



Title: Introduction Activity: Manufacturing Career Cluster

Grade: 6

Career Development Model:

Career Exploration

Nebraska Career Readiness Standards:

- Manages personal career development

Objective:

- Students will identify career opportunities and job titles within the Manufacturing career cluster.

Materials and Supplies Needed:

- Paper (any type)
- Any other materials you feel are useful when building a paper airplane
- Copies of "Manufacturing Roles" handout
- Optional: Copies of Manufacturing Cluster at a Glance for student reference and to aid discussion

Class Instructions:

Time: 30 - 40 minutes

1. Let the students know that, in a few moments, they'll all be taking on roles of jobs related to manufacturing.
2. Ask the students: Who has ever made a paper airplane?
3. Suggest that making that airplane required a fair bit of manufacturing on their part.
4. Break up the class into groups of six students per group.
5. Distribute the "Manufacturing Roles" handout and let the students complete the task.
6. Repeat the airplane manufacturing process as many times as desired.

7. Discuss the importance of each role to make a safe, reliable, quality product.

8. Continue to encourage exploration of Manufacturing careers. There are many opportunities in Nebraska for manufacturing jobs!

Credits/Sources:

Nebraska Career Education

Manufacturing Roles

Directions: Assign the following roles to the group members; each person should have a role. You must fulfill your role and cannot assist with any other role. You can only use supplies the teacher has approved to make the paper airplane.

Safety Coordinator

You are responsible for the safety of all workers. They must have a safe working environment with no hazards. You constantly monitor how the work is being done and talk with people to check if they have any safety concerns.

Freight and Material Mover

You are responsible for getting all the goods to the worksite. Anything needed must be brought by you.

Maintenance

After any test flights, you must retrieve the airplane and do any of the fixing/maintenance required.

Design Engineer

It is your job to decide the design for the project based on prior knowledge in this area. You do NOT assemble the airplane, but you work very closely with the assembly team to make sure they follow the parameters you've given them.

Assembler

You put together the airplane. You bring the plane from paper to the final product, adding any folds, tape, staples, etc.

Inspector

You inspect the quality of work being done by the group. You make sure everyone is fulfilling their role and NOT assisting with other parts of the task. If something is not up to your standards, you request the person to do it over again.