

Supply Chain Quality



Julie Buerman
Chemistry/AP Chemistry teacher at
Cedar Rapids Kennedy HS
2019 extern at Collins Aerospace

Part I: Overview of Workplace

Collins Aerospace is a world-wide corporation dedicated to improving all aspects of aerospace. They were a part of the first words ever spoken to the moon and developed the first ever GPS unit. (The first signal was actually sent from Cedar Rapids!) Collins Aerospace is currently involved in commercial, military and space programs across the world.

Part II: Workplace Focus

Supply Chain Quality (SCQ) looks at the quality of the suppliers providing customers with materials. Audit processes are completed to ensure materials obtained are quality materials and the supplier will be able to produce the material to meet the needs of the customer with an on time delivery.

Part III: Introduce the Problem

The company you work for would like to buy copper plated metal to use in the new product they are building. The metal needs to be coated well and be durable to stand up to many conditions including weather and temperature changes. Can you determine which supplier would be the best to buy the metal from?

Part IV: Background

In order to decide, students must be familiar with the electroplating process through research and completing an [Electroplating Lab](#). Once the lab is completed, students will collaborate to come up with a method to evaluate companies. The evaluation should include cost, reliability, risk (will the company be able to produce large orders, will their deliveries be on time) and overall quality of the product. A current SCQ Engineer will look at the evaluation to provide feedback.

Part V: Workplace Solution

The workplace solved the problem by visiting the companies and performing their own Quality Management Systems (QMS) audit. Many companies are working toward using a standard audit system for many processes called Nadcap.

Part VI: Educational Pathways

Most people in the SCQ department have an engineering degree of some kind. Some had a two year technical degree and used the Collins Aerospace Scholar program to have further degrees paid for while working.