

# Checklist for Success: Explore



- Find female facilitators or presenters.
- Train your role models and mentors on the following:
  - Positive STEM messages that motivate girls
  - How to dispel stereotypes and challenge misconceptions
  - Work values and how they impact the career decisions we make
  - How to message STEM to appeal to students' work values
  - That success is built through hard work and not simply innate ability
  - Types of information girls find interesting, such as hobbies and approaches to work/life balance
- Start early by implementing culturally relevant exploratory activities with students in elementary grades to show them the wide variety of opportunities.
- Select high school and college students with varying career interests as role models and activity leaders with younger students.
- Work with elementary and middle school teachers to integrate advanced manufacturing career examples into their curriculum and share the resources available through this project to make it easy for them to use.
- Build outreach activities from exposure with elementary students to skill development with middle school students so that by the time students reach high school, choosing to take a pre-engineering class or advanced manufacturing pathway is not such a foreign idea.
- Try a hands-on activity to excite kids about advanced manufacturing. Integrate this activity into your curriculum as a community service project for your students. Give them credit and make it important.
- Plan a field trip or a community service project. Take your high school or community college students to local elementary or middle schools and implement a lesson plan in concert with the teacher.
- Implement the strategies frequently - many times in a school year - to reinforce the understanding of the career field.
- Ideally, have female students tour advanced manufacturing facilities to experience the workplace firsthand.
- Look for local businesses that are participating in Manufacturing Day in October.
- Invite female students to tour AMT classrooms and experience some of the equipment required in the courses.
- Design events that do not have overly complicated tasks. The goal should be for girls to feel success, so they will gain interest and efficacy related to STEM.
- Build a pathway that is strategic and unified rather than a series of isolated events.
- Design activities that allow girls to see various jobs in advanced manufacturing. Avoid overemphasizing one type of job.
- Find opportunities to educate parents, teachers and other influencers about STEM and its role in advanced manufacturing, so they can dispel stereotypes and encourage their students who are capable and interested.
- Avoid talking-head presentations or "watch me" activities. Get kids involved in doing and learning, so they can find the joy in designing or making something.