

DISCOVER MANUFACTURING WEEK Educator toolkit



ABOUT DISCOVER MANUFACTURING WEEK

Discover Manufacturing Week is part of national Manufacturing Day efforts, led by the National Association of Manufacturers. The initiative seeks to address common misconceptions about manufacturing by providing opportunities for students, teachers, and the public to tour manufacturing facilities and talk to professionals about their careers. In West Michigan, Discover Manufacturing Week is officially the first and second week of November, but it includes all events scheduled during the months of October and November.

Discover Manufacturing has built a team of educator champions from each county who can help guide you through registration.

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PREPARING FOR DISCOVER MANUFACTURING WEEK

Manufacturers in West Michigan are working hard to provide students with an interactive experience. No matter where your students are in their "quest" towards a career, these events will provide an excellent opportunity to begin or deepen their career exploration. **Our hope is that the information included in this packet will help you and your students have a meaningful and enjoyable experience.**

Program Structure

Discover Manufacturing Week is geared towards for students in 6th – 12th grade.

- Manufacturers host groups of students for a tour.
- Students and educators tour the facility for approximately 2-3 hours.
- You will be able to select the employer you wish to tour.
- Once you select an employer, connect with them in advance to discuss their plan.

Additional Resources

Discover Manufacturing YouTube Channel

About Discover Manufacturing

<u>Comprehension Instructional Sequence Model (CIS) Lesson Plans</u> - Focusing on different aspects of manufacturing Ottawa County Students Celebrate National Manufacturing Week

STEM Learning YouTube Playlist - Hands-on activities for 4th-8th grade

Going PRO / A day in the life - See some of Michigan's most in-demand Professional Trades careers

BEFORE THE TOUR

Behavior

This is an incredible opportunity for students to interact and see first-hand what goes on inside a manufacturing facility. Manufacturers have graciously opened their workplaces to students, and we expect students will display professional behavior when representing their school.

Dress code

Please no hats or t-shirts with objectionable logos/graphics. Closed toed shoes are required.

Other preperations

- Connect with the employer! Build a relationship and plan together for your upcoming tour.
- Follow your school's timeline and required protocols for arranging field trips.
- Have your district's transportation phone number in case of transportation issues.
- Plan on an appropriate number of chaperones for the event.
- Discuss the following with your manufacturing company:
 - Communicate any specific concepts, curriculum, or STEM topics that you would like highlighted or addressed during the tour.
 - Discuss arrival times, departure times, point of contact cell phone (if available) and mode of transportation.
 - Confirm any special instructions for bus parking.
 - Share any student allergies.
 - Inquire about dress code, identification, behavior codes, and photo/video policies for the tour.
- Review expectations for student behavior and provide an overview of the event for students.
- Encourage the students to brainstorm meaningful questions on their own. A list of suggested questions is available in this packet. Follow your school's timeline and required protocols for arranging field trips.

DISCUSSION TOPICS TO PREPARE STUDENTS

Why are we participating in this Manufacturing Week event?

Discuss why exploration activities like Discover Manufacturing Week are important to their career development process. Emphasize that for most people, career development is an on-going process throughout their lives and not a one-time event. Introduce them to the LEAP career planning process at the end of this toolkit.

I know I don't want to work in manufacturing, so why should I care?

Speak to your students about how the local community and economy benefit from the manufacturing industry. In West Michigan, one in four jobs are in manufacturing, making it a key contributor to the state's economy. With an average of nearly 51,200 job openings expected annually, there is a high demand for skilled talent

What can I talk about with employers?

Whether or not they are currently interested in a career within manufacturing, urge students to keep an open mind and use the time to talk to employers about how/why they chose their career paths. Have students brainstorm questions they could ask employers at the event and encourage them to move beyond salary.

Sample list of meaningful questions to ask Manufacturers:

- 1. Why did you decide to pursue a career in this field?
- 2. What other jobs did you consider before deciding on this one?
- 3. What skills and education are required for your current position?
- 4. What do you like most about your job?
- 5. What do you like least about your job?
- 6. What is a typical day like?
- 7. What are your hours/days of work?
- 8. Do you work alone or on a team most often?
- 9. What can cause stress in this job?
- 10. What is your perception of the job outlook for this career field?
- 11. What are some of the surprises you have had in this job?
- 12. Were you employed in another profession before coming into this position? If so, why did you change professions?
- 13. What kind of training do companies like yours provide incoming employees? What skills are you expected to have learned beforehand?
- 14. What advice would you give to those considering this same career?

What companies will be featured?

Provide students with information on the employer(s) involved in your event. Have students generate some questions they would want to know about the company and/or provide examples. Tell students to investigate the company website in advance of the event. Assign groups to focus on different company characteristics:

- What is the focus of the business?
- What industries do they operate in?
- Is the company local or global in nature?
- Is the company privately or publicly held?
- What are some of open career positions the company is hiring for?
- What type of benefits does the company advertise?
- What type of positions does the company consider to be entry level roles?

AT THE TOUR

- Cell phone use is not permitted. Photographs are only by permission within any manufacturing facility. Ask first!
- Post your photos and videos on social media and tag @westmiworks or @west_michigan_works
- Send your photos and videos to ckelley@westmiworks.org
- Encourage students to engage with the manufacturer by asking those meaningful questions previously brainstormed. Manufactures want to engage your students!

AFTER THE TOUR

Gratitude

Manufacturers in West Michigan have spent many hours preparing for your students to visit! Please be sure to thank employers for their commitment so we can continue these partnerships for future students.

- Send a thank you note to manufacturers.
- Provide time for students to complete the event survey. This helps improve tours for future students and provides impactful feedback to manufacturers.
- Provide students time to complete the self-reflection worksheet.
- Encourage your senior students to apply for the Discover Manufacturing Week Scholarship
- Fill out an educator survey for a chance to win a \$50 Amazon gift card.

Self-reflection

After the event, have students reflect on what they learned at your Discover Manufacturing Week tour using the questions below. Have a discussion about the careers highlighted during the visit. Are there any surprising statistics? Which fields seem most interesting? Which careers were new to you? Encourage students to update or add information to their Educational Development Plan as appropriate.

1. Describe three things you learned about the manufacturing industry that you didn't know before:

2. What type of careers in manufacturing sound most interesting to you? Why?

3. What type of education or training do you need to get started in manufacturing?

4. Based on what you learned; what kinds of skills are needed to succeed in this industry? (e.g., math skills, public speaking, project management, etc.)

5. What are some of your next steps in career planning? (See the LEAP into Career Success handout for ideas)







LEARN about yourself

Understand your interests, values, skills, motivation, and personality.

What do I love to do? What is most important to me (your values)? What do I like to do in my free time? What skills and activities come naturally to me? What are my favorite/least favorite classes?

EXPLORE your options

Understand the career, education, and employment opportunities available to you.

What kinds of careers relate to my interests, values, and skills? What activities can help me learn more about careers that interest me? What education/training options are available for me? Who can help me get information about different careers? What trends in employment/the economy/industry should I be aware of?

ASSESS your "fit"

Assess your options and find the best match between you and your opportunities at this point in time.

What are the advantages and disadvantages of each option for me? What kind of lifestyle do I want in the future? What kind of education/training am I able or willing to pursue?

PLAN your next steps

Set short and long-term goals. Identify the steps you need to take to reach your goals and record them on your Educational Development Plan (EDP).

Which goals can I reach in the short-term (a year or less) and long-term (five years or less)? Which courses should I take to help me gain the proper skills, knowledge and training? What other kinds of experiences will help me move closer to my goals? Have I created, reviewed and/or updated my EDP to reflect my new learning and experiences?