

**NEW Manufacturing Alliance
STEM TASK FORCE/MATH COUNCIL MEETING MINUTES
Ariens Company – Brillion, WI
Wednesday, February 20, 2019 – 3:00 to 4:30 PM**

ATTENDEES: Carol Bredesen-Bemis Co., John Gillespie-Gillespie Productions, Paige Grube-Gillespie Productions, Rachel Johnson-NWTC, Mike Kawleski-Georgia-Pacific, Claudia Krepsky-Kohler Co., Sondra LaCoy-Outlook Group, Shannon Niccum-Nestle, Doug Schneckloth-Bonduel HS, Emily Teller-FVTC, Joe Turner-De Pere HS, Erin VanCamp-Brillion HS, Taryn West-Ariens Company, Brian Witt-Ariens Company, Dave Witzeling-Bay View MS, Ann Franz-NEWMA, Debbie Thompson-NWTC

Brian Witt, chair, welcomed and thanked the STEM Task Force and Math Council members for uniting to promote NEWMA’s STEM initiatives.

2019 INITIATIVES

‘YOU CAN MAKE IT IN NORTHEAST WI’ CAREER EXPOS	
<p>When: Tuesday, March 19, 2019 Where: Greenville Middle School Gymnasium Attendees: All Hortonville & Greenville Middle School 7th Graders Times: 8:30 – 9:30 AM Set-up 9:45 - 11:45 AM Hortonville M.S. Students 1:10 - 3:10 PM Greenville M.S. Students 3:15 – 4:45 PM Parents & M.S./H.S. Students</p>	<p>When: Tuesday, April 2, 2019 Where: Lombardi Middle School Gymnasium Attendees: All Lombardi Middle School 6th Graders Times: 8:15 – 9:15 AM Set-up 9:24 - 11:15 AM ½ of the 6th Grade Class 12:49 - 2:40 PM ½ of the 6th Grade Class 2:45 – 4:30 PM Parents & M.S./H.S. Students</p>
<p>Companies are needed to participate in both career expos. There is no charge to participate. Company reps will work with approximately six students at a time for 25 minute periods, in the morning and afternoon. Companies are encouraged to host an activity for the student to ‘make’ something <i>or</i> provide an activity that showcases manufacturing careers. Students will research participating companies prior to the expo they attend.</p> <p>The afterschool program is when parents will come back to the school to see what the students made. Employers that are hiring are encouraged to bring information about their job openings. High school students will also be invited to attend the afterschool program to learn about job opportunities. Contact Ann if you are interested in participating.</p>	

2019 GET REAL MATH (GRM) & PREMIERE

The GRM Premiere will be held in October. Companies producing 2019 GRM videos are Ariens Company, Kohler Co., Outlook Group, TIDI Products, and Oshkosh Corp. Ann shared that the videos are used across the U.S. John Gillespie and Paige Grube, Gillespie Productions, will be filming the 2019 videos. They are excited to join forces with the Alliance. To learn more about their organization, visit www.gillespieproductions.com.

Top 2019 Subjects to Cover			
as discussed at the last Math Council meeting			
Calculus	Modeling	Sound Waves	Transformations
PH Level	Algebra	Statistics	Trigonometry
Linear Programming & Graphing	Quadratics	Logarithms	Random Sampling

Math skills not featured in GRM videos *or* with limited exposure:

- ❖ **5th Grade** - Operations & Algebraic Thinking: write & interpret numerical expressions.
- ❖ **6th Grade** - Area, Surface, Volume: triangles, polygons, quadrilaterals, prisms
- ❖ **7th Grade** - Statistics & Probability: random sampling, informal comparatives & inferences, probability models
- 8th Grade:**
- ❖ Number System: irrational numbers

- ❖ Expressions & Equations: radical & integer exponents, proportional relationships of lines & linear equations
- ❖ Functions
- ❖ Statistics & Probability: bivariate data
- ❖ **High School** - Vectors & Matrix

Teachers were asked for any feedback, especially how they are using the GRM videos in the classroom.

- It can be difficult for teachers to find time to fit the videos and their lesson plans into the curriculum.
- The ability to search a keyword on the GRM website is helpful.
- Teachers like that the lesson plans are editable.
- Teachers would like more high school level videos.
- More algebra, calculus, statistics, quadratics, and programming are needed.
- Tie in the information about the career fields featured in the videos.
- Educators like that the videos are between 2-5 minutes long.

Marketing the Videos to Math Teachers

In the past, GRM videos have been marketed via:

- Postcards mailed to teachers.
- Announced at the WI Mathematics Council held in Green Lake, WI.
- Math teacher trainings at CESA 8.
- Emails sent to math teachers.

Other areas to market the videos were discussed.

- Advertise with the American Mathematical Association of Two-Year Colleges.
- Social networks.
- An effort will be made to get more STEM teachers involved.
 - ✓ Ann will contact DPI to see if NEWMA could host a session *and/or* package something to give to schools.

NEWMA's **ACP (Academic & Career Planning) meeting** will be held 10/29/2019, at the KI Convention Center.

FEMALES IN STEM OCCUPATIONS

Women are underrepresented in STEM fields, with companies struggling to find talent. What is not drawing females towards STEM fields? Ideas/suggestions:

- Females may think manufacturing is dirty, physically hard.
- Company doors need to be opened to show what modern manufacturing entails.
- Provide more hands-on activities at career expos. Give kids the opportunity to build and play with things.
- Parents drive their kids' interests. They may not understand manufacturing. 'Take a Child to Work Day' can offer the opportunity to help children branch out with other employees besides their parent.
- What we may think is important in a job, the younger generation does not. They are more interested in meaningful/enjoyable work, vs. having a large income.
- Host female speakers and provide mentors, women already working in the field.
- The workplace needs to be a comfortable environment to succeed.

ARIENS COMPANY TOUR

NEXT MEETING DATE/TIME/LOCATION/AGENDA

The next STEM Task Force meeting will be held **on Tuesday, April 30, at Paper Discovery Center (Appleton), 3:00 to 4:30 p.m.** Agenda:

- ✓ 2019 Get Real Math & Premiere
- ✓ 'You Can Make IT in Northeast Wisconsin' Recap & Possible Fall Events
- ✓ Females in STEM Occupations