

## Summary of Manufacturing Day Events 2014

This is a brief synopsis of the North Dakota Manufacturing Day events for 2014.

The Governor issued a proclamation making October 3, 2014 North Dakota Manufacturing Day.

Events were held in communities across the state:



### Fargo Community:

The **Greater Fargo Moorhead Economic Development Corporation** hosted student tour events for Manufacturing Day for the third time. On October 3<sup>rd</sup> they had 165 high school students from West Fargo, Fargo and Moorhead tour **John Deere Electronic Solutions, Aggregate Industries, Fargo Jet Center/Weather Modification, and Prinsco**, with a luncheon hosted by the Minnesota State Community and Technical College. Here is a link to an article on their website: <http://smartmovefargomoorhead.areavoices.com/2014/10/13/educating-and-changing-perceptions-of-the-manufacturing-industry-160-high-school-students-toured-four-local-companies-for-manufacturing-day/>

A second group of people toured **John Deere Electronic Solutions** for Manufacturing Day. They included about 40 industry professionals who were on the North Dakota State University campus attending a microelectronics summit.

**Trail King** hosted public tours also on October 3<sup>rd</sup>, but unfortunately had no one participate.

**Cat Reman** celebrated Manufacturing Day the week of October 6<sup>th</sup>. Valley News Live came on site for 5 live broadcasts the morning of the 6<sup>th</sup>. They thanked their employees by giving them hats and serving a meal to each shift. They also held a public open house and gave tours to 30 people.

### Wahpeton Community:

On October 22<sup>nd</sup>, the **City of Wahpeton** hosted 203 high school junior and seniors from the Wahpeton school district for tours in **Bobcat, WCCO Belting, ComDel Innovations, and Heartland Precision**. The **North Dakota State College of Science** also provided tours and lunch for the students. Check out photos of the event at: <https://www.facebook.com/Wahpeton.ND>.

### Jamestown Community:

**Jamestown / Stutsman County Development** partnered with **UTC Aerospace Systems** for tours of their facility on October 3<sup>rd</sup>. Forty five people from the high schools and public participated in the tours.

### Grand Forks Community:

**Steffes Corporation** held public tours on October 3<sup>rd</sup>. While only 2 people came to the event, one was Congressman Kevin Kramer.

### Dickinson Community:

**Steffes Corporation** also held public tours in their Dickinson location on October 3<sup>rd</sup>. Five people toured their facility and they held one on site job interview.

**Steffes Corporation** also partnered with the **Stark Development Corporation, Killdeer Mountain Manufacturing, Fisher Industries, TMI Systems Design Corporation, Funshine Express, Stone Mill, Baker Boy, Worthington Industries and Amber Waves** to publish an ad in the Dickinson Press touting the manufacturing industry. A copy of the ad is attached. They also ran radio ads on the importance of manufacturing. The City of Dickinson and Stark County declared October 15, 2014 as Manufacturing Day.

## Student Survey Results:

We asked the students to complete short surveys before the tours and again immediately after the tours. Here are their responses:

### Pre-Tour Student Responses:

284 students responded to the pre-tour survey. The students on the Fargo tours were from classes that taught skills which would likely be compatible with a manufacturing career. The students from these targeted classes may skew the results slightly toward the industry. The Wahpeton students were from all class types.

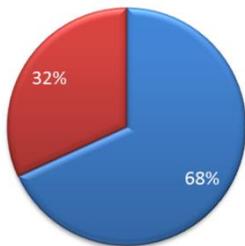
Here are the breakdowns of the students by gender and grade level.

### Students taking 2014 Pre-Tour Surveys by Grade

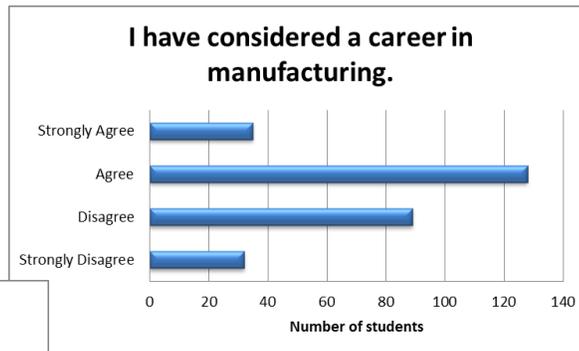
■ 9th Graders ■ 10th Graders ■ 11th Graders ■ 12th Graders



■ Male ■ Female



We also asked them about their current state of mind about the industry and whether key influencers have been discussing manufacturing as a career option.



