

Priming the Pump for Future Workforce



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Strong experience in education solutions.



Creators of KeyTrain® and Career Ready 101® for **ACT WorkKeys®**,
acquired by ACT

- Online basic skills enhancement curriculum
- Helped to create the National Career Readiness Certificate
- Used in approx. 15% of US high schools and in other agencies
- Managed **28 statewide contracts** with over 4 million registered users
- Delivered 7.2 million lessons and 2.4 million hours used per year
- Statistically proven effective at raising basic skills test scores

WorkKeys®



ACT®

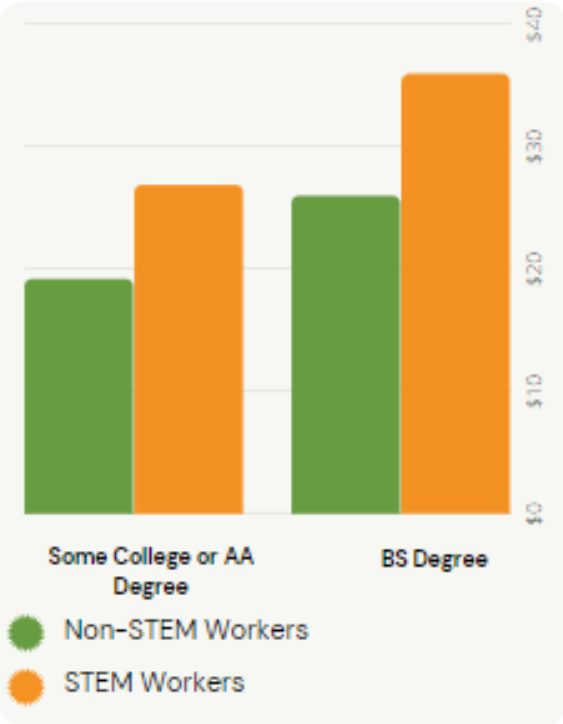
ACQUIRED BY ACT in 2010

#1 Reason students do not major in STEM is a lack of awareness of careers



Learning Blade® is a [complete toolbox](#) of online interactive student lessons, teacher lesson plans, and project-based learning activities designed to grab students' attention while introducing them to the careers, tools, and technologies found throughout STEM, computer science, and CTE fields.

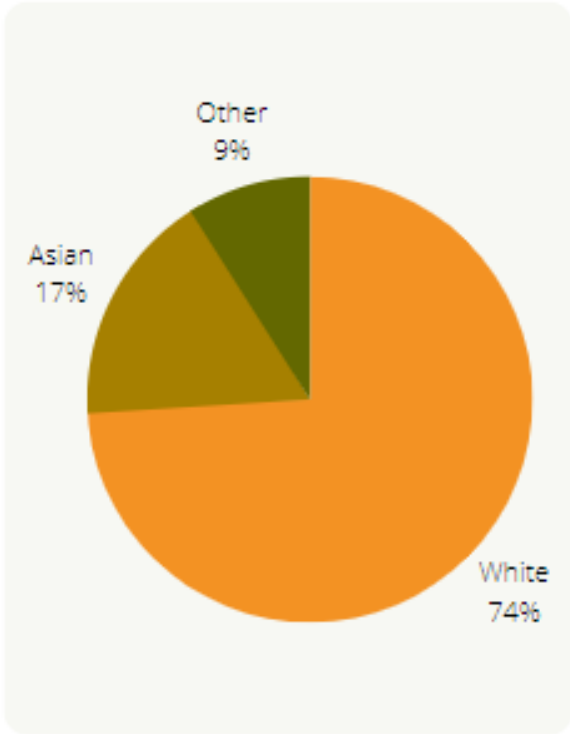
Demand for STEM, computer science, career tech workers is growing, but participation by students is lacking.



