

**Careers from A to Z:**

Quinn the Quality  
Control Engineer

# WHO IS QUINN?

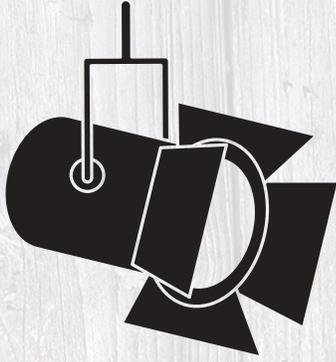


Hi, I'm Quinn! I am a **quality control engineer**. Quality control engineers make sure the products that are sold to people are good quality. When you buy a phone, you expect it to work. But what if the buttons are missing? It's my job to make sure that does not happen. Quality control engineers make sure products have all their pieces and work correctly. As a quality control engineer, I am in charge of inspecting products to see if anything needs to be fixed before a product is sold.

## WHAT IS A QUALITY CIRCLE?

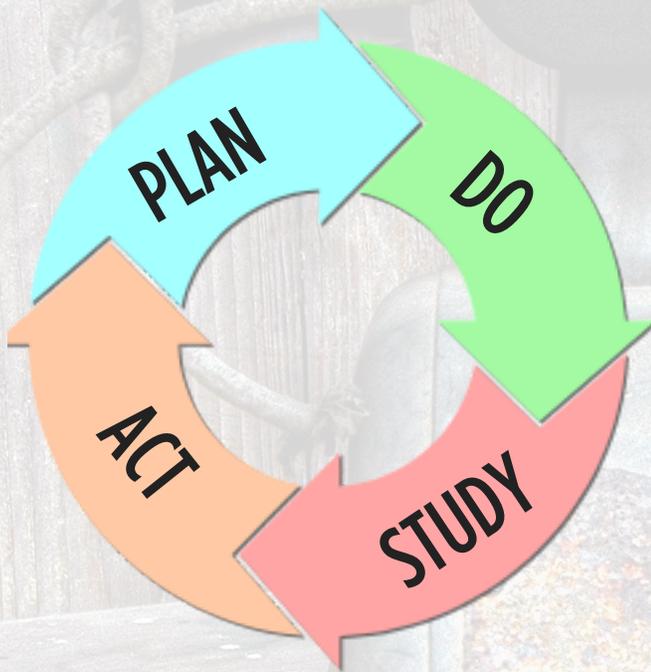
Quality circles are tools that businesses use to make sure products are the best they can be. Have you ever heard of the saying, "Two heads are better than one?" With a quality control circle, many people will work together to solve problems or come up with ideas. When you are doing math, you might work with a group in class to solve a problem. People at a toy company might work together in a quality circle to figure out how to package the toy so it doesn't break. Quality circles happen while products are being made. Instead of finding a mistake at the very end after all the work is done, people can now find and solve problems before the product is finished. This saves businesses time and money!





# Spotlight On: Walter Shewhart

Walter Shewhart was hired in 1918 to help engineers improve the quality of the telephone. He created a new tool called a quality control cycle. There are four main steps to the cycle:



- Plan: Find out what can be improved or changed.
- Do: Make the change.
- Study: Ask people their thoughts.
- Act: Make more changes if needed.

Here is an example of a quality control cycle:

**Problem:** People report getting sick from eating beef from a company called Newman Burger

- Plan: Determine what is making people sick.
- Do: Go to the factory where the burgers are made.
- Study: Watch how the burgers are made and see if the factory is clean and if the people wear gloves.
- Act: After seeing dirty water mixed with the hamburger, stop hamburger production and fix the leak.

# IT'S YOUR TURN

A company wants to improve a bike helmet they sell. Kids do not want to wear it because it pinches their ears and it does not look cool or fun. It's your job to create a quality control cycle that fixes the helmet so kids want to wear it.



**Plan:** How can we make this helmet more fun for kids? What can we add to make kids want to buy this helmet? Write your answers in 3 to 4 sentences.

**Do:** Draw your helmet with its new fun features. Label your drawing.

**Study:** Ask a friend to look over your ideas. Have a friend give 2 suggestions to make your design better. Write down your friend's suggestions below.

**Act:** Based on what your friend said, write any additional changes you plan to make. If you have time, build your design using art and building supplies in your classroom.