We see before the tours a fairly strong interest in manufacturing as a

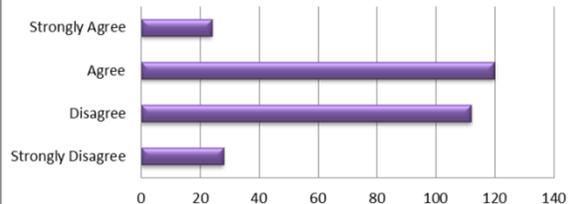
**career option: 57% (Agree/Strongly Agree).**

The **parents** are key influencers and the students indicate that almost exactly **half have encouraged their child to pursue a career in manufacturing (Agree/Strongly Agree).**

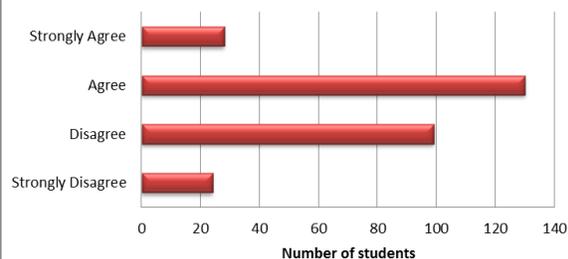
The **teachers and career counselors** are also key influencers in career choices. According to the students, they have been more vocal than the parents about **encouraging students to consider manufacturing as a career: 56% (Agree/Strongly Agree).**

We also wanted to measure changes in attitudes as a result of the tours by the students so a post tour survey was provided with related questions.

#### My parents encourage me to explore manufacturing as a career.



#### My teachers and career counselors have talked to me about exploring manufacturing as a career.

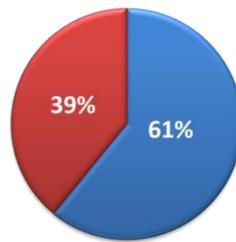


## Post-Tour Student Responses:

Of the 243 students who toured companies, there were a greater number of males and almost 50% were students in the 11th grade.

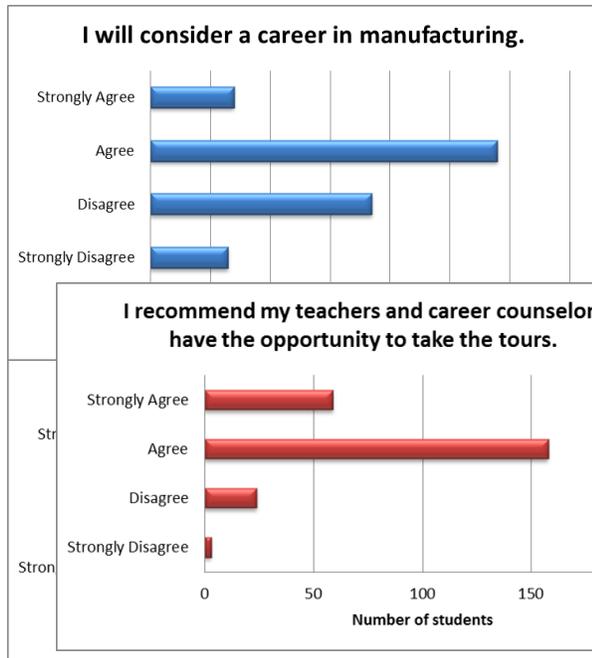
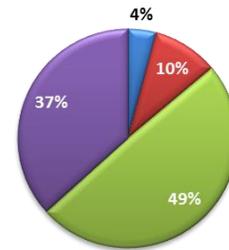
After the tours, the **59% of the students said they would consider a career in manufacturing**, compared with the 57% from the pre-tour survey.

■ Males ■ Females



## Students on 2014 Tours by Grade

■ 9th graders ■ 10th graders ■ 11th graders ■ 12th graders



We wanted to know if they would recommend the manufacturing tours to their key influencers. **89% of the students recommended the teachers and career counselors take the tours and 62% recommended their parents take them** (Agree/Strongly Agree). This is an area we should consider pursuing more aggressively – impacting the key influencers.