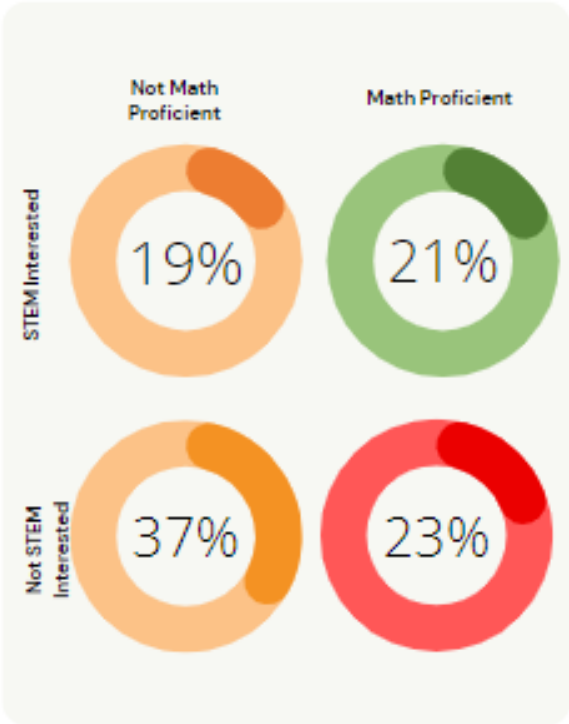
STEM Jobs pay more at all levels



Women are underrepresented in STEM



Minorities are underrepresented in STEM



23% of Students are prepared for STEM, but are not interested

12th Graders, 2013, from ACT, Inc.

“Missions” involve a societal challenge that interests students



12

“Missions”
that engage
all students

Mission	Challenge	Career Clusters
Car Manufacturing	Use modern manufacturing techniques to design and build a new concept car	Advanced Manufacturing
Dolphin Rescue	Help rescue rehabilitate an injured dolphin, including creating an artificial prosthetic tail	Biomedicine, Marine Science
Energy Sources	Evaluate alternative or upgraded energy sources for a city that currently has an old coal-fired power plant	Energy Production, Environment
Entrepreneurship	Set up a new business with a focus on entrepreneurship	Finance, Business
Flu Outbreak	How health and IT professionals can use data warehousing and analysis to predict flu outbreaks using GIS and social media data	Information Technology
Fresh Food	Consider methods to increase production of local foods in a community	Agriculture
Hack Attack	Learn about methods to create and protect website, apps and social media after a school’s website and media are hacked	Computer Science
Haiti Orphanage	Design and build an environmentally-sound orphanage for children left homeless by an earthquake in Haiti	Construction, Sustainability
Heart Surgery	Conduct heart surgery and therapy for a child with a heart defect; evaluate the use of artificial hearts or heart components	Medicine
Lightweight Aircraft	Design a lightweight and easily maintained aircraft for distant missions	Lightweight Metals Manufacturing
Rescue Robots	Explore technology used for robotics design, such as sensors, electrical circuits, industrial design and computers	Electronics, Computer Science
Transportation Congestion	Evaluate new transportation methods for a city that has a traffic congestion problem	Transportation

Each Mission includes an interactive toolbox of lessons and activities.



Interactive online lessons, ready-to-use lesson plans and activities for middle and high school students. Can be used by any teacher, anywhere. Validated and proven to increase STEM/CS/CTE career interest.

Interactive Lessons

Over 400 online lessons tied to academic standards



Hands-On Projects

Mission challenges are project-based lessons using common materials



Design Thinking

Solve complex problems with the 5-step creative thinking process



Parent Discussions

Handouts and easy experiments for at-home discussions



Career Videos

Introduce over 50 careers with real-life people



3D Printing Activities

Create objects that demonstrate science principles



Intro to Coding

20-hour middle school course providing robust coding experiences



Papercraft Figures

Students make origami-type figures of 100 careers and technologies



How Learning Blade Achieves Positive Impact



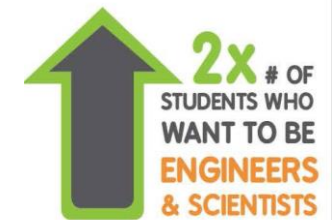
1. Increase **Career Awareness**

- Introduce over 100 STEM and computer science careers and technologies



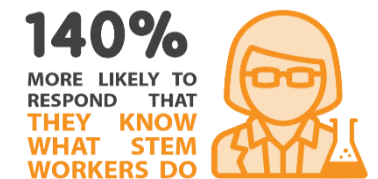
2. Increase **Career Interest**

- Presents in the context of solving societal issues that students care about



3. Increase **Self-Efficacy**

- Helps students of different backgrounds see themselves in these careers through role models and non-traditional approach to science topics



