

APPENDIX 1.

WIN LEARNING SOFTWARE

WIN Initial Skills Review

WIN Learning's Initial Skills Review (ISR) measures a student's mastery level of *foundational* workforce skills that focus on the core communication, reasoning, and problem-solving skills so often required for 21st Century jobs—from entry level to professional. The ISR gives students a good idea of how prepared they are for a wide array of careers upon graduation, and helps clarify their needs for further training and/or education. These well-developed assessments also assure precise skills-based placements into further work on foundational skills allowing learners to be challenged, but not frustrated by work for which they are not yet ready.

The review measures a student's skills in the three WorkKeys area tested—*Reading for Information*, *Applied Mathematics*, and *Locating Information*—with each area including at least three scored levels of questions for independently measuring essential career readiness. Scores are then related to career exploration that matches students to jobs, training and careers. For example, scoring at Level 3 means students are prepared for 30% of jobs in the workplace; at Level 4, for 60% of jobs; and at Level 5 and above, for 90% of jobs.

Students can then further develop their foundational skills using WIN's Career Readiness Courseware, with the ISR serving as a precise placement tool in the Courseware. Systematic instruction can then advance learners to a level of functional competency to assure their continued success.

To meet the needs of all students, the Initial Skills Review can be taken in either English or Spanish. An audio component is available (in English only) for those whose reading skills can benefit from additional help.

WIN Career Readiness Courseware

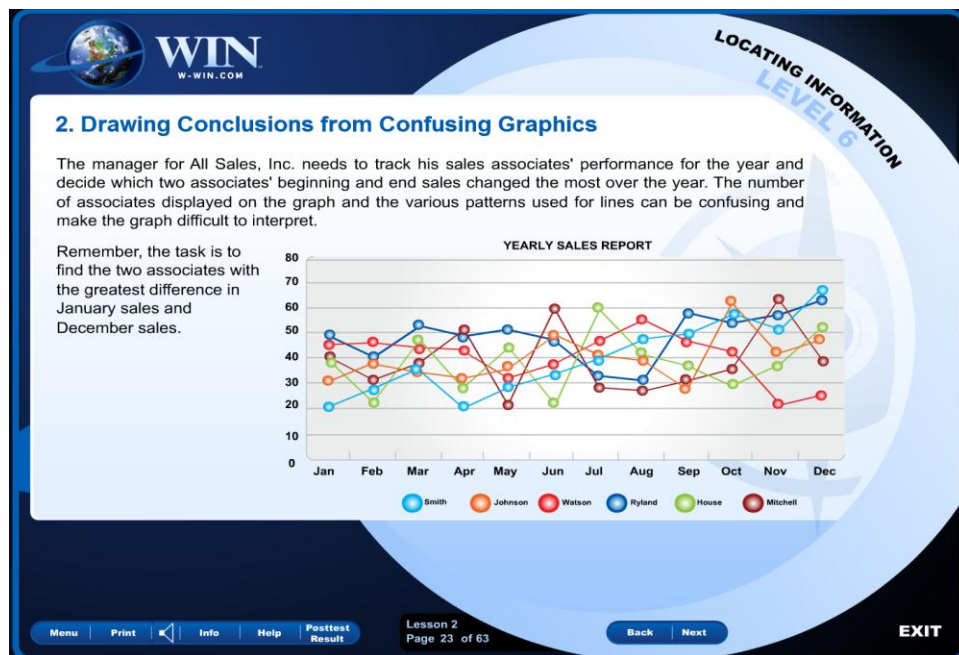
Career Readiness Courseware revolutionizes how we think about Career Driven Education. The Courseware is aligned to state standards and national proficiency tests so that students can effectively prepare for any of these exams, while increasing their foundational skills for careers.

Addressing relevancy in education, the Career Driven Education Model with its Career Readiness Courseware is aligned to skill levels *based on the realities of the current job market*. WIN's Career Readiness Courseware can be accessed at up to seven different skill levels for nine unique topics. The topics include *Reading for Information*, *Applied Mathematics*, *Locating Information*, *Listening*, *Observation*, *Applied Technology*, *Business Writing*, *Writing*, and *Teamwork*.

The Courseware can be self-paced (individualized) online or delivered by an instructor in a group setting. Pretests are designed to be parallel to Courseware posttests to measure learning

gains. The following screen displays illustrate the simplicity and student-friendliness of the instruction.

Career Readiness Courseware Screen Display: LEVEL 6 Locating Information



Career Readiness Courseware Screen Display: LEVEL 7 Reading for Information

2. Review of Level 6 Skills

Since we will be using skills from Level 6 to progress through Level 7, let's review. A good way to begin our review of the Level 6 skills is to use *Your Elderly Patient Needs Special Attention*, the passage from Lesson 1, as the basis for additional exercises.

SKILL 3 - DETERMINING THE LESS COMMON MEANING OF WORDS

Let's define the following terms by making a chart.

Let's review skills 4, 5, and 6 through the following activity.

WORD	GENERAL USE	TECHNICAL USE IN PASSAGE
STORE	retail establishment	supplies
STROKE	striking of one thing against another	paralysis
TRIGGERING	firing a gun	causing
MINUTE	60 seconds	small

Menu Print Info Help Posttest Result Lesson 2 Page 8 of 36 Back Next EXIT

Career Readiness Courseware Screen Display: LEVEL 5 Applied Mathematics - Spanish

WIN
WORLDWIDE INTERACTIVE NETWORK

MATEMÁTICAS APLICADAS
NIVEL 5

3
7

Encuentre el área y perímetro de un triángulo de 4 cm x 3 cm x 5.5 cm (base). La altura es 2.5 cm.

3cm 4cm
5.5cm

ÁREA =
PERÍMETRO =

A área = 13.75 centímetros cuadrados; perímetro = 12.5 cm
B área = 12.5 centímetros cuadrados; perímetro = 6.875 cm
C área = 12.5 centímetros cuadrados; perímetro = 13.75 cm
D área = 6.875 centímetros cuadrados; perímetro = 12.5 cm

English

Menú Imprimir Sonido Información Ayuda Post Examen Leción 3 Pág. 33 de 75 Anterior Siguiente SALIR

EFFECTIVE FOR ALL STUDENTS AND PROGRAMS

Instructors are often overwhelmed by the wide range of students' learning needs and levels of skill and preparedness. WIN's Career Readiness Courseware addresses these challenges by helping teachers to better identify to users' unique skill gaps and capabilities, develop their skills, and maximize their learning potentials across all learning styles and programs. Natural voice audio allows full participation of those with visual impairments or halting reading ability in English. Fully descriptive and energetic screen displays provide additional access for those participants with hearing impairments.

CAREER CREDENTIALS

WIN's Career Readiness Courseware prepares students to sit for any career certification credential such as Measured Progress, which provides immediate scale scores; WorkKeys, with level scores; or other work readiness certificates of employability skills.

WIN is the national leader for preparation of the WorkKeys Career Readiness Certificate as well as more than 26 state and regionally branded credentials also based on WorkKeys. These certificates provide a portable credential that promotes career development and skill attainment for the individual, and confirms to employers that an individual possesses basic workplace skills in reading, math, and locating information – skills that all jobs require.

SPECIAL COURSEWARE FEATURES

WIN Career Readiness Courseware has several exclusive capabilities that distinguish it from other e-learning skills gap training programs:

- Can be accessed as a Web-based program, with 24/7 access to learning, or as a Local Area Network (LAN). With the LAN option, where Internet is not available or limited,
- Can run on its own server (dedicated computers leased from WIN) or can be uploaded to a local server.
- Aligns with McRel for GED, COMPASS, TABE 9 & 10, ASVAB, CASAS, AEFL, McGraw Hill, and WorkKeys assessments, as well as State-specific requirements and Accuplacer.
- Is 100% Flash (v 6.2), eliminating any requirements for a plug-in such as Authorware to launch its courseware.
- Addresses core skills required for entry into all 16 Career Clusters identified by the US Department of Labor. All lessons support the US Department of Labor Workforce Development Performance Measures and the US Department of Education standards.
- Provides a robust suite of pre-formatted reports which can be run at multiple levels, e.g., group, student, and/or classroom or program. The reports show teachers where individual learners are having problems so targeted instruction can be developed and delivered.

WIN Soft Skills Curriculum

WIN's Soft Skills curricular framework includes a wide range of attitudinal, behavioral, and applied competencies –the skills most critical to success in today's schools and workplaces.

In the past five years, researchers have written a great deal about the importance of soft skills. The *Partnership for 21st Century Skills* (including leaders from Cisco, Dell, Time Warner, and Microsoft) has urged high schools to place a greater emphasis on 21st Century skills such as attitude and critical thinking for all students and jobseekers (Harvard, 2011). Other studies express similar concerns about the lack of appropriate behavioral and attitudinal skills for success in college and careers (Wagner, 2008; Nagle, 2010). This past year, the US Department of Labor's Employment and Training Administration developed its own pyramid of skills required for employees to achieve success in the workforce (USDOL, 2011). At its base are soft skills.

Economist and Nobel Laureate James Heckman, a strong advocate for linking education and the economy, expressed concern that schools have glossed over a key skill set—soft skills.

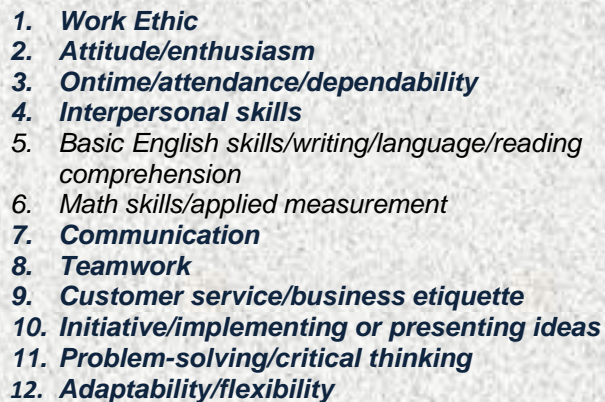
These skills, as much as academic ability, may help achievement gaps within minority populations, particularly if addressed early. He cites an emerging body of evidence which shows character traits—such as motivation, ability to work with others, cooperation, attention, self-regulation, and self-esteem—may be equally or more predictive of schooling, wages, healthy behaviors, and success than cognitive skills (Heckman, 2011).

Soft skills prepare students for success in college and careers. They are what employers want and they cannot be left for learning on the job.

DEVELOPED AS A RESULT OF EMPLOYER STUDIES

Whether for workplace training or for college bound students, WIN's Soft Skills Series is on target to prepare students for a world of working together to meet established goals.

