

**NEW Manufacturing Alliance
K-12 TASK FORCE MEETING MINUTES
KI – Green Bay, WI
Friday, May 15, 2015, 8:30 – 10:00 a.m.**

ATTENDEES: Allison Baue-GPS Education, Doug Bengson-Industrial Controls Co., Beau Biller-PHS, Andy Bushmaker-KI, Adam Cochart-BPHS, Megan Crary-Georgia-Pacific, Dan Mella-PHS, Darren Munson-PHS, Stacy Norman-GBAPS-Elmore, Sara Suckow-KI (Manitowoc), Derek Lineberry-Sargento Foods, Ann Franz, Debbie Thompson

1. MATH RESEARCH PRESENTATION – DAN MELLA, BEAU BILLER, DARREN MUNSON, JACK DANIELS OF PLYMOUTH HIGH SCHOOL (PHS)

The presentation was given by Plymouth School District educators that worked on their Master’s degree in partnership with UW-Green Bay. As a part of this program; Beau Biller, Jack Daniels, and Darren Munson did a research project on “Advancing Career Readiness in Mathematics & Technology Education Curricula for Non-university Bound Students”.

When their school district adopted the Common Core in 2010, three math credits were required of students as part of their graduation requirements. This necessitated an increase in testing for all students, with lots of changes taking place. The changes included making Algebra 2 a required course for all students. Plymouth High School (PHS) teachers expressed concern as to whether or not requiring algebra 2 was appropriate for all students, as not all of them are pursuing a four year college degree. The majority of students at PHS are going on to a four year college. The real concern was for the students not going on to a four year college.

Surveys were conducted. One of the PHS staff members responded, *“If we were to offer math curriculum that aligns with the math specific to their pursued trade, they would be better prepared.”* Students reported they want math classes that are going to prepare them for the career they plan to pursue. A PHS graduate shared, *“If I was going to become a welder, give me math related to that, not useless math classes like Algebra 2. Touch base and give kids a feel for what they might have to learn in college to complete that career in the future.”* Providing a lot of high level math teaching that is not going to get used is counterproductive. Technical college graduates have many opportunities, especially in manufacturing, to make a viable living.

Conclusions

- Algebra 2 is not necessary for the 35% of students not going to a four year college. Math skills are still needed, but something other than Algebra 2 and more tailored for the career they wish to pursue.
- There is a significant demand for alternative math courses for non-college bound students.

Recommendations

- All students continue to be required to take 3 years of math, including Algebra 1 and Geometry.
- Form a committee to create alternative math classes, focusing on the math modeling of the CCSSM that will offer additional options alongside Algebra 2.
- Form partnerships with businesses.
- Promote the growth of programs in technical education.

2. MATH VIDEO PROJECT & PRESENTATION TO THE WI MATHEMATICS COUNCIL ON MAY 7, 2015

Ann and Andy Bushmaker presented the math videos at the Wisconsin Math Council meeting in Green Lake on May 7. The meeting was well attended, with the teachers very interested and excited about the math videos and lesson plans. Teachers requested videos be made featuring higher levels of math.

The next nine videos are being sponsored by a National Science Foundation grant that was applied for by NWTTC. These nine videos involve geometry, trigonometry, and will focus on tech college trades math. Andy reported the rest of the nine videos will be filmed by the end of May. The goal is to have the latest videos and lesson plans added to the website by August 31, 2015.

Teachers have also requested real-life math problems that don’t have videos. **Members are asked to email Ann any of their math problems with answers.** Andy submitted a cost analysis problem for this purpose.

3. EXCELLENCE IN MANUFACTURING/K-12 PARTNERSHIPS AWARDS

The nomination process is now open for the 4th annual “Excellence in Manufacturing/K-12 Partnerships Awards”. [Nominations](#) are being sought for individuals, manufacturers or schools that showcase manufacturing careers in a unique way. **The deadline to nominate is Monday, June 15, 2015.** Winners will be recognized at the Wednesday, October 21, 2015 awards dinner at the KI Convention Center, Green Bay. All nominees and tech ed teachers will receive a free ticket to the event.

The Alliance Steering Committee will be having a meeting with school administrators the afternoon of the awards dinner to discuss industry needs. A committee will be formed to prepare for this gathering, with plans to meet in June.

4. EMPLOYABILITY SKILLS TRAINING

The fall pilot will include:

- A to Z Machine Company, Inc. will be working with New London High School students on making the Excellence in Mfg./K-12 Partnerships awards
- Lindquist Machine Corporation will be working with Bay Port High School.
- KI will be working with Denmark High school.
- Industrial Controls will be partnered with a high school in the area.

Please contact Ann if your organization would like to partner with a school this fall.

5. OTHER TOPICS

- 19 Bay Port High School students recently completed welding certifications and will be touring Fox Valley Metal-Tech (FVMT) on Wednesday. FVMT prepared and donated materials for their program. The tour will allow students to get a broader perspective of what they worked to achieve. The North Coast Marine Manufacturing Alliance will be sponsoring student bussing for the tour.
- The North Coast Marine Manufacturing Alliance had their first-ever SeaPerch competition at Edison Middle School on May 9. The event was a huge success. Student teams from Leonardo da Vinci School, Marinette Middle School, and the Sea Cadets participated. Prior to the event, each team built an underwater submarine. Students competed in a timed competition using two different underwater courses built by NWTC students. The event will be held again in February 2016. Regional schools are encouraged to participate. Winners will be able to attend the state competition, with the hopes of advancing to nationals.

6. NEXT STEPS AND MEETING LOCATION

The next NEWMA K-12 Task Force meeting will be on Friday, July 17, 2015, 8:30 to 10:00 a.m. at A to Z Machine.

Agenda items include the following; a) Math videos, b) Excellence in Manufacturing/K-12 Partnerships Awards, c) Employability skills training.

The full membership meeting is scheduled for Thursday, June 11 at Foth (De Pere), 12:00 to 2:00 p.m. Agenda items include the following.

- Serving Veterans in Your Workplace: Hiring, Retaining & Engaging Veteran Employees
- Wisconsin Fast Forward Grant: How to Fund Your Employee Training Program
- Manufacturing First Expo & Conference Overview
- K-12 Best Practices Presentations; a) Plant tour project management software, b) Appleton Technology Academy, c) Bay Link Manufacturing