4. Increase **Career Readiness**

- Practice basic academic skills in the context of these careers
Demonstrate relevance of academic studies to personal goals



Introduction to Coding Course



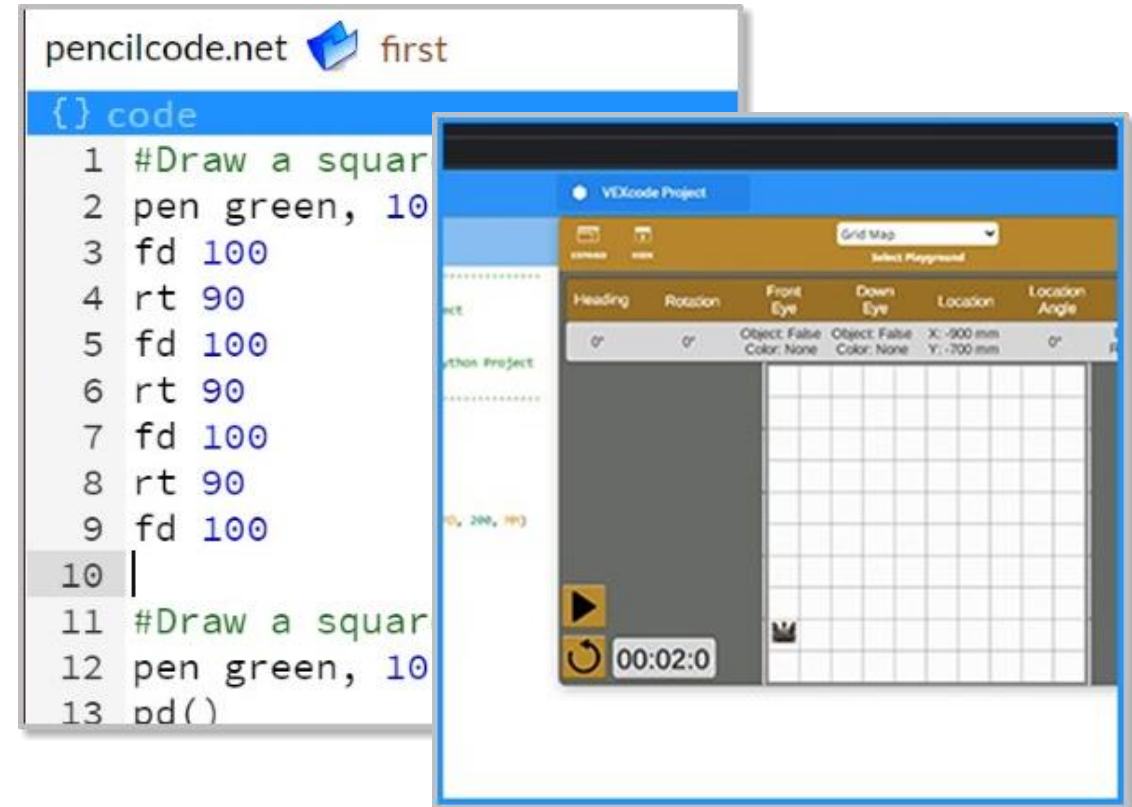
This 20-hour course provides everything you need to introduce students to computer science and real, text-based computer programming for MIDDLE SCHOOL!

Includes online lessons, group classroom activities, and complete lesson plans for guiding students through authentic coding experiences. Topics include:

- Computer hardware and software
- Simple algorithms and common statements
- Offline algorithm games
- Beginning programming
- Creating a simulated mobile app
- Concepts of cybersecurity and personal security
- Exploring common IT careers

"Having the Learning Blade tool in schools, students are exposed to the world of CS courses, CS opportunities, and CS career paths, and that is getting more students interested in CS jobs such as coding. The new "Intro to Coding" Block will continue to enhance what teachers can provide to their students."