A 2009 statewide study of business leaders in South Carolina found most failures in hiring and retention stemmed from *soft skill deficiencies* and not from any lack of technical capability (Nagle, 2010). When businesses ranked workplace skills critical for success, *ten of the top 12 were soft skills*.

- 
1. **Work Ethic**
 2. **Attitude/enthusiasm**
 3. **Ontime/attendance/dependability**
 4. **Interpersonal skills**
 5. **Basic English skills/writing/language/reading comprehension**
 6. **Math skills/applied measurement**
 7. **Communication**
 8. **Teamwork**
 9. **Customer service/business etiquette**
 10. **Initiative/implementing or presenting ideas**
 11. **Problem-solving/critical thinking**
 12. **Adaptability/flexibility**

SOFT SKILLS CONTENT – RELEVANT FOR COLLEGE AND CAREER READINESS

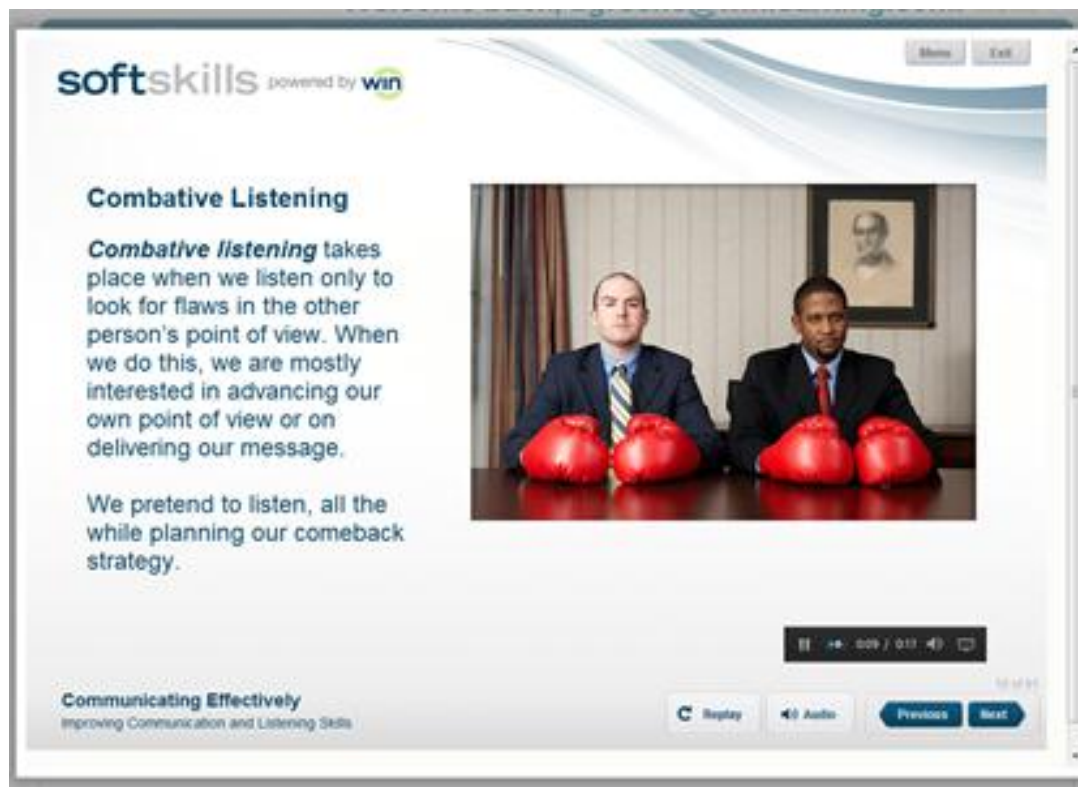
The WIN Soft Skills Series instructionally *models* appropriate skills required for college and the workplace in the context of four modules which reflect the communication and teamwork skills employers and college instructors want. Each module includes pretests, course content, and posttests to measure learning gains.

- **Module 1 - Conveying Professionalism:**
 - Describes components of a strong work ethic, including personal images conveyed to colleagues and customers.
 - Explains benefits of a positive attitude and excellent customer relations.
 - Describes the importance of being on-time and dependable.
 - Discusses how motivation affects performance.
 - Offers strategies to build excellent work habits.
- **Module 2 - Communicating Effectively**
 - Identifies ways to improve communication and listening skills for a productive work environment.
 - Explains the importance of spoken communication to improving understanding.

- Assesses use of communication tools—email etiquette, cell phone use, social networking.
- Describes how to resolve conflict in the workplace.
- **Module 3 - Promoting Teamwork and Collaboration**
 - Explains how treating coworkers as team members benefits an organization.
 - Describes how diversity benefits a workplace.
 - Discusses the importance of sensitivity to individual differences.
 - Describes the benefits and challenges of teamwork and collaboration.
 - Defines leadership and its value in the workplace.
- **Module 4 - Thinking Critically and Solving Problems**
 - Describes the importance of innovation, creativity, and flexibility in the workplace.
 - Defines adversity and describes how it affects the workplace.
 - Evaluates elements of critical thinking—evidence, reasoning, and fallacies.
 - Distinguishes between inductive and deductive reasoning.
 - Applies strategies to help with creative problem-solving in the workplace.

WIN's Soft Skills Series is the only soft skills curriculum on the market today which is driven by employer demand. The topics in the curriculum were the result of extensive research into hiring and retention decisions made by employers for first-time employees. In this way, WIN is uniquely positioned to support an emerging workforce.

WIN's Soft Skills has also seen applications as a team-building tool. In several reported instances, the curriculum has been integrated into teacher professional development programs to demonstrate for teachers and program instructors what students and adult learners need to know to be successful in their careers.



Put Yourself in the Other Person's Shoes

We have to imagine ourselves in another person's exact situation before we do or say anything.

You can apply this principle in your workplace by being sensitive to other people's differences and thinking about how you would feel if you were in their place.



Promoting Teamwork and Collaboration
The Importance of Sensitivity to Differences

42 of 67

C Replay

Audio

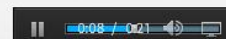
Previous

Next

How Does Innovation Happen?

In order to innovate, we must be **creative**. In other words, we must use our imagination to produce original ideas.

Creativity is one of the most important skills that anyone can have. Without it, we would never be able to move ahead, and we would find ourselves stuck in the same patterns.



Thinking Critically and Solving Problems
Innovation, Creativity and Adaptability in the Workplace

6 of 93

C Replay

Audio

Previous

Next

WIN Strategic Compass

WIN STRATEGIC COMPASS TRANSFORMS EDUCATION

WIN Strategic Compass creates a clear picture of the realities of the workplace. By having this information in hand, educators, counselors, and communities can help direct students and jobseekers to industries where there are jobs. *This link to real opportunity gives students more hope for their future and helps them remain in school.*

By effectively creating a continuum between education and the workplace through real-time labor market information, *WIN Strategic Compass has become one of the most exciting tools available today for educational reform in districts and schools nationwide.*

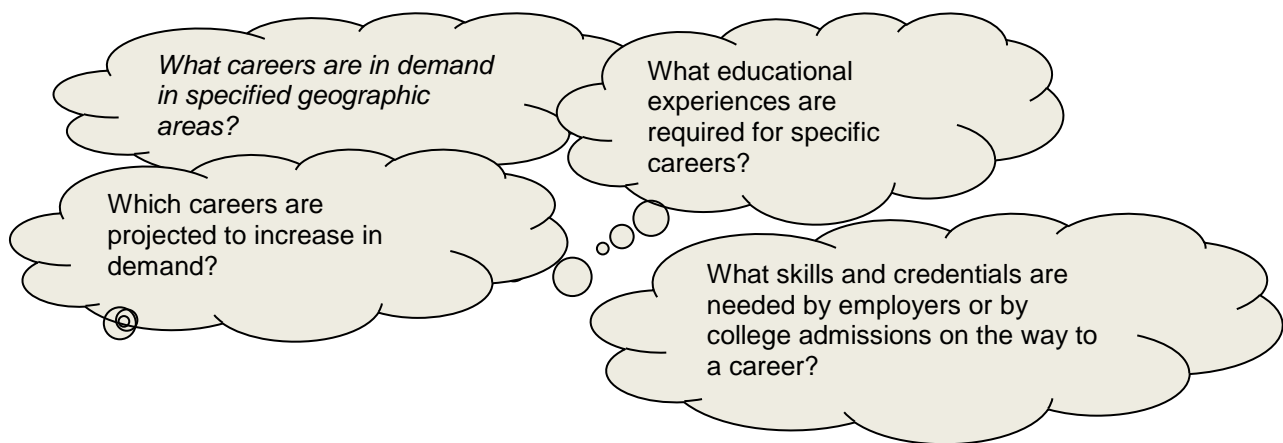
DATA-INFORMED DECISION-MAKING – AN EDUCATIONAL BUILDING BLOCK

WIN's Strategic Compass creates a data-rich framework for planning and actualizing career and college readiness—in the context of educational aspirations, economic realities, and labor-force demands. This educational tool holds value for everyone:

- For educators – Strategic Compass benchmarks required workforce skills by occupation, targets demand occupations, and helps translate career readiness into a basis for student engagement and school reform.
- For counselors – Strategic Compass becomes an important tool for guidance and counseling, providing a relevant labor market analysis with detailed maps of career pathways. Working with students, counselors can help students plan for careers based on students' own choices and realities. Counselors can create Individual Career Readiness Reports which map pathway to a target occupation. Requisite skills, education and experience are identified along with the institutions/programs which can provide them.
- For policymakers and the community – Strategic Compass provides a common language with which education, economic and workforce sectors can communicate on issues related to workforce equilibrium. It also provides a clear and accurate picture of where educational and community resources can be most effective in preparing students for college and careers.

REALISTIC, ATTAINABLE CAREER PATHWAYS

With Strategic Compass, easy-to-use search keys and screen displays answer a range of questions that impact educational pathways.



By forming these questions and providing answers, Strategic Compass tells educators if students are prepared to leave high school with a plan for the future.

Educators often ask, *have we given students the tools to succeed, no matter what career pathway they choose?* With Strategic Compass, the answer is “yes!” Strategic Compass creates an *economic and educational plan that defines a student’s place in a workforce which embraces well-prepared young adults at multiple entry points—after high school, two- or four-year college, training and certification, and apprenticeships.*

STRATEGIC COMPASS: CUSTOMIZATION AND START-UP

WIN customizes Strategic Compass for each implementation to reflect the economic, workforce, and education information of that state and region. Customized information includes: a list of fastest growing industries in that area, in-demand careers, skill and job gaps, education/training programs for high-demand careers, and other information relevant to education and the workplace. Additionally, WIN compiles the customized profiles into a *Career Guidance Report*, which enables counselors to further inform their career guidance strategies for individual students, including those at risk of drop-out.