Here are some of the student comments after the tours:

### Pre-Tour Comments: What do you hope to see or do on the tours?

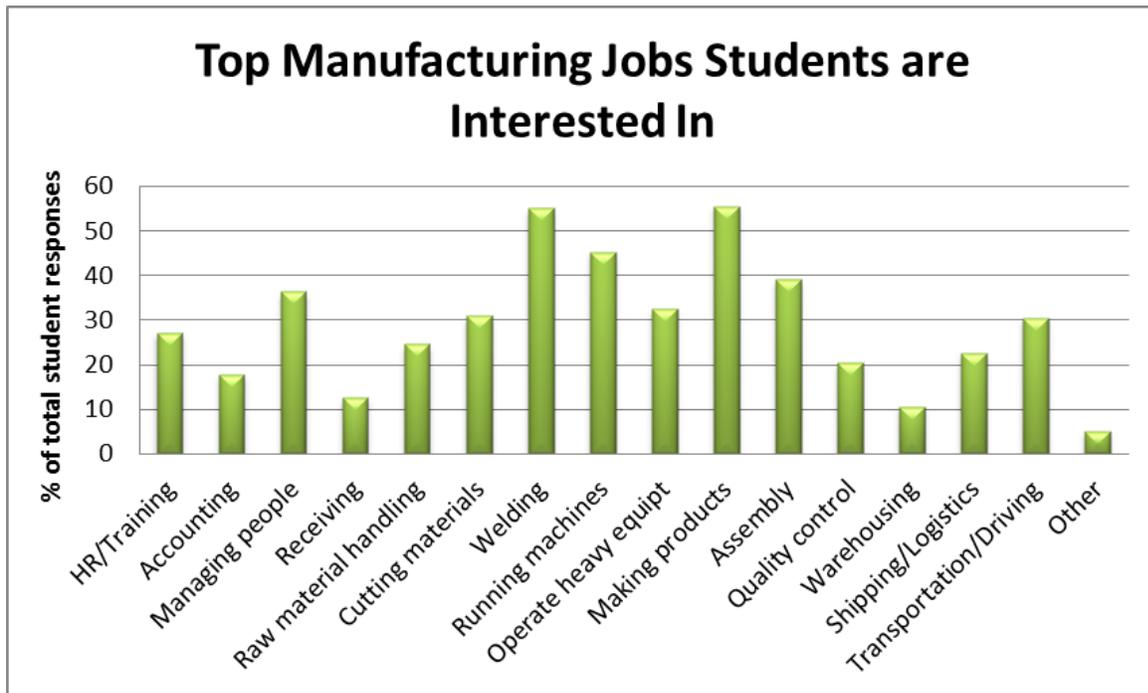
- *Robots and advancements from past technology to today and the future.*
- *I hope I get to meet someone who can explain to me the benefits and available opportunities in manufacturing careers.*
- *I would like to see new job opportunities and some manufacturing being done in a real location. I would like to ask and see if people enjoy there job. (sic)*
- *Different types of tools and how they work or how is it to be in a envornment like that type of work. (sic)*
- *I would like to learn about manufacturing in a real world application and see how I could possibly go forward in my life in the manufacturing field.*
- *I hope to see people doing things that I could see myself doing as a career in the future.*
- *See the entire process from the engineer's notebook to the cutting materials, to the finished product.*
- *I hope to see cool new things that may open my mind set up more for what to be when I am older.*
- *I'm still unsure on my college & career choice so I'm hoping this may help me decide if I would consider going into mfg or not.*
- *I hope to learn more about the mfg career field because it is an important part of our community.*

### Post-Tour Comments: What you liked most about the tours?

- *Learning about all the different job opportunities that our community has & learning how important each person's job was.*
- *Seeing all the amazing technologies & robots in action, in person.*

- Learning about how technology has changed the industry.
- Getting to see real world people working @ facilities that make real world things.
- How we were able to see how the jobs were done and got to get a close view how it's done and ask people who do that job questions and they gave very good answers back on the questions.
- All the tools and other materials that I never thought existed that they used.
- Learning new things about career choices that we went to and getting a look at how they operate at their place of work.
- I liked how there was lots of hands on opportunities to help me further my knowledge of manufacturing and different career opportunities.
- The tours really taught you how most of the stuff are made and that there is a lot of different careers you can do just in the area.
- Every place we visited was unique in its own way. Everyone was hands. We were not limited to interacting with the different machines and materials which was very awesome. Definitely one of the most exciting, entertaining, and most educational experiences I've had in a very long time. No questions asked, I would definitely like to have a career in manufacturing now. This trip really enhanced my opinions about manufacturing and other technical careers. Thanks for the trip. IT WAS AMAZING!

**Top Manufacturing Jobs the Students are Interested in learning more about:**



The students were asked to select the top 5 manufacturing jobs they were would interested in learning more about. The 236 student responses selected Making Products at 55.5% and Welding at 55.1% as the top jobs.

The other category included responses such as: Managing a plant/running the business; engineering; graphic design; mechatronics; and computerized part design.