Former Governor Asa Hutchinson





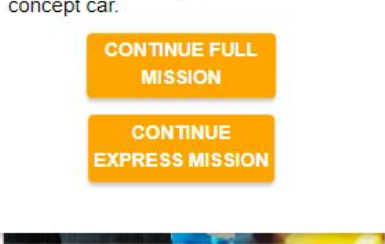









Students Can select a Mission, or teachers can assign specific Missions.



MY MISSIONS



 <p>Car Manufacturing</p> <p>Use modern manufacturing techniques to design and build a new concept car.</p> <p>CONTINUE FULL MISSION</p> <p>CONTINUE EXPRESS MISSION</p>	 <p>Dolphin Rescue</p>	 <p>Energy Sources</p>	 <p>Entrepreneurship</p>
 <p>Flu Outbreak</p>	 <p>Fresh Food</p>	 <p>Hack Attack</p>	 <p>Haiti Orphanage</p>
			

Students operate missions from a mission dashboard.



DASHBOARD **MY MISSIONS** **MY LESSONS** **RESOURCES**

YOUR MISSION **MISSION GUIDE** **SWITCH MISSIONS** **YOUR SCORECARD**

Hack Attack

TASK: After your school website and files are hacked, you work to repair, detect, and prevent hacks.



TOOLS	STATUS
Cloud Computing	In Progress
Cyber Security	In Progress
Mobile Applications	In Progress
Robot Development Kit	In Progress
Social Media and Connectivity	In Progress

TEAMMATES	STATUS
Data Scientist	Not Started
Information Security Analyst	Not Started
Software Engineer	Not Started
UI - UX Designer	Not Started
Web Developer	Not Started

Missions Completed: **0** **1** Mission Score: **0** **0** **6** Tools Earned: 0 of 5 needed Teammates Earned: 0 of 5 needed



LB interactive lessons introduce careers while reviewing academics.



3D Printing Technology

Types of 3D Printing

The ability to produce virtually any 3D model by repeatedly adding thin layers of material has revolutionized the design and, to some degree, the manufacturing process. The more formal term for 3D printing is "additive manufacturing." Click on each of the three types of 3D printers to learn more about them.



Layered Powder

Fused Deposition Modeling builds the model. This process can use some of the materials that can be used to create strong actual parts.



The Journey of a Thousand Miles

How it Works

The next steps for your character will be to **pause for a second, wave, and then say, "Goodbye."**

Drag the blocks to the correct place in the programming stack.

```
repeat 1  
  move 10 steps  
  jump  
  turn around 360 degrees  
  say Hello!
```

touch toes say Goodbye!

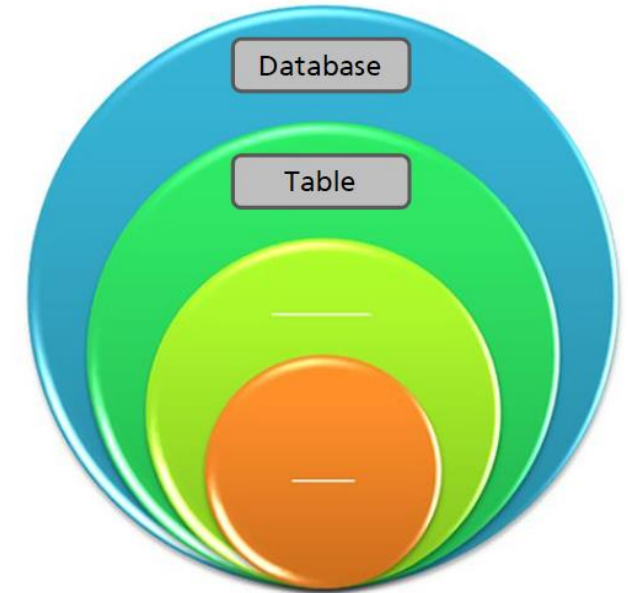
wait 1 secs wave move 10 steps

Submit Answer

Adding It Up With a Program

Relationship Between Terms

Using the graphic onscreen, drag each term to the correct location to graphically represent the relationships of the terms to each other.



Exit



Exit



The system provides academic skills reports by class or student.