STRATEGIC COMPASS: ADMINISTRATIVE PLANNING

Strategic Compass includes three types of analytics—economic, workforce, and education which can be accessed by any user on the system. These are shown following:

EDUCATION MODULE	
Standard Analytics	Description
Educational Gaps	Calculates supply/demand for specific courses and training by career cluster, occupational group, and green clusters
Skill Gaps	Calculates the skills, knowledge, interests, attributes, work value, work style, and work activity gaps between occupations
Career Pathways	Maps career requirements by career cluster, occupation, instructional program, and experience.

Career Ready	Calculates the fastest growing occupations by Work Keys Career Readiness Certificate level
Programs	shows career pathways for specific occupations; provides lists of two- and four-year institutions and training programs offering coursework and degrees to support specific careers

ECONOMIC MODULE	
STANDARD ANALYTICS	DESCRIPTION
Top Ten	Calculates the top industries and related occupations in growth and decline
Employment	Displays percentage changes in employment over time and across multiple regions
Unemployment	Displays unemployment rates in designated counties, customized regions, states, or for the entire nation. .
Wages	Displays average wages for a specific industry or all industries across multiple regions.
Labor Inventory	Identifies the occupations employed by any given industry, along with the proportion of that industry's labor inventory which makes up the selected occupation.
Occupation Gaps	Calculates occupational supply and demand gaps by career cluster, occupational group, education program, industry, STEM occupations, GREEN occupations, or custom occupation groupings; calculates current and projected total employment versus supply.
Maps	Provides a visual representation of commuting patterns, unemployment rates, and other economic data as requested

WORKFORCE MODULE	
Standard Analytics	Description
Demographic	Gathers data on first-time workers by ethnicity, gender, and educational attainment
Skill Gap	Compares a selected occupation with others in terms of Career Readiness Certificate levels, skills, knowledge, abilities, interests, work values and work activities
Occupation Profiles	Contains a detailed description of any O*NET occupation, including career cluster, career pathway, education/experience requirements, skill requirements, average wages, Career Readiness Certificate level, and required instructional programs
Clusters	Identifies emerging, declining, and mature industry and occupation clusters including the identification of clusters with a competitive advantage
Supply and Demand	Calculates the impact of the addition or subtraction of a firm on regional workforce equilibrium.

From the information accessible through Strategic Compass, administrators, educators, and students will be able to see just what industries have the highest demand—i.e., where the jobs are now and in the future. These industries can be developed by Strategic Compass as **Career Exploration Sites**.

Each site will feature target occupations, providing occupational profiles that include the WIN Core Employability Skills requirements for each. The profiles will also link to the educational and training programs that map to the occupations, as well as local institutions that offer them. Students and jobseekers will be able to create and store resumes and cover letters, explore current job openings, and build individual career plans. An example of this type of site could be best demonstrated at <http://westvirginia.strategiccompass.com>.

STRATEGIC COMPASS – STUDENT-DIRECTED

Strategic Compass includes a *personalized electronic counseling* tool which provides students with hands-on opportunities for in-depth career exploration. Career interest profilers electronically examine what is important to a student in a job, and compare the student's own values against various occupations to create a list of jobs reflecting these personal values. This process gives students three important pieces of information essential to career choices—*what students like to do, what is important to them, and what they do well*.

As students identify their career interests and begin to understand how they need to prepare for their chosen careers, they build, layer upon layer, their plans for going from high school to two- or four-year colleges, training programs, or directly to work.



Explore Job Families

As they further investigate different job families, they explore in greater depth career areas that may be of interest.

Accountants

Your Rating
★★★★★

Compatibility
not enough data *why?*

Create a Budget

☒ **Create a Plan**

Locator Report

Transition Report

Find Job Openings

About the Job

Analyze financial information and prepare financial reports to determine or maintain record of assets, liabilities, profit and loss, tax liability, or other financial activities within an organization.

It is also Called

Accountant	Accounting Methods Analyst
Accountant Manager	Accounting Officer
Accounting Bookkeeper	Accounting Supervisor
Accounting Consultant	Accounting Systems Analyst
Accounting Manager	Accounting Technician

What They Do

Prepare, examine, or analyze a accounting records, financial statements, or other financial reports to assess accuracy, completeness, and conformance to reporting and procedural standards.

Report to management regarding the finances of establishment.

Establish tables of accounts and assign entries to proper accounts.

Develop, implement, modify, and document recordkeeping and a accounting systems, making use of current computer technology.

Compute taxes owed and prepare tax returns, ensuring compliance with payment, reporting or other tax requirements.

Maintain or examine the records of government agencies.

Advise clients in areas such as compensation, employee health care benefits, the design of a accounting or data processing systems, or long-range tax or estate plans.

Develop, maintain, and analyze budgets, preparing periodic reports that compare budgeted costs to actual costs.

Provide internal and external auditing services for businesses or individuals.

Education Required

Most of these occupations require a four-year bachelor's degree, but some do not.

Wages

In 2011, the average annual wage in Kentucky was **\$57,130.00** with most people making between **\$33,640.00** and **\$87,160.00**

Outlook

During 2008, this occupation employed approximately **10,940** people in Kentucky. It is projected that there will be **12,670** employed in 2018.

This occupation will have about **173** openings due to growth and about **187** replacement openings for approximately **360** total annual openings.

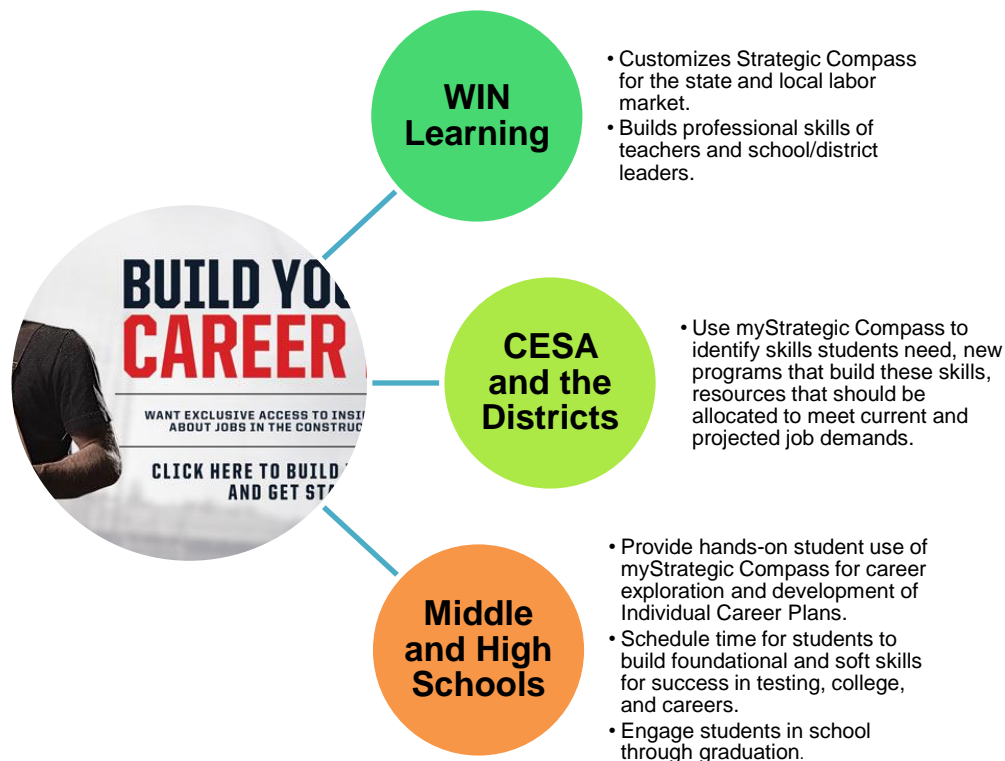
Common College Majors

01:30

It is here in Strategic Compass that the intersection between personalized learning and career and college readiness manifests—in the creation of Individual Career Plans based on each student's embedded career exploration activities. These Plans define a student's place in a workforce at a series of potential entry points—after high school, two- or four-year colleges, apprenticeships or other training and certification. When students have an Individual Career Plan based on their own expressed goals, they are more engaged in school and more clearly see the relevance of their education.

By effectively creating a continuum between education and the workplace through real-time labor market information, *WIN Strategic Compass has become one of the most exciting tools available today for educational improvement nationwide.*

The placement of WIN myStrategic Compass in the schools is a partnership—with WIN, the district, and its middle and high schools.



With Strategic Compass, students have *options* and can follow their own individual career pathways in life. When students graduate from high school career and college ready, they make their mark on the road to success.

WIN Ma+H

From WIN's commitment to improving student achievement and teacher effectiveness has come one of the boldest instructional models to be introduced in education today—Personalized Career Readiness. With the WIN model, students explore careers, envision their future and link it to their development of skills across the curriculum, but centered on math and literacy. With this new set of courseware, WIN can help your district move from a one-size-fits-all educational approach that benefits only some students to personalized student-focused assessment and instruction that helps all students learn and become college and career ready upon graduation. WIN Ma+h and WIN Literacy form the instructional center to the model and assure students' success throughout their core curricula.

WIN Ma+h lessons are centered the Common Core State Standards in Mathematics (CCSSM) for Grades 5 through 8. These include all of the basic skills students must have to build on sequential math and be successful in high-school math and science. Implementation can take many forms. For example, in 5th through 8th grades, WIN Ma+h can easily supplement any

established curriculum to add project-based career and math learning. WIN Ma+h can also serve as a set of core lesson plans. In 9th and 10th grade, the curriculum can be an intervention program to improve math achievement for those students who are one to three years below grade level and need math taught in a new way so they too can master the skills required to move beyond Algebra Readiness.

TEACHING MATHEMATICS SO STUDENTS WANT TO LEARN!

WIN Ma+h is *cloud-based, modular, and career-focused, emphasizing math, reading, and workplace skills*. Each module is built around a **project** scenario tied to a career, and involves producing products similar to those required in a workplace setting (e.g., power points, verbal presentations, performance charts).

