



What

The STEAM Basketball Challenge is a one period activity from the general Robotics program. Students were asked to practice their engineering design skills to construct a tower that could hold a basketball for at least 20 seconds using only masking tape and newspaper. In addition students were asked to make their tower as tall as possible whilst still ensuring their tower fulfilled all the set criteria.



Why

The aim of the STEAM Basketball Challenge was to give students an opportunity to practice problem solving skills in a collaborative environment. By taking risks, resilience was tested as the first few attempts were often unsuccessful. The challenge also helped students to practice their analytical thinking skills in a pressure task.

How

Students were asked to work in groups of two. After being given the brief, they had five minutes to discuss the problem with their partners and ask any questions to help clarify the problem and criteria. A five minute brainstorming session followed and then 25 minutes was allocated to the build. Groups were then asked to present their final design to the class. Each group was given the opportunity to outline the positives, problems and possible improvement's in both construction and design of their towers.