Standards Performance Report
⏪ BACK TO STUDENT LIST

Student Name: Adam Andrews **School:** Thinking Media

Date: 05/01/2017 **Time:** 9:51 AM

Classes:

Name	Period	Teacher
3rd Period Science	0	Professor Smith

Notes: Each question may have more than one standard.
 The first response to each question in each activity session is recorded.
 Questions may be attempted more than once if the activity is repeated.

Standard Details
Activity Details

Export Reports:

ID	Category	SubCategory	Definition	Responses	Responses Correct	Responses Correct (%)	Questions	Questions Correct	Questions Correct (%)
ALL	-	-	All Responses	842	620	73%	48	25	-
6.RI.1	Reading Informational	Key Ideas and Details	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	100	75	75%	14	9	64 %
6.RI.10	Reading Informational	Range of Reading and Level of Text Complexity	By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	100	75	75%	14	9	64 %
6.RI.3	Reading Informational	Key Ideas and Details	Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).	5	0	0%	3	0	0 %
6.RI.4	Reading Informational	Craft and Structure	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical	22	20	90%	4	4	100 %

Lessons are specifically aligned to state academic standards.



Add Assignment - John Adams

Search By: Mission Tools and Teammates Activities/Lessons

Check a box next to an activity to assign it. Click on a standard number to see details for that standard.

Click on an activity name for a preview.

Show only assigned activities

Select State

NY

Select Context

-Select Context-

Search

Go

Assign	Activity	Context	State Standards	Keywords
<input checked="" type="checkbox"/>	3D Printing Technology	Math	GEO-G.C.2b. , GEO-G.C.5. , GEO-G.CO.7. , GEO-G.GMD.1. , GEO-G.GMD.3. , NY-5.MD.3. , NY-5.MD.4. , NY-5.MD.5.a. , NY-5.MD.5.b. , NY-5.MD.5.c. , NY-6.G.2. , NY-7.G.4. , NY-7.G.6. , NY-8.G.2. , NY-8.G.9.	additive manufacturing, layered powder, fused deposition modeling, stereolithography, Volume of rectangular prism, volume of cylinder, volume of triangular prism, volume of right triangular prism, thickness of walls, mass-produced, machinist
<input checked="" type="checkbox"/>	A Bird with One Wing - How Helicopters Fly	Science	6-8.RST.4. , 6-8.RST.5. , 6-8.WHST.1.b. , 6-8.WHST.2.d. , 6-8.WHST.3.a. , 9-10.RST.1. , 9-10.RST.4. , 9-10.RST.9. , 9-10.WHST.1.a. , 9-10.WHST.1.e. , 9-10.WHST.2.b. , 9-10.WHST.3.a. , 9-10.WHST.4.	Main rotor, tail rotor, reaction torque, collective control stick, cyclic control stick, rudders(or pedals)
<input type="checkbox"/>	A Day in the Life of a 3D Printing Technician	English	5L3b. , 5L4a. , 5L6. , 5R1. , 5R2. , 5R3. , 5R4. , 5R5. , 5RF4b. , 5W5. , 6L4a. , 6L4d. , 6L6. , 6R1. , 6R2. , 6R3. , 6R4. , 6W5. , 7L3a. , 7L4a. , 7L4d. , 7L6. , 7R1. , 7R2. , 7R3. , 7R4. , 7W5. , 8L4a. , 8L4d. , 8L6. , 8R1. , 8R2. , 8R3. , 8R4. , 8W5.	

SAVE

CANCEL

Multiple Statewide Efforts



Alabama

Department of Education Office
of Career & Technical Education &
Alabama Works

"Learning Blade is a dream for a teacher who wants to help their program thrive and remain strong. Using this type of resource is so helpful."



Tennessee

National Rural Education
Association

"Learning Blade has impacted my students' learning because they have visuals to accompany the content they receive in other classes."



South Carolina

South Carolina Department of
Education, Office of Career &
Technical Education

"After using Learning Blade, students have become more confident, especially in their math skills and sentence ordering in ELA."



Louisiana

Louisiana Office of
the Governor



Arkansas

Arkansas Department of Education,
& The Arkansas Public School
Resource Center



Missouri

Missouri Department of
Elementary & Secondary
Education (DESE)



Idaho

Idaho STEM Action Center

NEW!