Forming the curriculum around workplace skills and recognized career clusters makes math fun and motivating, thereby increasing the learning curve for each student. To build soft-skills, including problem solving, teamwork, and communication, the curriculum enables students to work individually or collaboratively on real world projects. By anchoring math learning in real-life activities to which students can relate, learning becomes fun, students gain a passion for their work, and, as a result, student achievement is enhanced.

With WIN Ma+h, the project-based learning modules are designed to let students enter a lesson at differentiated instructional levels—reflecting their differential mastery of prior skills. Then, even when they are working in a group, students move independently, doing the tasks they can accomplish successfully and thereby, no matter their individual skill level, contributing to the greater group project. Real learning in mathematics *for all students* is promoted in three ways:

- **Experientially:** Learning connects to the students' world—the real world in and out of school, the world of the individual student's own ideas, and the collective world of each other's ideas.
- **With Authenticity:** Students are at the generative center of the classroom. Students' projects are created around authentic problems found in the workplace, and demonstrate teamwork to solve these problems.
- **With Learning Trajectories:** Understanding the differences in skill levels and varying progression rates for students, WIN has broken larger topics into smaller, task-based units. This format allows teachers to introduce topics linearly or mapped to the spiral year path in the Standards to emphasize learning which requires more work. Using learning trajectories, such as visually represented below, provides WIN Ma+h with a way to both connect to the Standards in a useful way and differentiate learning according to student need. Competency-based learning in the classroom remains front and center without being overly disruptive of teachers' instructional goals or students' team efforts.

NG: Tools and Topics

- 1. Number and Operations**
 - Calculators
 - Number Grid
 - Number Line
- 2. Data Analysis & Statistics and Probability**
 - Tables
 - Data Graphs
 - Spreadsheet
 - Probability lab
- 3. Fractions, Decimals, Percents**
 - Decimal Array Blocks
 - Fraction Bars
- 4. Ratio and Proportion**
 - Sets of Objects Tool
 - Scaling Lab
- 5. Geometry and Measurement**
 - Shape Construction Tool (With Protractor)
 - Geoboard
 - Coordinate Grid Graph
- 6. Algebra**
 - Equation Builder/Checker
 - Algebra Workbench (Equation Solver)
 - Marble Bags (Graphic Equations)

General Tools

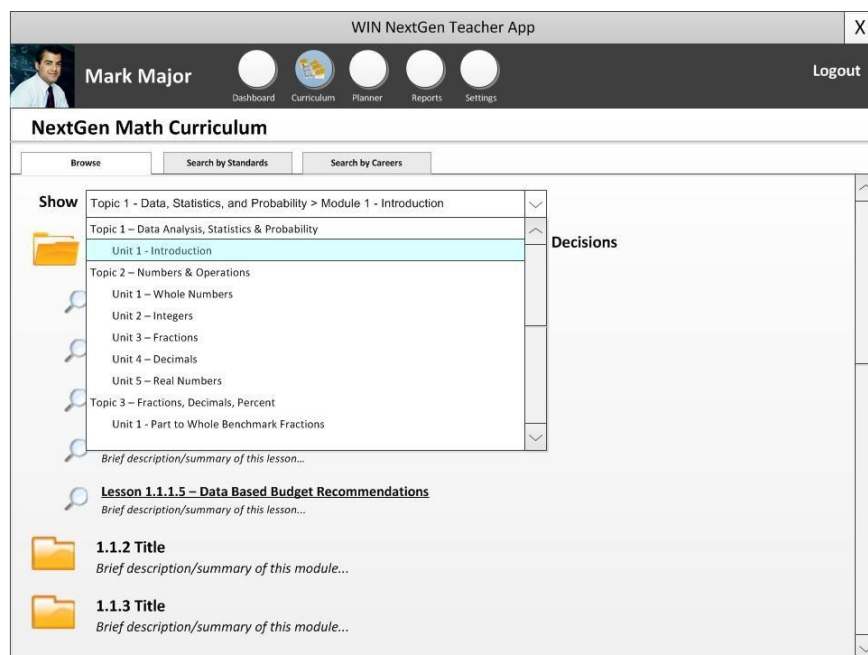
- Concept Map/Flow Chart
- Simulation Engine
- GIS Data Tool

	Number & Operations	Data Analysis & Stat	Fractions, Decimals, %	Ratio & Proportion	Geometry & Measurement	Algebra
Calculator	XX	X	X	X	X	
Number Grid	XX		X			X
Number Line	XX					X
Tables	X	XX		X	X	X
Data Graphs	X	XX				
Spreadsheet		XX		X		X
Probability Lab		XX	X	X		
Decimal Array Blocks	X		XX			
Fraction Bars			XX	X		X
Sets Tool		X	XX	X		X
Scaling Lab				XX		
Shape Construction			X	X	XX	
Geoboard	X		X	X	XX	
Coordinate Grid Graphs (X/Y)		X			XX	X
Equation Builder				X	X	XX
Equation Solver				X		XX
Graphic Equations					X	XX
Concept Map/Flow	X	X	X	X	X	X
Simulation Engine	X	X	X	X	X	X
GIS Data Tool		X	X	X	X	X

BROWSING THE CURRICULUM TO PERSONALIZE LEARNING

The WIN Ma+h *Curriculum Browser* gives teachers an effective way to access and search through the digital curriculum. With the *Browser*, teachers can review topics covered by the content, look at the design and nature of the content, explore effective ways to use content to personalize learning, build awareness of CCSS alignments, and learn how the curriculum relates to careers. The Curriculum Browser also makes it easier for teachers to choose which parts of a lesson to use with students, to further differentiate learning.

The Curriculum Browser is broken down into a few distinct screens, each of which serves a purpose related to the larger goals for learning about and working with WIN Ma+h, as the following sample screen shows.



Major screens in the Curriculum Browser include:

- **Curriculum Outline** – Providing a birds-eye view of the curriculum structure. The available content is enumerated and briefly described.
- **Lesson Overview** – Providing an introduction to the lesson that quickly orients teachers to the purpose and potential uses of the lesson.
- **Lesson Teacher Prep** – Providing content that helps teachers feel comfortable working with the entire lesson and differentiating the learning for all students.
- **Lesson Content** – Depicting the outline and content of the lesson in the form that will be seen “in class,” when students are presented with lesson.

INTRODUCING REAL WORLD MATH IN TODAY’S CLASSROOM

At the beginning of each lesson, WIN lists **Teacher Notes**, which include the lesson’s background, possible areas of difficulty (bumps in the learning path), workforce context, and classroom vignettes. Next, five-minute warm-up activities (such as games, puzzles) bring everyone in the class together and focused. Then, the lesson continues with the “**Hook**,” which gets students interested in what is being taught by giving them a project structure focused on real-life authenticity.

WIN NextGen Teacher App

Mark Major

Logout

Dashboard Curriculum Planner Reports Settings

Back to Browser Lesson 1.1.1.1 - How best to attract new customers to the restaurant? And other data based questions. << Back 1 / 5 Next >>

Overview Lesson Content Resources Lesson Tools

Lesson Pages << Back Next >> Teacher Tips

Teacher Guide

- Objectives
- Objectives - For Students
- Skills Fluency Activity
- Let's Meet Sylvia!
- Intro - Restaurant Video with Prompt
- Example Dot Plot
- Example - Dot Plot2
- Engagement Activity 2 - Preparing to Introduce the Frequency Graph Tool
- Engagement Activity 2 - Memo from Sylvia
- Engagement Activity 2 - Introducing the Frequency Graph Tool
- Student Activity1 - Making a Frequency Graph with

Lesson 1 - How Best to Attract New Customers to the Restaurant?

Meet Sylvia!

Sylvia is a restaurant owner. She is trying to grow her business and want to make choices that increase the number of her customers and that make her more money.

We're going to help Sylvia grow her business!



Teach Lesson Now

Add Lesson to Lesson Plan

The heart of the WIN Math classroom is the set of *activities* designed to enrich and stretch students' understandings of the lessons. Because students can work individually or in small groups on each lesson's projects, teachers have the flexibility to give those students who need it, the extra time to master the math concepts in a particular unit.

0:00:45 (h:mm:ss)

<< Back Next >> Close Assign to Class First Class

Let's Meet Sylvia! (TS)

Objectives - For Students (TS)

Objectives (TS)

Intro - Restaurant Video (TS)

Intro - Restaurant Video with Prompt (TS)

Example Dot Plot (TS)

Engagement Activity 2 - Introducing the Frequency Graph Tool (TS)

Student Activity1 - Making a Frequency Graph with the Graph Tool (SS)


Practice Activity 1 - Create a Graph: The Breakfast Menu (SSp)

Practice Activity 2 - Test: Interpreting frequency graphs level 1 (SSp)

Journal Work - Applying Frequency Graph Results (SSj)

Homework 1

Lesson 1 - How Best to Attract New Customers to the Restaurant?



Teachers learn to use activities as building blocks, with each activity continually deepening the ideas introduced in the Opening Hook. Teachers can see motivation building

across the different activities, and can easily harness this enthusiasm toward learning and mastering new math concepts.

0:00:19 (h:mm:ss)
<< Back
Next >>
Close
Assign to Class
First Class

Let's Meet Sylvia! (TS)
Objectives - For Students (TS)
Objectives (TS)
Intro - Restaurant Video (TS)
Intro - Restaurant Video with Prompt (TS)
Example Dot Plot (TS)
Engagement Activity 2 - Introducing the Frequency Graph Tool (TS)
Student Activity 1 - Making a Frequency Graph with the Graph Tool (SS)
Practice Activity 1 - Create a Graph: The Breakfast Menu (SSp)
Practice Activity 2 - Test: Interpreting frequency graphs level 1 (SSp)
Journal Work - Applying Frequency Graph Results (SSj)
Homework 1

Lesson 1 - How Best to Attract New Customers to the Restaurant?

Introducing the Frequency Graph Tool

We can use frequency graphs to analyze and compare the survey results. Make a graph that shows the data in the table.

Name	Value
Newspapers	8
Magazines	1
Radio	2
TV	11
Friends	6
Facebook	2

What story does the data tell?

How Do People Hear about Restaurants

Link to Data Table | Survey Results

Two additional examples , shown below, emphasize how WIN Ma+h intertwines math learning with careers— and brings relevance to the curriculum while building interest among all students. In project-based screen displays, similar to Sylvia’s restaurant, the first example introduces careers working with animals; the second captures the relationship and use of math in construction.

