## Lesson 5 – It's OK to fail

Have the students work in groups to build a tower using only paper that is over one yard tall. They can tear, fold, and manipulate the paper and way they choose but it must be a free standing tower.

Supplies: 30 pieces of paper, yardstick for measurement

Give them 5 minutes to try this. Then stop them and measure their towers.

Now repeat the activity, giving them 30 new pieces of paper. Only this time, give them 2 minutes to plan without touching any of the paper. Then provide 5 minutes to build. Stop them and measure. A majority of groups should have taller towers.

- Discussion questions for reflection:
- Why do you think you failed?
- Do you think you could have done something different to be successful in this task?
- How do you feel when you fail?
- Does failing ever make you want to try harder?
- Are there other people who make you feel it isn't OK to fail?
- Where do you have your greatest fear of failure?
- If your tower was taller the second time, why do you think this is?
- What was different from the first time you built the tower to the second?

## The story of Thomas Edison

Thomas Edison is the acknowledged inventor of the light bulb. If you don't know how a light bulb works, electricity is funneled through a filament which as a result glows. This is what produces the light. However, Edison had great difficulty finding the proper filament that either didn't burn up or that glowed brightly enough. He began his research with the platinum group of metals. Eventually he experimented with carbon, trying cotton threads, different sorts of paper and cardboard. Eventually he discovered that the best filament was carbonized bamboo. When asked if he was frustrated at having such failure, he was quoted as saying "I have not failed. I've just found 10,000 ways that don't work."

Failure quotes

"I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed." Michael Jordan

"Failure is simply the opportunity to begin again, this time more intelligently." Henry Ford

"Success consists of going from failure to failure without losing enthusiasm." Winston Churchill

"There is a silly notion that failure's not an option at NASA. Failure is an option. If things are not failing, you are not innovating enough." Elon Musk

"Only those who dare to fail greatly can achieve greatly." Robert Kennedy

Discussion Question: Is there ever a time when failure is a good thing?