Ohio

Ohio STEM Learning Network
Proudly Managed by Battelle



Florida

FADSS



Oklahoma

Oklahoma Office of Management
and Enterprise Services


Our results have been independently validated.



Student Survey Results Validated by Battelle:

- **55% Increase** in students who strongly agree that they are interested in a career in Computer Sci.
- **Doubling** the # of students interested in becoming an engineer and/or scientist
- **79% Increase** in students recognizing “*Math is helpful when solving interesting problems.*”
- **69% Increase** in students recognizing “*What I learn in school will be useful later in life.*”
- **56% Increase** in students interested in **taking advanced math classes** in high school.

59% 
MORE LIKELY
TO BE INTERESTED
IN STEM CAREERS

140% 
MORE LIKELY TO
RESPOND THAT
THEY KNOW
WHAT STEM
WORKERS DO

70% 
MORE LIKELY TO TALK ABOUT
SCIENCE WITH OTHERS

Results from Student Surveys

Independent Ed.D. Research Results: Katherine Kendall, 2017. All items $p < .001$, $N = 276$
Learning Blade users were more likely to intend to pursue STEM careers:

- **59% more likely** to be interested in a STEM career
- **84% more likely** to want a job that designs or builds things
- **140% more likely** to respond that they knew what STEM workers do
- **70% more likely** to be willing to like to talk about science with others

Selected as “Accomplished” in STEMworks database by WestEd by meeting rigorous design principles and evaluation by independent reviewers

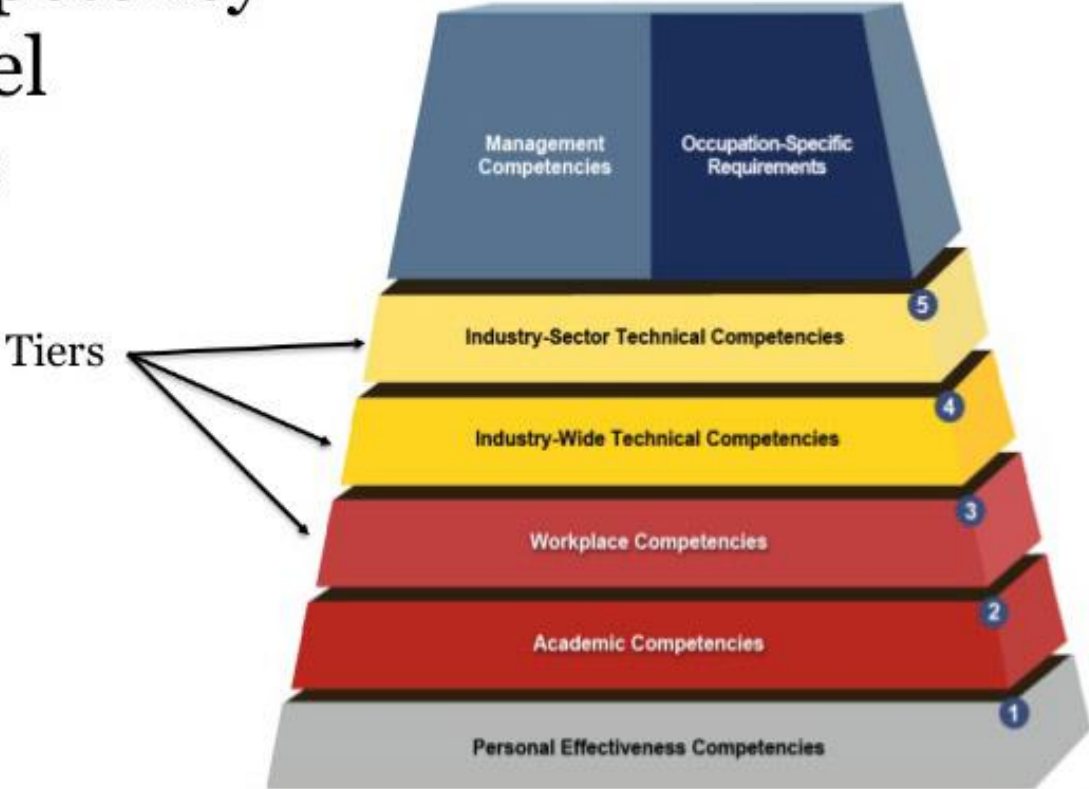
STEMWORKS

Learn more at <http://link.learningblade.com/results>

Ready for Industry[®] Provides Essential General Industry Knowledge



Competency Model Tiers



Creates a bridge between standard K-12 education and the knowledge needed for success in industry.

