



## **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



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



**Reggie Newson**  
DWD Secretary



**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.

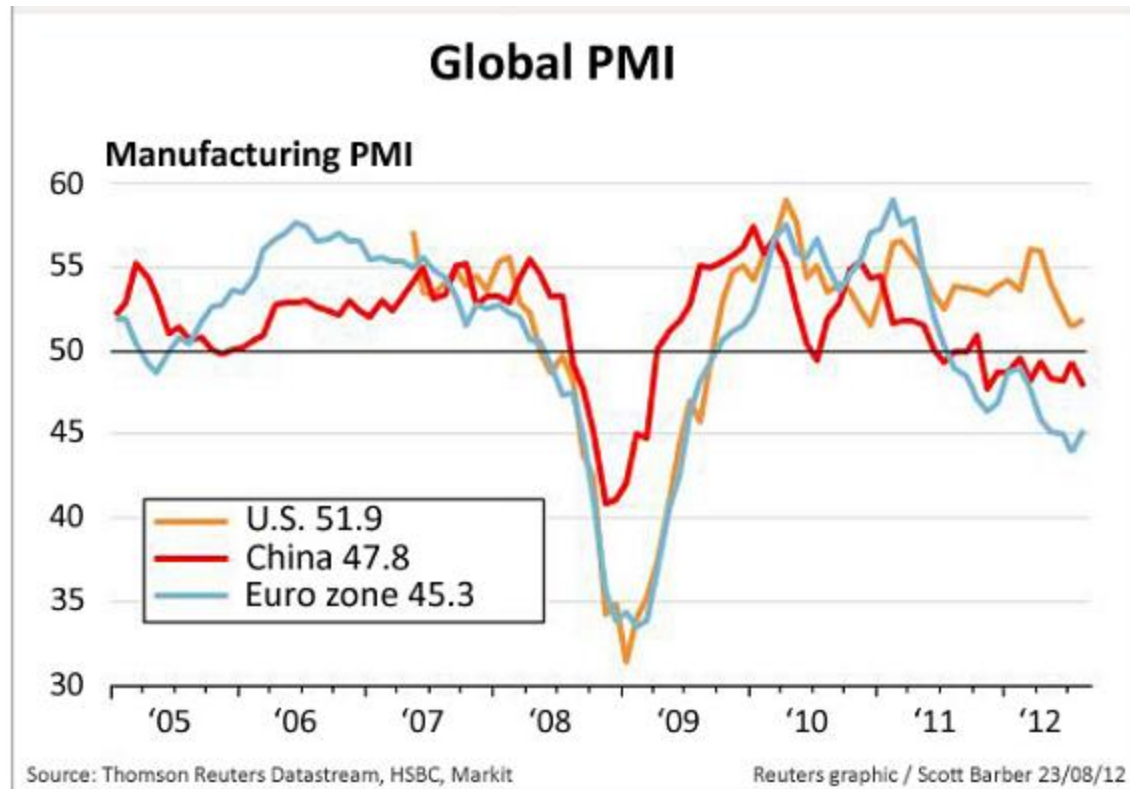
The company has added 600 jobs in the past 12 months, and now has 1,400 employees, but is struggling to fill vacancies for skilled trades jobs. It's even having a hard time recruiting people to sign on to train and work for them. The company held open 40 spots for entry-level workers, reaching out to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





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



## **Objective:**

- 1. 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)



