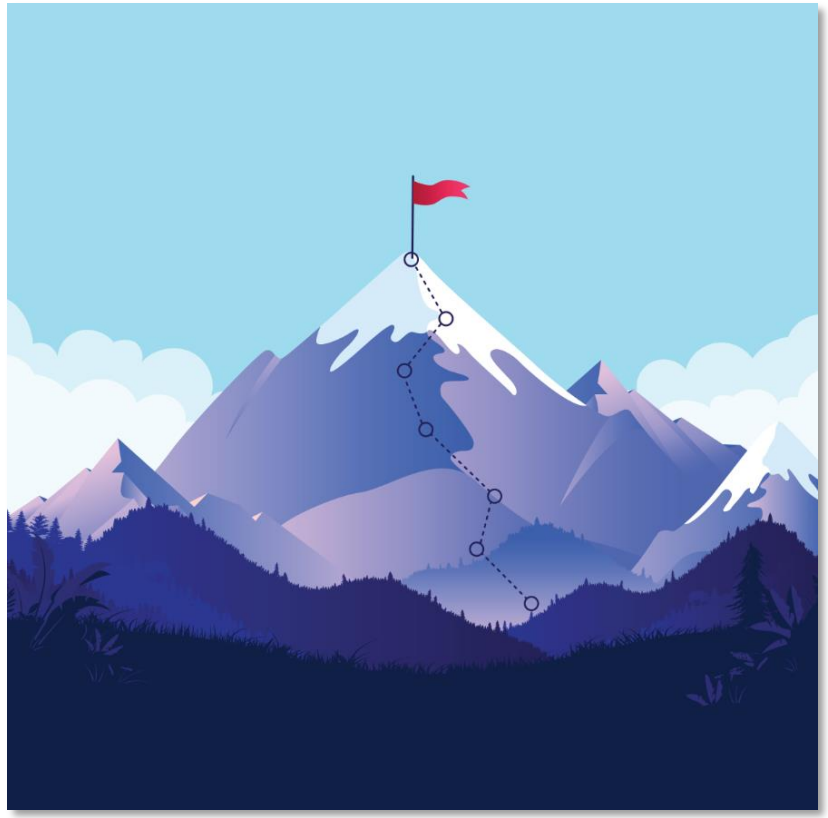
4. Career Preparation

- *Successful execution of career plan*

Guiding Students Toward Employment Success

It's not always easy…

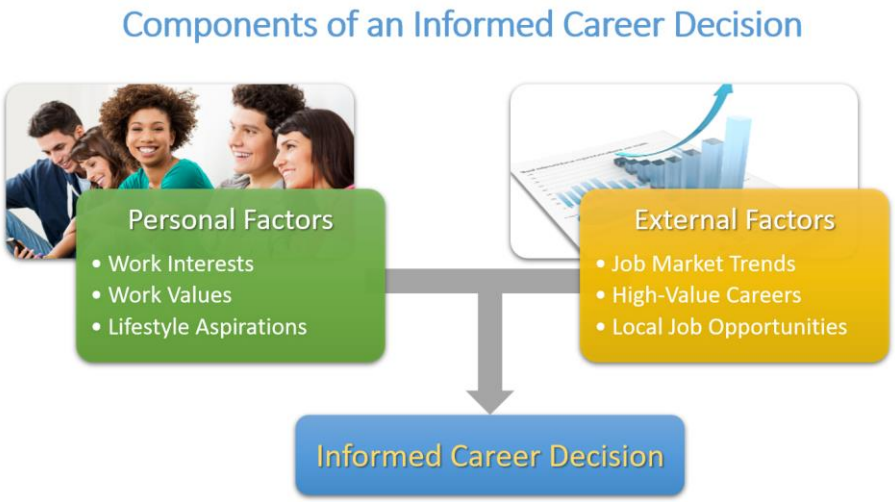
Motivation to engage in the career process may be lacking for some students.

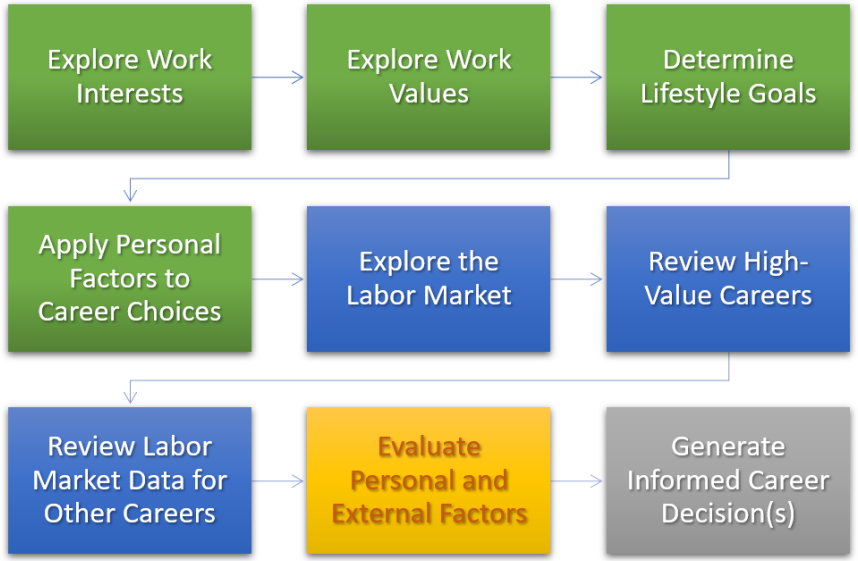


Solution

- Help students understand why and discuss the purpose in career exploration activities often.
- Keep the discussion focused on the positive outcomes of career exploration.
- Personal motivators may need to be identified.

Guiding Students Toward Employment Success





Our ultimate goal is to encourage students to make informed career decisions and act on those decisions with effective career plans.

Overview

- Building Career Pathways
- Components of Effective Career Plans
- Guiding Students Toward Employment Success

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