Covers gaps in common technical training and the industry and workplace competencies in tiers 3 and 4 of the workplace competency model.



READYFORINDUSTRY 

Ready for Industry Addresses Career Preparedness for the Job Seeker



This new platform, Ready for Industry (RFI), is designed to address career preparedness and awareness for the near-term job seeker – from late high school through adult.

RFI bridges two gaps that exist in the preparation of many potential skilled workers:

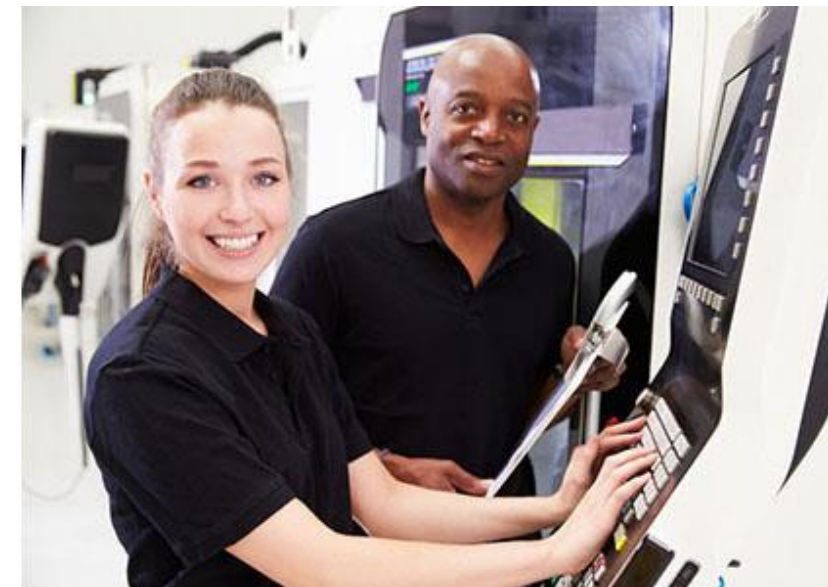
- What industry pathway do I want to pursue?
- What is the basic info that employers want me to know that I might not learn in school?

RFI provides separate 15-20 hour courses for each of the 5 highest-demand industries:

- Healthcare
- Manufacturing
- Information Technology
- Construction
- Logistics

RFI is *NOT* a replacement for technical training. It provides a context for post-secondary career search and training.

READYFORINDUSTRY



General Course Outline



READYFORINDUSTRY

For each of the 5 highest-demand industries, RFI provides self-paced, online instruction on:

- Introduction to the Industry
- What it is like to Work in the Industry
- Industry Terminology and Common Practices
- Career Opportunities and Descriptions
- Current Issues and Trends in the Industry
- Career Pathways, Education and Certifications in the Industry
- Workplace Expectations in Industry

Separate 15–20-hour courses for each of the 5 highest-demand industries:

- Healthcare
- Manufacturing
- Information Technology
- Construction
- Logistics




Introduction to Construction

0% COMPLETE

- INTRODUCTION
 - Introduction to Construction
- BEGINNING THE PROJECT
 - Before the Ground is Broken
 - The Critical Path of Construction
- BUILDING THE STRUCTURE
 - Types of Foundations
 - Framing
 - Roughing-In

Building the Structure



Whether you live in a condo, apartment, or a house, have you ever wondered what goes in to building the structure?

Click through the following steps to see how a typical building is constructed.

START >

Terms Related to Medication Administration

14% COMPLETE

- INTRODUCTION
 - Terms Related to Medication Administration
- DRUG ADMINISTRATION ROUTES
 - Two Basic Drug Administration Routes
 - Enteral Routes
 - Parenteral Routes
- MEDICATIONS
 - Basic Categories of Medications

Section 2 of 7

Two Basic Drug Administration Routes

Two Basic Drug Administration Routes

There are two basic routes of medication administration:

(Click the cards shown to learn more about the two basic routes of medication administration.)