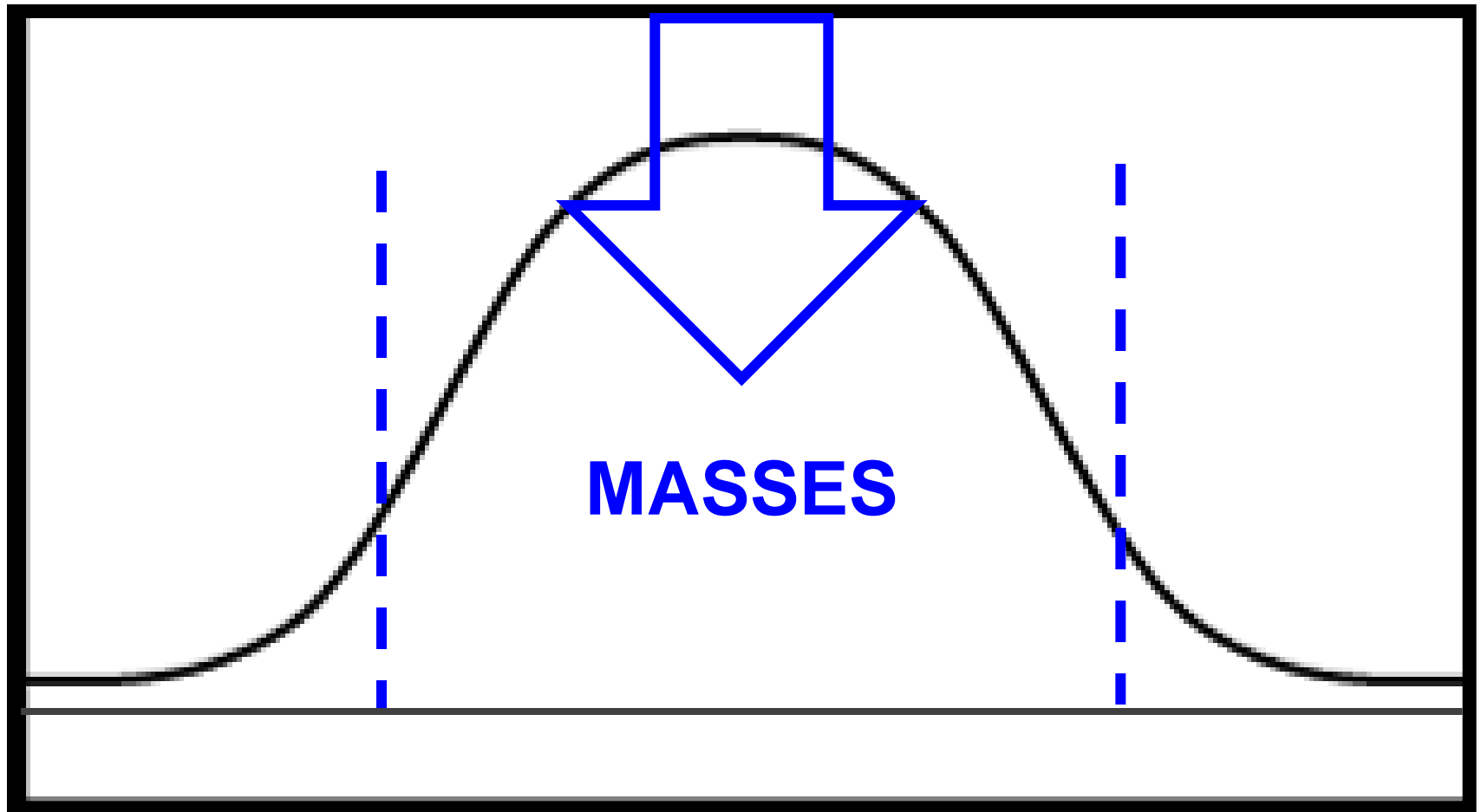
## Current

- Disjointed
- Hit & Miss
- “One”sies & “Two”sies
- Not filling “Needs”