WIN NextGen Teacher App
Mark Major
Dashboard
Curriculum
Planner
Reports
Settings
Logout

LESSON: M1.1.1 > L1 - How best to attract new customers to the restaurant? And other data based questions.
<< Back
1 / 5
Next >>

Overview
Lesson Content
Resources

Warm Up
Career Context
Engagement
Applying Math
Activity
Wrap Up
Lesson Tools
Teacher Tips

Career Context & Driving Questions for Unit

The Career Story - Working with Animals

Do you love animals? There are many careers where dedication to animal welfare can be turned into a successful and satisfying career. One of the easiest to come up with is to be a veterinarian.

Veterinarians learn many of the same things that doctors do, but they apply it to animals. There are general veterinarians who treat many different types of animals – primarily pets. And there are specialists who may work on only horses, or birds, or sea life.

Veterinarians and veterinary technicians in private practice have to be good at the medical side of working with animals, but they also have to understand the human-animal bond. They do much more than just help sick animals; they help these animals be loved. The reward of seeing a pet recover and be returned to its family is very satisfying.

Veterinarians and veterinary technicians who specialize in certain types of animals may find themselves in very unique positions. If you specialize in sea life, you may even become a

Veterinary Science Industry

- Agriculture, Food & Natural Resources Career Cluster (AG)
- Animal Systems Career Pathway (AG-ANI)
- Marketing Career Cluster (MK)
- Business Management & Administration Career Cluster (BM)

The Driving Questions: Project Based Learning

- Dosge

Mark Major

Dashboard

Curriculum

Planner

Reports

Settings

Logout

LESSON: M1.1.1 > L1 - How best to attract new customers to the restaurant? And other data based questions.

<< Back

1 / 5

Next >>

Overview

Lesson Content

Resources

Warm Up

3 × 2 =

Career Context

Engagement

Applying Math

Activity

Wrap Up

Lesson Tools

Teacher Tips

Using the Number Line to Multiply

In his job at the construction company, Darrell has to attach five 1/4" thick boards to create a thicker board. He needs to calculate the product of 5 and 1/4. Darrell decides to model the problem using arrows along the number line. The whole number 5 is a **scalar**, the factor used to multiply a number. And the unit fraction is the length of the board to be scaled.

Follow the steps below to see how Darrell models this multiplication.

- Set the range from 0 to 2 and the scale in fourths.
- Draw an arrow to represent 1/4. Then choose **x** in the operations menu.
- Choose or enter the scalar 5 and click Show.
- The product is the length of the red vector above the number line.
- (This is a mock-up of the final display that will show the product as 5/4.

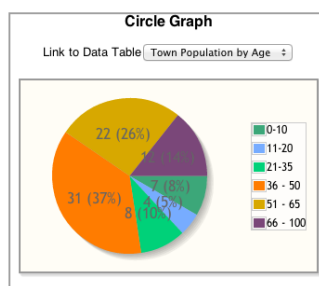
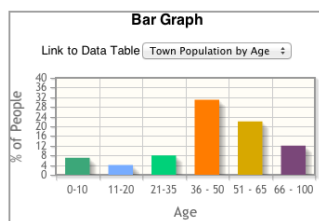
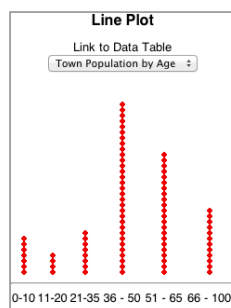
Number Line - Whole Numbers

LEAVING NO ONE OUT WITH WIN MA+H AND LITERACY

Same Data, Different Views

You can show data in different ways. In this example, the table data is shown in different types of graphs.

Town Population by Age	
Age	% of People
0-10	7
11-20	4
21-35	8
36 - 50	31
51 - 65	22
66 - 100	12



WIN has created a math program in which learning is delivered through *project modules*. Students can enter the modules at different levels of mathematical sophistication according to their ability, and can participate in a single lesson in different ways within the same module. What does this mean? Teachers can create a single project-based, collaborative classroom that includes everyone in the class, no matter their math proficiency.

Thus, a class can be working on the same **project** scenario, but solving different problems about that scenario, all of which address the same general math content. For example, the project may focus on planning a cross-country

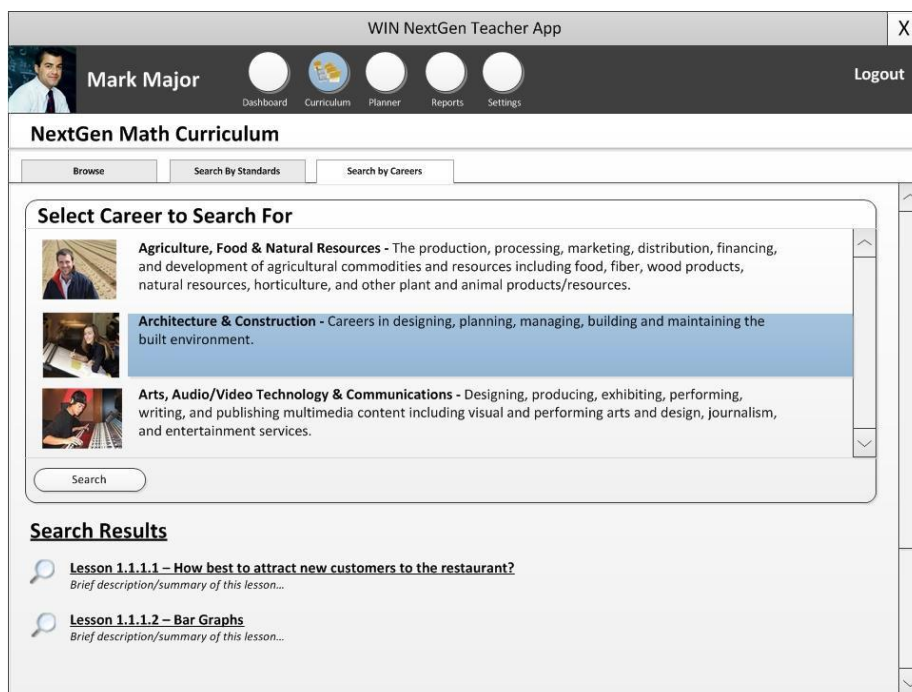
car trip and solving relevant problems for the trip: How much time is needed to travel between two cities (average speed limit 55 mph)? How much gas will the car take? What will it cost? What additional expenses might we have, and what else do we need for a successful trip? The

problems could be solved both arithmetically and algebraically with data presented in different views, and the scenario could be accessed by different students according to their current abilities.

MAKING MATHEMATICS RELEVANT: INCREASING CAREER AND TEST READINESS IN A MATH CLASSROOM

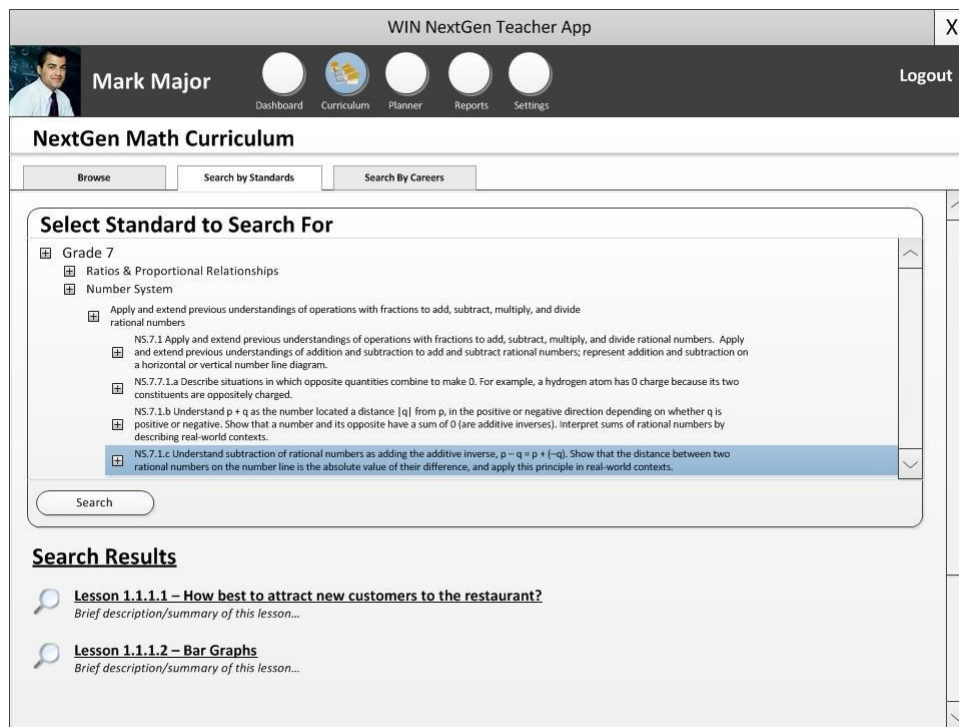
In 1997, the Departments of Labor and Education together created a workforce scan with 16 nationally recognized career clusters to crosswalk educational, occupational, and labor market information under similar rubrics.

Agriculture & Natural Resources. Architecture & Construction. Arts, Audio/Video Technology, & Communications. Business & Administration. Education & Training. Finance. Government & Public Administration. Health Sciences. Hospitality & Tourism. Human Services. Information Technology. Law & Public Safety. Manufacturing. Retail/Wholesale Sales & Service. Scientific Research & Engineering. Transportation, Distribution & Logistics



These resulting career clusters are fundamental to the WIN Ma+h platform for teaching and learning, and form the context for all math projects. Teachers can use the Curriculum Browser to search for careers, as the screen to the left shows. These activities link the real-world project-based math learning with career exploration and development of Individual Career Plans, through myStrategic Compass.

Each skill reinforced in WIN Ma+h connects curriculum with one of the career clusters *and* with the Common Core State Standards. This alignment, available through the Curriculum Browser for teachers, helps to assure students can prepare for state tests and increase their scores while, at the same time, increase their foundational skills for careers. For those states that have not adopted Common Core State Standards, WIN will work to assure alignment with their own state's standards across the curriculum.



This bridge between standards, real-world skills, and math learning in the classroom makes learning math concepts relevant to each student's life. And, relevance often marks success in math achievement. With the presentation of math across the career clusters, students easily recognize that math is a skill essential to success in both college and careers.

WIN LITERACY: LEARNING TO READ, WRITE, AND COMPREHEND IN A NEW WAY

WIN Literacy, scheduled for release in 2014, is similar in its design to WIN Ma+h in its implementation options—core or supplemental for middle school, and an intervention for struggling students in high school. The curriculum is contextual to careers, project-based, and aligned with the Common Core State Standards (in this case in Reading, Grades 5 through 8).