ENTERAL



PARENTERAL

Certificate of Completion – Industry Credential(Coming Soon!)



- **Currently participants can earn a Certificate of Completion**
- **Ready for Industry **industry-recognized credential** is being developed and planning for release later this year.**

NOCTI

Ready for Industry[®]: Launched 2022



Already implemented in several states statewide!



Ready for Industry[®]: Sample Uses



- **High School- CTE efforts**
 - **Preparing students for Apprenticeships, Internships**
 - **Work-based Learning Classes**
 - **Management System allows easy reporting**
 - **IEP transition plans**
 - **Individual student success plans**
 - **JAG – Jobs for America Graduates**



Ready for Industry helps prepare students with the soft skills that they need for their Health Science Internship. This was a great partnership between Ready for Industry and the Coosa Valley Medical Center.”

Deana Goodwine, Director of Workforce Development, Sylacauga High School, AL

Ready for Industry[®]: Sample Uses



- **Community and Technical Colleges**
 - **College/Career Readiness**
 - **Orientation classes for students for those unclear as to what industry they want to pursue – career preparedness**
 - **Management System allows easy reporting**
 - **Better prepare candidates for jobs in the 5 industries.**



"We've launched Ready For Industry at 10 of our colleges and plan to expand to 18 others this fall. We're excited about the support RFI is providing our students through an innovative career-preparedness platform."

Dr. Flora Tydings, Chancellor, Board of Regents, TN

Ready for Industry[®]: Sample Uses



- **American Job Centers – WIOA:**
 - **Career/Workforce Preparedness**
 - **Integrate as part of intake process**
 - **Veteran Services**
 - **Youth Services**
 - **Management System allows easy reporting**
 - **Supports WIOA Requirements**



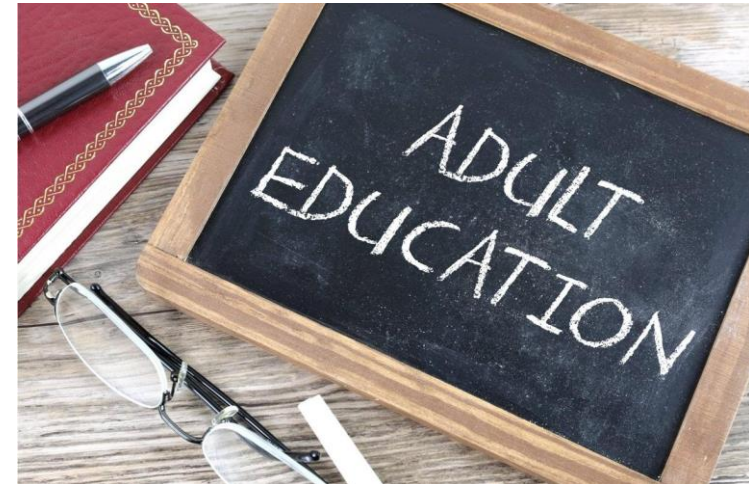
“We believe that RFI makes our clients more confident and prepared for living wage careers that our communities desire.”

Traci Albertson, Office of Workforce Development, MO

Ready for Industry[®]: Sample Uses



- **NGO and Others**
 - **Adult Education**
 - **Vocational Rehabilitation**
 - **Corrections**
 - **TANF**
 - **Additional Ideas?**



"I find the courses informative and definitely learned new information. I like that participants have to pay close attention because if they don't, quiz results will let you know. They are challenging."

Arron DeGracia, Career Institute Director, UA Pulaski Technical College

Ready for Industry Summary



Ready for Industry (RFI), is designed to address career preparedness for the near-term job seeker – from late high school through adult.

RFI provides separate about 20 hour courses for each of the 5 highest-demand industries:

- Healthcare
- Manufacturing
- Information Technology
- Construction
- Logistics

RFI useful in

- High School – CTE – Apprenticeships etc.
- Adult Ed/ Voc Rehab/TANF/Corrections etc.
- Community/Technical Colleges
- Job Centers - WIOA

READYFORINDUSTRY



THANK YOU - Contact Us



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