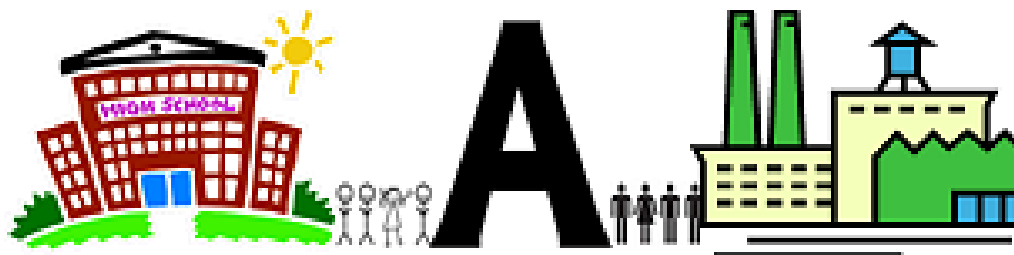
## Future

- 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

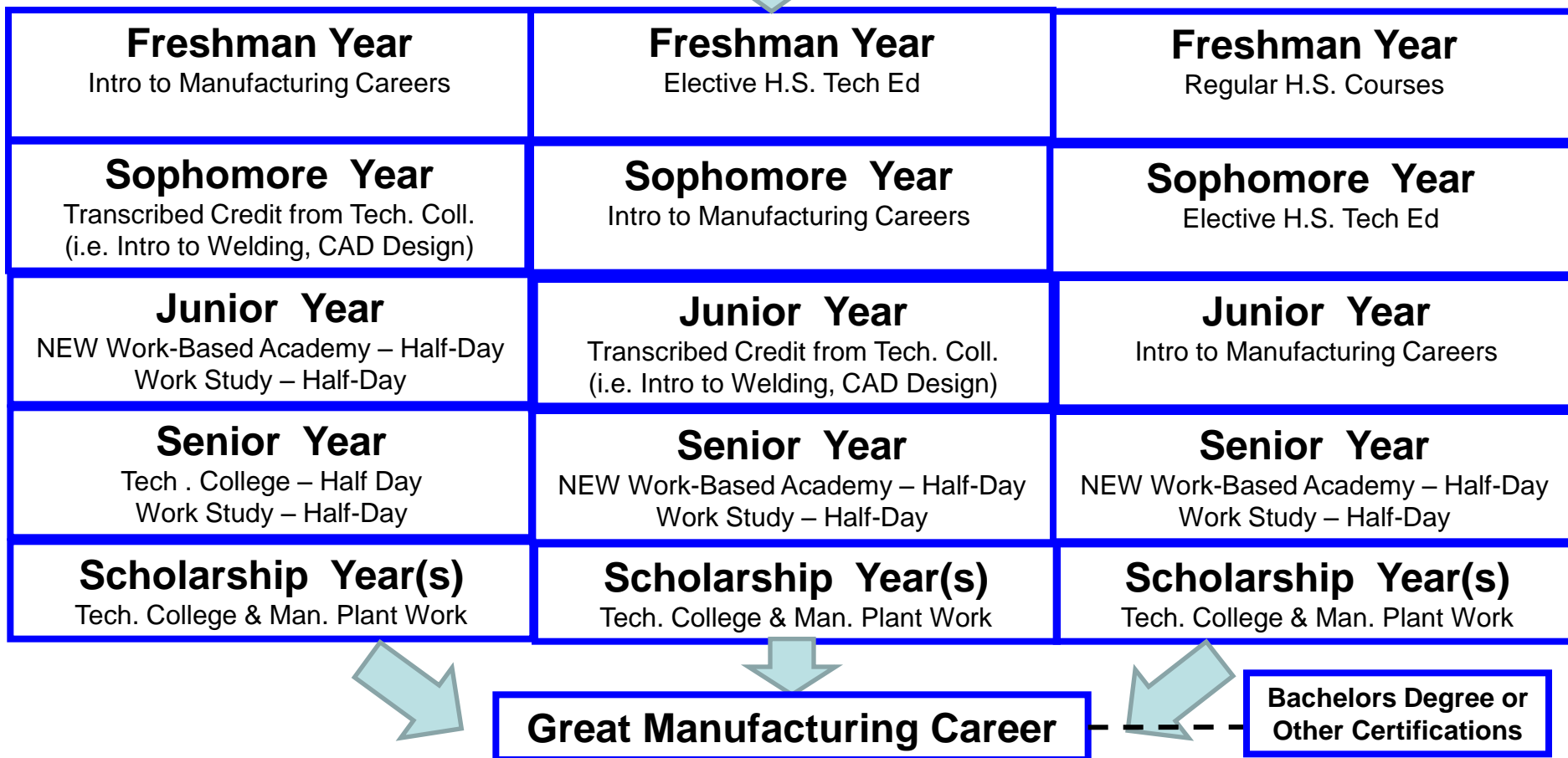


*The academy is designed to Target the masses.  
Kids 2.0-3.2ish GPA, on track to graduate!!!*



## NEW Advanced Manufacturing Work-Based Academy

### PATHWAYS



# Proposal

## Create Manufacturing Employee Pipeline

**Framework (100 Students Per County)**

### **HIGH SCHOOL**

#### **Freshman & Sophomore Year**

Intro 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

Six Hours per Week 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 – No physical building

- Students work on WIN Learning Program at home High School with instructor provided by High School
- WIN Learning Software provided by Pilot.
- Each student is assigned a Career Counselor. They work together for work-based placement, raising Career Readiness Score, work-based evaluation, scholarship application with manufacturer, resume, WIN Learning pacing, post secondary options, etc.
- Students day highly flexible – Morning or afternoon in factory experience.
- Schedule flexible enough to allow student to take regular high school course at current high school (i.e. Band, Trig, Physics).
- Students are recruited for the academy by Work-Based School Counselor provided by Pilot