The WIN projects use many types of contexts to engage students—a mystery, an adventure, a discovery, a hunt, or other engaging projects. The thread that runs through all of the WIN literacy presentations is that *project activities must provide a purpose for students to work hard to get meaning from text*. WIN Literacy also engages students through the Web, which is motivating, comfortable, and relevant to this generation. The Internet is the primary source of reading materials for students, and one that WIN has harnessed for WIN Literacy.

Exceptional Examples of Success

Strategic Compass

- ✓ In 2010, WIN began working with the Rural Workforce Network Consortium, a partnership of five Workforce Investment Boards in Texas (representing 75 counties and a combined population of two million), which together targeted the Biotechnology/Life Sciences-Medical industry cluster as a regional competitive advantage. Building analytics through Strategic Compass, WIN conducted an Employer Survey to determine hiring plans and skill requirements; a Career Pathways Analysis to profile target occupations and identify education requirements and K-12 programs of study; and an Economic Study to profile regional economic realities such as labor inventories. Findings were compiled into a *Curricula Assessment Report* with clear recommendations for better aligning secondary and post-secondary education with the projected job demand in the targeted industries. These recommendations were subsequently exported to a major regional report that recommended workforce development, economic recruitment efforts, educational initiatives and alignment, and funding streams. The generation of this report, which originally required more than 60 person-days to complete, was then automated within Strategic Compass so it could be replicated by project administrators at any time with different time parameters or for different industries in a matter of seconds.

myStrategic Compass

- ✓ *Go Build Alabama* (www.gobuildalabama.com) was developed by WIN for the State of Alabama and its construction sector to support job growth across the state. At *Go Build Alabama*, students and other jobseekers can log on and register for employment, review a list of available jobs, explore occupations in which they have an interest, and calculate their own job skills/career readiness for employment. *Employers, colleges, and training programs* can log on, and review the list of individuals interested in college or jobs.

Career Readiness Courseware

- ✓ The statewide Florida Ready to Work program, operational since 2007, is built around WIN Career Readiness Courseware and Career Readiness Certificates. Following instruction on the Courseware, passing scores on proctored assessments earn students a Florida Ready to Work Credential (a WIN-customized State certificate). Florida Ready to Work has more than 350 implementation partners (schools and job centers) and 650 employer partners representing 300,000 employees. Since the program began, Florida Ready to Work participants have registered more than 479,000 courseware hours, with the lowest skilled making the most significant gains. More than 67,000 Credentials were awarded to high-school students, and more than 110,000 for all groups. A Florida state-level evaluation of the program showed credential holders had a significant advantage in gaining employment over other active jobseekers with no credential and earned higher salaries in the workplace.
- ✓ After only one semester using the WIN Career Readiness Courseware, the Fayette Institute of Technology (FIT) had *100% of its 2010 graduating class employed or accepted into a post-secondary program*. The FIT principal noted a remarkable increase

in West Virginia Career Readiness Certificate test scores, which make students highly sought after by employers and college counselors in a highly competitive market.

- ✓ The GED Options Program—an alternative credit recovery program encouraging students in South Carolina to earn their GED—utilizes WIN Career Readiness Courseware to build students' foundational skills. A state study of the program found students who succeeded with WIN showed far greater success in passing the GED.
- ✓ In Flint's (MI) Jobs Corps group, students using WIN Career Readiness Courseware, and using it regularly, succeeded in passing the Test of Basic Education (TABE) more than those students who did not master the Courseware and were infrequent users. Evaluators noted the WIN users achieved higher academic gains overall.

Appendix 2. References

Alliance for Excellent Education. (May 2011). Saving now and saving later: How high school reform can reduce the nation's wasted remediation dollars. Issue Brief. Washington, D.C.

Bridgeland, J.; Dilulio, J; and Morison, K. (2006 March). The silent epidemic: Perspectives of high school dropouts. Washington, D.C.: Civic Enterprises, for the Bill & Melinda Gates Foundation.

Carnevale, A.; Smith, N.; and Strohl, J. (2010). *Help Wanted: Projections of Jobs and Education Requirements Through 2018*. Washington, D.C.: Centre on Education and the Workforce, Georgetown University.

CBS Evening News Report. (2011 October 26). Interview with Scott Pelley.

CNBC. (2011). Need Work? US Has 3.2 Million Unfilled Job Openings. Retrieved from: http://www.cnbc.com/id/44838614/Need_Work_US_Has_3_2_Million_Unfilled_Job_Openings

Harvard Pathways Project. (2011). Pathways to Prosperity: Meeting The Challenge Of Preparing Young Americans for the 21st Century: Boston, MA: Harvard University College of Education.

Heckman, James. (2011 March). The American family in black and white: A post-racial strategy for improving skills to promote equality. NBER Working Paper Series, Working paper 16841. Cambridge, MA: National Bureau of Economic Research.

Higher education and wages. Plenty of university graduates are working in low-skilled jobs. (2010 September 8). *The Economist*. Retrieved at <http://www.economist.com/node/16984636>.

Memcott, Matt. (2011 June 15). 2 million 'open jobs'? Yes, but U.S. has a skills mismatch. NPR News Blog. <http://www.npr.org/blogs/thetwo-way/2011/06/15/137203549/two-million-open-jobs-yes-but-u-s-has-a-skills-mismatch>.

Nagle, Richard. (2010 January). Hiring, retention and training: Employers' perspectives on trade and soft skills in South Carolina. University of South Carolina, South Carolina Workforce Investment Board.

Skill Pages Youth Employment Blog. (2011 December 7). Exploring college and career readiness. <http://skillspages.com/blog/?p=476>.

Society for Human Resource Management. (2008). Workforce readiness and the new essential skills. Alexandria, VA.

United States Department of Labor (2011). Employment and Training Administration Competency Model. Retrieved from www.careeronestop.org/competencymodel/pyramid.aspx

Appendix 3.

New Manufacturing Alliance



NEW
Manufacturing

Alliance

Make it in NorthEast Wisconsin



NEW Advanced Manufacturing Work- Based Academy



- Employees and employers partner to meet the evolving needs of labor markets.
- Our education system is innovative and offers lifelong learning beginning at birth, including:
 - Cooperation between schools and businesses to provide meaningful exposure and training in the workplace for secondary and post secondary students. Apprenticeships and internship opportunities for secondary school and post secondary students in the workplace.
 - Interpersonal relationship education.
 - Harnessing of technology for industry and individual advancement.
- Our education and training system:
 - Develops a more highly skilled workforce to supply new businesses. Sees each student graduating from high school with a job skill.
 - Makes sure that all students earn credentials beyond the high school diploma.
- The education system is flexible in its ability to change as conditions and needs change and opportunities for improvement present themselves.



The Road Ahead: Restoring Wisconsin's Workforce Development

Tim Sullivan

On Education, Mr. Sullivan states,

"The U.S. skills gap widened due in part to government intervention in the 1980's. The country, fearing international competition, began to focus students on a four-year college preparatory curriculum. Alternative forms of education, like shop class or apprenticeships, were deemphasized and defunded.

Despite this philosophical shift in education, the job market continues to need middle and low-skilled workers. A recent Georgetown University study determined that between 2008-2018, Wisconsin will have 925,000 job positions available due to retirements and/or growth. Roughly 70% of those jobs will require less education than a four-year degree.... **People need to adapt more to the needs of the employer."**

"A student that completes a high school degree but is neither prepared for work nor continuing education should not be considered a success, no matter how many good grades that student accumulates."

Tim Sullivan

On Academic and Career Plans, Mr. Sullivan states,

"We know Wisconsin is facing a skills gap and this gap is projected to increase in size. **Many of the next decade's jobs will be in middle skill jobs, like subsets of manufacturing** and health care. Nevertheless, we hear from K-12 educators that parents, students, or both are not interested in these careers. We believe this lack of interest may be from not exposing students to what these careers are like and the opportunities they present."



WORKFORCE WATCH

Wisconsin - the Workforce of Choice

WISCONSIN

"W" logo

DWD logo



WISCONSIN DEPARTMENT OF

PUBLIC INSTRUCTION



Reggie Newson
DWD Secretary

Departments of Workforce Development, Public Instruction Offer Parents, Employers, School Officials New Guide to Wisconsin's Child Labor Laws



Tony Evers, PhD
State Superintendent

"Working just a few hours a week offers students many valuable lessons that complement what they learn in school," Secretary Newson said. "It helps them develop basic soft skills critical to success in the world of work, such as being punctual, dressing appropriately, communicating and working well with others. Plus, they get a paycheck and learn to manage money. When it's done right, an after-school job for students can be a great learning experience. That's why this new guide is so important for parents, employers and school officials."

"Work-based learning in Wisconsin is an important component to every child graduating from high school ready for college and career," State Superintendent Evers said. "Students should have quality opportunities to experience possible careers first-hand. Children's safety must also be a top priority on the job, and this guide provides information that will ensure that all student-minors who work while in high school have the best and safest experience possible."

Career outlooks are sunny for those with skills in nursing or metalworking and fabrication.

Author: Terry Licht Date: Jun 24, 2012

Unlike other industries still recuperating from the Great Recession, there remains a high demand for the skilled professions in Northeastern Wisconsin.Northeastern Wisconsin are projected to need to fill 10,000 production and manufacturing jobs by 2016, according to a 2010 survey of the region.

Even in a time of relatively high unemployment, manufacturing companies struggle to find enough skilled metal workers. And the need for welders is expected to increase 26 percent by 2015, according to the New North survey.

For instance, Muza Metal Products in Oshkosh, which last month completed a 47,000-square-foot plant addition, continues its growth in the metals manufacturing industry that leans heavily on Oshkosh Corp. Muza employs 260 workers over four shifts, but are still short workers.

"Skilled labor for fabrication is in high demand, especially in this area," Muza Metal Products President Dan Hietpas said. "It's a very competitive area, and we are still looking for 10 to 15 workers."

Career outlooks are sunny for those with skills in nursing or metalworking and fabrication.

