

The whole of science is nothing more than the refinement of thinking.

Albert Einstein,
American scientist

for sources of experimental error that might account for any surprising results.

Redesign Your Smart Sensor System

Come up with a new design for your smart sensor system based on your test data and the conclusions you've drawn from them. Determine what modifications you need to make to the original design, and repeat the process of building and testing your system.

Make Your Presentation and Critique Other Presentations

On the day of class presentations, your group will both make a presentation and respond to the presentations of other groups. Your class will function as the design evaluation panel, trying to find the best system to send to the legislature. Present your smart sensor system to the panel. Show the panel how it works and explain the design process your team followed. Each team will have five minutes for its initial presentation, followed by three minutes for class discussion and suggestions.

Talk About the Outcome of the Presentations

Reflect on the presentation process with your group. Discuss the suggestions you and your team made about the sensor systems and identify which you thought was the best project in the class. With your class, come to a consensus on the new sensor system to present to the state representative.

Draw Conclusions About What You Learned from the Design Process

Think over what you have learned about smart sensors through this process. Reflect on the various new applications you considered and those the class proposed. If you enjoyed this process, you might consider pursuing a career in materials science or engineering.