# NEW Work-Based Advanced Manufacturing Academy



## First Year Costs

*Marinette & Brown County Pilot - 300 Students*

## CESA 7 & CESA 8 Responsibilities

Activity	Salary	Benefits	Equipment	Software	Misc.	Total
Project Manager	70,000	35,000	2,000	1,000	5,000	113,000
Adv. Man. Career Counselor/Recruiter	50,000	30,000	2,000	2,000	6,000	90,000
Career Advisor/Job Coach/WIN Tracker	60,000	30,000	2,000	500	5,000	97,500
Career Advisor/Job Coach/WIN Tracker	60,000	30,000	2,000	500	5,000	97,500
WIN Courseware				42,000		42,000
Advertising/ Promotion					50,000	50,000
Transportation					60,000	60,000
Misc.					10,000	10,000
SubTotal						560,000
CESA 7 Business Operations						44,800
<b>TOTAL</b>						<b>604,800</b>

Per Student = 2,016

## Manufacturers Responsibility

Activity	Salary	FICA	Equipment	Software	Tech Coll.	Total
Work-Based Experience Year 1 (\$8.00 per hour)	576,000	43,920				619,920
<b>TOTAL</b>						<b>619,920</b>

# NEW Work-Based Advanced Manufacturing Academy



## 2nd Year Costs

*Marinette & Brown County Pilot - 300 Students*

## CESA 7 & CESA 8 Responsibilities

Activity	Salary	Benefits	Equipment	Software	Misc.	Total
Project Manager	71,400	35,700	2,000	1,000	5,000	115,100
Adv. Man. Career Counselor/Recruiter	51,000	30,600	2,000	2,000	6,000	91,600
Career Advisor/Job Coach/WIN Tracker	61,200	30,600	2,000	500	5,000	99,300
Career Advisor/Job Coach/WIN Tracker	61,200	30,600	2,000	500	5,000	99,300
WIN Courseware				42,000		42,000
Advertising/ Promotion					50,000	50,000
Transportation					60,000	60,000
Misc.					10,000	10,000
SubTotal						567,300
CESA 7 Business Operations						45,384
<b>TOTAL</b>						<b>612,684</b>

Per Student = 2,042.28

## Manufacturers

Activity	Salary	FICA	Equipment	Software	Tech Coll.	Total
Work-Based Experience Year 1(\$8.00 per hour)	576,000	44,064				620,064
First Year Students in 1st Year of Scholarship	587,520	44,945			1,950,000	2,582,465
<b>TOTAL</b>						<b>3,202,529</b>

# PROGRAM EVALUATION

**S**pecific  
**M**easurable  
**A**ttainable  
**R**elevant  
**T**rackable



**NEW Advanced  
Manufacturing Work-  
Based Academy**



# PROGRAM EVALUATION

**Specific**  
**Measurable**  
**Attainable**  
**Relevant**  
**Trackable**



**NEW Nursing**  
**Work-Based**  
**Academy**

# PROGRAM EVALUATION

**Specific**  
**Measurable**  
**Attainable**  
**Relevant**  
**Trackable**



**NEW Construction**  
**Work-Based**  
**Academy**

# PROGRAM EVALUATION

**Specific**  
**Measurable**  
**Attainable**  
**Relevant**  
**Trackable**



**NEW Finance**  
**Work-Based**  
**Academy**

# PROGRAM EVALUATION

**Specific**  
**Measurable**  
**Attainable**  
**Relevant**  
**Trackable**



**NEW Tourism**  
**Work-Based**  
**Academy**

# PROGRAM EVALUATION

**Specific**  
**Measurable**  
**Attainable**  
**Relevant**  
**Trackable**



## List of 16 Career Clusters

Agriculture, Food, and Natural Resources  
Architecture and Construction  
Arts, Audio/Video 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  
Manufacturing  
Marketing  
Science, Technology, Engineering, and Mathematics  
Transportation, Distribution, and Logistics



**Mark Kaiser**

**President & CEO  
Lindquist Machine**

**Chair  
NEW Manufacturing Alliance**

**[mkaiser@lmc-corp.com](mailto: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](mailto:jdickert@cesa7.k12.wi.us)**

**920-617-5612**