Author: Terry Licht Date: Jun 24, 2012

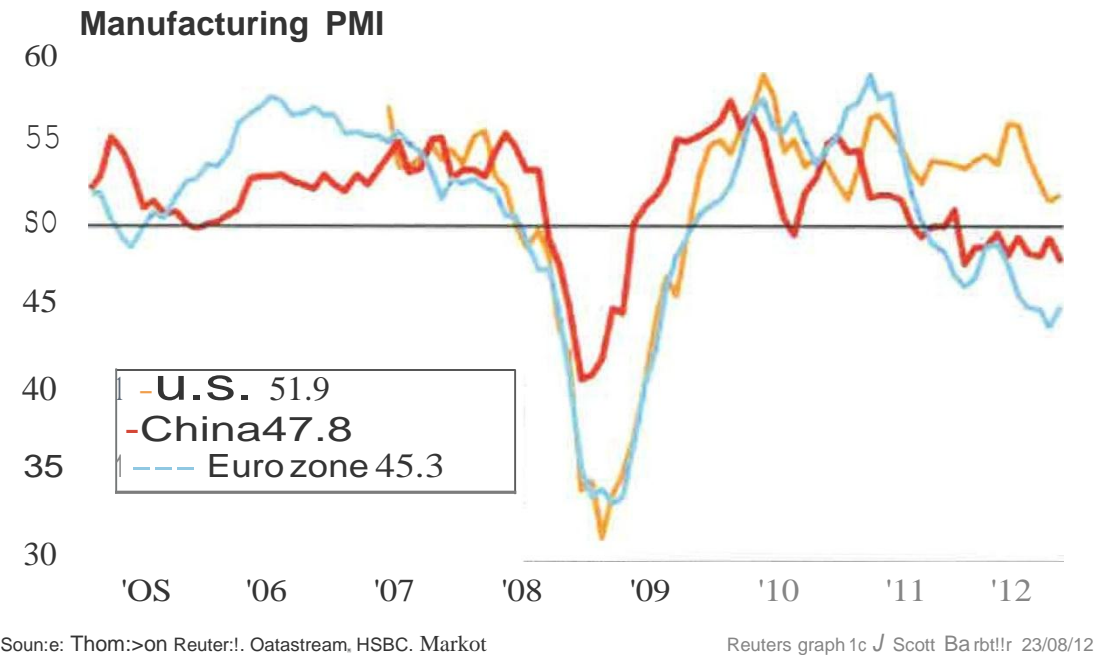
In Marinette, the shipbuilding company Marinette Marine is equally hard up for skilled welders, pipefitters and electricians.

The company has added 600 jobs in the past 12 months, and now has 1,400 employees, but is struggling to fill vacancies for skilled trades jobs. It's even having a hard time recruiting people to sign on to train and work for them. The company held open 40 spots for entry-level workers, reaching out to nine schools in the process; it landed seven graduates.

A typical employee at the shipyard can earn \$30,000 to \$40,000 a year. Right now, the future looks "pretty rosy for us," Marinette Marine President and CEO Charles Goddard said. "We can easily handle 100 or more hires out of high schools in a year."

The welding/metal fabrication program at Fox Valley Technical College, which works with Muza Metal and Marinette Marine, has a very high job placement rate after graduation. Ninety percent of last year's graduates found jobs. Some of the students in the program even were hired before they finished their degrees.

Global PMI



America's Manufacturing Industry Is The Envy Of The World Right Now

We have for some time talked about an [American manufacturing renaissance](#). And this boom happens to come at a time when manufacturing is declining in some of the biggest economies in the world, including Germany and China.

[Flash PMI](#) in the [U.S.](#) was at 51.9 in August, above the contractionary reading of 50. Meanwhile, [China's flash PMI](#) plunged to 47.5 and German flash PMI climbed to 45.1.

This chart from [Reuters' Scott Barber](#) shows that American manufacturing is in better shape than China and Europe, and has been above the contractionary level since early 2009.



Jeff Dickert's Objective:

1. To have a surplus of manufacturing workers in the pipeline so I don't have to hear ever again, at any meeting, social event, or a Jim Golembeski speech that there are not enough quality kids going into manufacturing.
2. With the NEW Manufacturing Alliance create a program that will draw 300 new students annually in the CESA 7 Region directly into manufacturing (Create Our Own Pipeline).
Duplicable in other regions and career pathways.

Creating Our Own Manufacturing Pipeline



- Access to many manufacturers
 - Jobs
 - Experience recruiting
 - Open areas for on-site classrooms
 - Limited Financial Resources
 - Other alliances: Chambers, Tech Colleges, WMC, NEW North, etc.
- 38 School Districts
 - Educational Programming
 - Experience setting up specific educational training and programs
 - Need kids to graduate with a purpose
 - Limited Financial Resources
 - Other alliances: P.I.E., DPI, PAC, Tech Colleges, Guid. Coun., etc.



Why Now??



- Manufacturing:
 - Current Need
 - Prepare for Economic Rebound
- Education: Perfect Storm
 - New School Report Cards 2012-13
 - New Teacher & Principal Evaluation System 2014-15
 - New Rigorous Common Core Standards 2014-15
 - New National Test 2014-15
 - New Wisconsin Flexibility for H.S. Technical Education Degree 2012-13



Why Now?? (My Opinion)



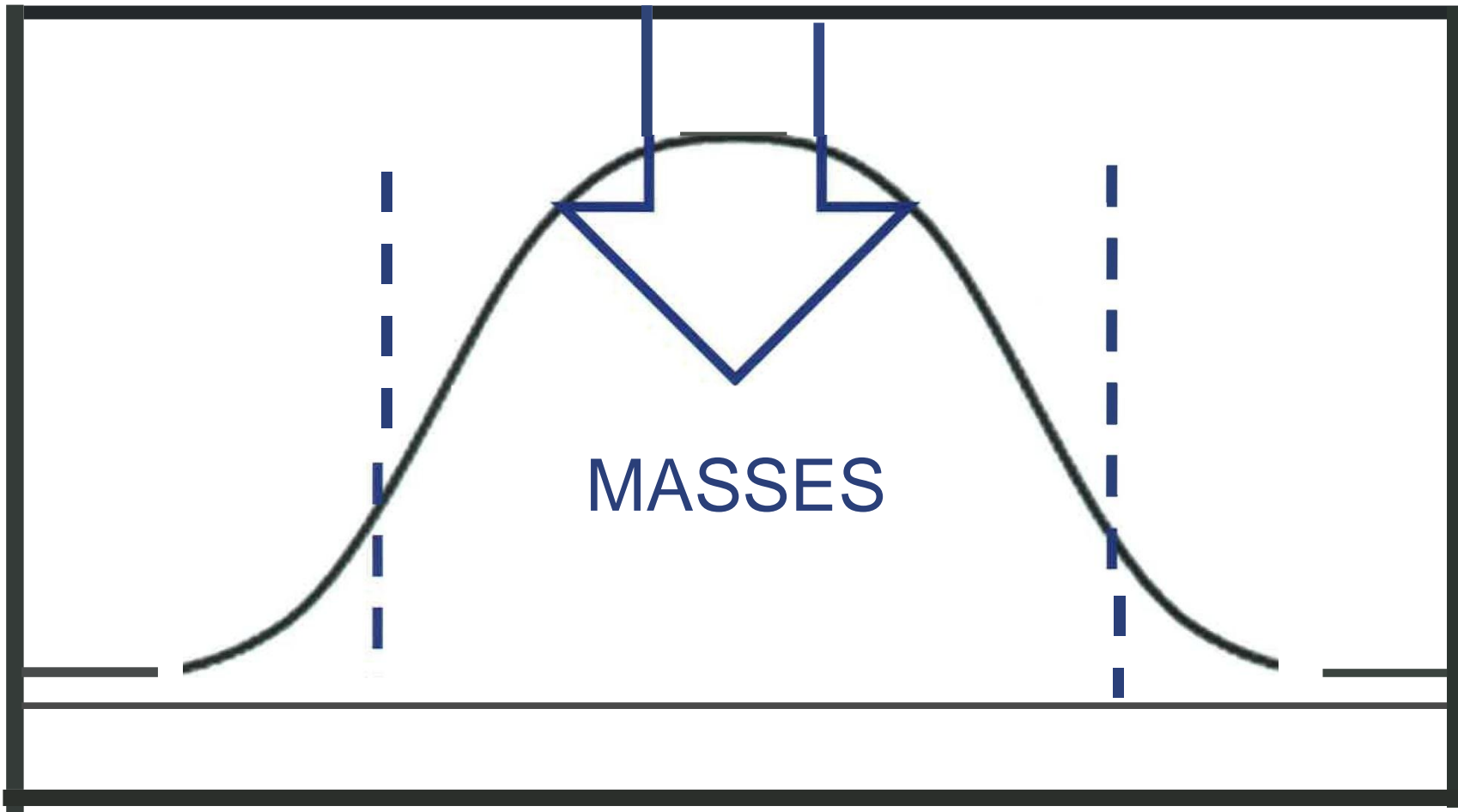
Current

- Disjointed
- Hit & Miss
- "One"sies & "Two"sies
- Not filling "Needs"

Future

- Well Coordinated
- Hit the masses - Fill Needs
- Replicate the best
- Many entry points into the system
 - Freshman Year, Sophomore Year, Junior Year, Senior Year, Post Senior Year

NEW Advanced Manufacturing Work-Based Academy



*The academy is designed to Target the masses.
Kids 2.0-3.2ish GPA, on track to graduate!!!*



NEW Advanced Manufacturing Work-Based Academy

AYSL1

Freshman Year Intra to Manufacturing Careers	Freshman Year Elective H.S. Tech Ed	Freshman Year Regular H.S. Courses
Sophomore Year Transcribed Credit from Tech. Coli. (i.e. Intra to Welding, CAD Design)	Sophomore Year Intro to Manufacturing Careers	Sophomore Year Elective H.S. Tech Ed
Junior Year NEW Work-Based Academy- Half-Day Work Study- Half-Day	Junior Year Transcribed Credit from Tech. Coli. (i.e. Intra to Welding, CAD Design)	Junior Year Intra to Manufacturing Careers
Senior Year Tech. College- Half Day Work Study- Half-Day	Senior Year NEW Work-Based Academy- Half-Day Work Study- Half-Day	Senior Year NEW Work-Based Academy- Half-Day Work Study- Half-Day
Scholarship Year(s) Tech. College & Man. Plant Work	Scholarship Year(s) Tech. College & Man. Plant Work	Scholarship Year(s) Tech. College & Man. Plant Work



Great Manufacturing Career



Bachelors Degree or
Other Certifications

Proposal



Create Manufacturing Employee Pipeline

Framework (100 Students Per County)

HIGH SCHOOL

Freshman & Sophomore Year

- Intra to Manufacturing Careers Course

- Tech. Ed. Courses Exposure

- Visit local manufacturing Plant (October- Manufacturing Month)

Junior or Senior Year

- Half-Day Defined Coursework (Paid by School District)

- Math and English Mandatory {WIN Learning}

- Other 21st Century Skills Curriculum {WIN Learning}

- One Technical College Class per Semester in Manufacturing

- Half-Day Work-Based Experience at Manufacturing Plant (Paid by Manufacturer)

Proposal



Create Manufacturing Employee Pipeline

Framework (100 Students Per County)

Post H.S. Years 1, 2, & More if needed

Work at Manufacturing Plant- F.T.E. to be determined (Required to get Scholarship)

Attend Area Tech College - Manufacturing Scholarship (Paid by Employer)

Scholarship Conditions (Must stay employed at Manufacturer Sponsor while attending Technical College)

- Student must pay back 100% of scholarship if they do not work at or complete one full calendar year after TC graduation at Sponsor's Company
- Student must pay back 67% of scholarship if they work over one year but not two years after TC Graduation at Sponsor's Company
- Student must pay back 33% of scholarship if they work over two years but not three years after TC Graduation at Sponsor's Company
- Student must pay back 0% of scholarship if they work over three years at Sponsor's Company.

Proposal



Create Manufacturing Employee Pipeline

Framework (100 Students Per County)

Details:

Target (Masses)

- Students interested in Manufacturing Career
- Alternative to 4-Year College Prep Track
- Students mechanically inclined

Educational Expenses:

- Courseware
- Classroom Rent
- Computers
- Internet Access
- Teacher(s)
- Project Manager
- Manufacturing Career Counselor(s)

H.S. Graduate Options:

- Regular High School Diploma from home District
- New H.S. Technical Diploma from home District

Proposal



Create Manufacturing Employee Pipeline

Framework (100 Students Per County)

Details:

Academy- Strategic Location(s) placed with one teacher and approximately 30 computers.

Students day highly flexible – Morning or afternoon in factory experience.

Students works through WINS Program. Additional on-line courses available in specialty areas (i.e. Calculus).

Schedule flexible enough to allow student to take regular high school course at current high school (i.e. Band).

Manufacturer provides dedicated and appropriate off-floor learning space.

Proposal

Create Manufacturing Employee Pipeline

Framework (100 Students Per County)

Details:

Selection Process - Both Ways

- Students select Manufacturing Partners and applies
- Student interviews for Work-Based Position
- Student and his/her family interviews Manufacturer and visits plant

Types of Jobs needed

- Computer Numerical Controls (CNC)
- Coordinate Measuring Machine (CMM)
- Electro-Mechanical
- Welding
- Fabrication
- Others

Manufacturing Partner

- NEW Manufacturing Alliance solicits businesses, selection of those interested, and the student application process

Proposal

Create Manufacturing Employee Pipeline

Framework (100 Students Per County)

Details:

Define the Weeks

- School Calendar
- Manufacturing Calendar

Liability Insurance Issues

Transportation

- Students without transportation

Marketing of Program to Students & Families

- Manufacturing Guidance Counselor

School District Expenses

- Cost per Kid

Proposal



Create Manufacturing Employee Pipeline

Framework (100 Students Per County}

Details:

Manufacturer's Expenses

- Student Worker
- Scholarship
- Program's Operation

Supplies for Students

- Steel Toes Shoes
- Gloves
- Head Gear

Student hours - Minimum/Maximum

Working into schedule Technical College Class – One hour every day or all day once a week?

Appropriate Staffing Levels to ensure success

NEIV Work-Based Advanced Manufacturing Academy

First Year Costs



NEW
Manufacturing
Alliance
Make it in North East Wisconsin



CESA 7 Responsibilities

Activity	Salary	Benefits	Equipment	Software	Misc.	Total
Project Manager	70,000	35,000	2,000	1,000	5,000	113,000
Teacher/Job Coach	50,000	25,000	2,000	500	500	78,000
Teacher/Job Coach	50,000	25,000	2,000	500	500	78,000
Teacher/Job Coach	50,000	25,000	2,000	500	500	78,000
Summer Teacher/Job Coach	20,000	2,000	300	200	500	23,000
WIN Courseware				14,000		14,000
Classroom Tables			4,000			4,000
Classroom Chairs			1,500			1,500
Teacher Supplies					6,000	6,000
Classroom Projector			4,000			4,000
Classroom Screen			500			500
Computers			50,000			50,000
Internet					10,000	10,000
Printers			4,000			4,000
Tech Support					8,000	8,000
Classroom Rent					36,000	36,000
Cleaning Service					3,500	3,500
Classroom Utilities					9,600	9,600
Misc.					5,000	5,000
NWTC Courses					83,000	83,000
Adv. Man. Career Counselor/Recruiter	50,000	30,000	2,000	2,000	6,000	90,000
Advertising/ Promotion					10,000	10,000
Transportation					30,000	30,000
Student Mandatory Apparel					25,000	25,000
SubTotal						739,100
CESA 7 Business Operations						59,128
TOTAL						798,228

Manufacturers Responsibility

Activity	Salary	Benefits	Equipment	Software	Tech Coli.	Total
Work-Based Experience Year 1(\$8.00 per ho	480,000	48,000				528,000
TOTAL						528,000

NE\N\ork-Based Advanced Manufacturing Academy

2nd Year Costs



NEV
Manufacturing
Alliance
Make it in NorthEast Wisconsin



CESA 7 Responsibilities

Activity	Salary	Benefits	Equipment	Software	Misc..	Total
Project Manager	71,400	35,700	2,000	1,000	5,000	115,100
Teacher/Job Coach	51,000	25,500	2,000	500	.500	79,500
Teacher/Job Coach	51,000	25,500	2,000	500	.500	79,500
Teacher/Job Coach	51,000	25,500	2,000	500	500	79,500
Summer Teacher/Job Coach	20,400	2,040	300	200	.500	23,440
WIN Courseware				11,000		11,000
Classroom Tables			500			500
Classroom Chairs			.500			500
Teacher Supplies					6,000	6,000
Classroom Projector			250			250
Classroom Screen						-
Computers			4,000			4,000
Internet					10,000	10,000
Printers			1,000			1,000
Tech Support					8,000	8,000
Classroom Rent					36,720	36,720
Cleaning Service					3,570	3,570
Classroom Utilities					9,792	9,792
Misc.					5,000	5,000
NWTC Courses					83,000	83,000
Adv. Man. Career Counselor/Recruiter	51,000	30,600	2,000	2,000	6,000	91,600
Advertising/ Promotion					10,000	10,000
Transportation					30,000	30,000
Student Mandatory Apparel					25,000	25,000
SubTotal						687,972
CESA 7 Business Operations						55,038
TOTAL						743,010

Manufacturers

Activity	Salary	Benefits	Equipment	Software	Tech Coli.	Total
Work-Based Experience Year 1(\$800 per hour)	480,000	48,000				528,000
First Year Students in 1st Year of Scholarship	489,600	48,960			650,000	1,188,560
TOTAL						1,716,560

NEW Work-Based Advanced Manufacturing Academy

3rd Year Costs



CESA 7 Responsibilities

Activity	Salary	Benefits	Equipment	Software	Misc.	Total
Project Manager	72,828	36,414	2,000	1,000	5,000	117,242
Teacher/Job Coach	52,020	26,010	2,000	.500	.500	81,030
Teacher/Job Coach	52,020	26,010	2,000	.500	.500	81,030
Teacher/Job Coach	52,020	26,010	2,000	.500	.500	81,030
Summer Teacher/Job Coach	20,808	2,081	300	200	.500	23,889
WIN Courseware				11,000		11,000
Classroom Tables			.500			500
Classroom Chairs			.500			.500
Teacher Supplies					6,000	6,000
Classroom Projector			250			250
Classroom Screen						-
Computers			4,000			4,000
Internet					10,000	10,000
Printers			1,000			1,000
Tech Support					8,000	8,000
Classroom Rent					37,454	37,454
Cleaning Service					3,641	3,641
Classroom Utilities					9,988	9,988
Misc.					5,000	5,000
NWTC Courses					83,000	83,000
Adv. Man. Career Counselor/Recruiter	52,020	31,212	2,000	2,000	6,000	93,232
Advertising/ Promotion					10,000	10,000
Transportation					30,000	30,000
Student Mandatory Apparel					25,000	25,000
SubTotal						697,786
CESA 7 Business Operations						55,823
TOTAL						753,609

Manufacturers Responsibility

Activity	Salary	Benefits	Equipment	Software	Tech Coli.	Total
Work-Based Experience Year 1(\$8.00per hour)	480,000	48,000				528,000
Second Year Students in 1st Year of Scholarship	489,600	48,960			650,000	1,188,560
First Year Students in 2nd Year of Scholarship	499,392	49,939			650,000	1,199,331
TOTAL						2,915,891

PROGRAM EVALUATION

Specific
M
easurable
Attainable
Relevant
Trackable



Manufacturing
Alliance
Make it in NorthEast Wisconsin

CES At
I-

NEW

NEW Advanced Manufacturing Work- Based Academy

PROGRAM

EVALUATION

Specific
M measurable
A attainable
Relevant
T trackable



NEW Nursing
Work-Based
Academy

PROGRAM EVALUATION

Specific
Measurable
Attainable
Relevant
Trackable



NEW Construction
Work-Based
Academy

PROGRAM EVALUATION

Specific

M

Measurable

Attainable

Relevant

Trackable



- NEW
Manufacturing
Alliance

Make it in NorthEast Wisconsin

At
A..

CE S

NEW Finance
Work-Based
Academy

PROGRAM EVALUATION

Specific
M **Measurable**
A **Attainable**
R **Relevant**
T **Trackable**



NEW Tourism
Work-Based
Academy

PROGRAM EVALUATION

Specific
Meas rable
Att
ainable
Relevant
Tracka^{bl} e



NEW
Manufacturing
Alliance

Make it in
NorthEast
Wisconsin

List of 16 Career Clusters

Agriculture,
Food, and Natural
Resources Architecture and
Construction
Arts, AudioNideo Technology, and
Communications
Business Management and
Administration Education and
Training
Finance
Government and Public
Administration Health
Science
Hospitality
and Tourism
Human
Services
Information
Technology
Law, Public Safety, Corrections and
Security
M
a
n
u
f
a

cturing
Marketing
Science, Technology, Engineering, and
Mathematics
Transportation, Distribution, and Logistics





Mark Kaiser

President & CEO
Lindquist Machine

Chair
NEW Manufacturing Alliance

mkaiser@lmc-corp.com
920-713-4160

Future

- Discuss
- Question
- Consider
- Action



Jeff Dickert

Agency Administrator
Cooperative Educational
Service Agency #7

jdickert@cesa7.k12.wi.us
920-617-5612