

ENTREPRENEURIAL THINKING

Activity - Fail your way to success challenge! “Tri” it if you dare!

Activity overview

Failure is an intrinsic part of life. Only by failing and learning from that can we move forward.

Did you know it took Thomas Edison over 1000 attempts to invent the lightbulb?

Have you ever set out to achieve what seems impossible?

In this activity students work in teams to complete a simple task and through a series of iterative rounds move towards a target that at first may seem unachievable.

Through a sequence of Plan, Do, Study, Act, students decipher why they failed to achieve the target and devise strategies to have another go, and another, applying their learnings and working their way to success.

Design Thinking Model – Focus

All stages – “Failures” can occur at any stage throughout the design process; develop the mindset to embrace these as learning opportunities drawing upon other entrepreneurial mindsets such as persistence, optimism and adaptability.

Materials

- ▶ A4 sheets white paper
- ▶ A4 sheets coloured paper
- ▶ 1 x ruler per team
- ▶ 1 x pencil per team
- ▶ Timer
- ▶ Scoresheet

Preparation

Prepare a score sheet/table with each team name down the left-hand side and enough space.





to record 3-5 scores. Make sure the teams can see the score sheet / whiteboard.

Example:

Team Name	Round 1 Score	Round 2 Score	Round 3 Score	Round 4 Score etc

STEEM Activity Sequence

Get students into teams of 3-4 and provide each team with 1 pencil, 1 ruler and approx. 6 sheets of both white and coloured paper. White paper is for drafts, coloured paper is for timed rounds.

Set the challenge!

Tell student teams that they must draw as many triangles as possible on one sheet of A4 paper in 1 minute.

Explain the rule that each person must draw only one line per turn using the pencil and ruler, before passing it on to the next person in the team to do the same. Lines can only be drawn using the ruler.

Teacher Tips:

Ensure the rules are adhered to. Build excitement and a competitive environment between teams to achieve as many triangles as possible. The timing is critical, consider using a visual countdown timer or call out the last 10 seconds.

When counting triangles at the end of each round, it may be necessary to be the triangle “auditor” to ensure fairness and remind students that triangles only have 3 sides!

Activity rules

Lines can only be drawn using the ruler.

Only one line can be drawn per person per turn.

Triangles must have 3 completed joined up sides.

Provocations: question to pose before starting the STEEM challenge

Ask students how many triangles they think their team can draw in 1 minute.

Set the bar high; challenge them by suggesting they can at least double/triple that number.





STEEM Task

Round 1

1. Set the timer for **1 minute** and instruct the student teams to get started straight away.
2. At the end of the time students count up the triangles they have created. Record these to the scoreboard, noting how close or otherwise they were to their initial estimations.
3. Tell the students whether they have achieved their own target or not, that it has been proven by NASA scientists that it is possible to achieve a great deal more! (eg 300 triangles). Let students know that they have FAILED, and more is possible.

Round 2

4. Challenge the teams to have another go but let them know that this time they will have **1 minute** to STUDY their previous approach and PLAN for the next round. Encourage them to draft and prototype their approach on the white paper before resetting the timer for **1 minute** where they put their planning into action on the coloured paper.
5. Repeat for subsequent rounds as desired, each with **1 minute planning and 1 minute execution**, increasing the target where required and challenging students to apply their creativity to achieve more.

Reflection questions

- Did your plans go to plan?
- How did it feel to be told you failed/didn't achieve your target at Round 1? How did the planning and prototyping help move you closer to the target?
- What were some of the learnings after each round which moved you towards the goal? (or not?)
- What did you learn about yourself and your teammates during this activity? Did any leaders emerge? How was the teamwork?
- Is failing final?
- What other entrepreneurial mindsets did you draw upon during this activity?

STEEM Team Tips – growing great STEEM GALS teams.

This activity highlights the importance of studying and really understanding the causes when something has not gone as planned. Learning from the “failure” and applying new thinking to achieve a better result next time is what sets us up for success.

Frequent “review” sessions where the teams can reflect on their work so far, identify anything that hasn't worked as well as expected and devise a new plan based on their learnings is recommended for successful projects.

Don't be afraid to use the word Fail, and couple it with the opportunity to Learn. Afterall, FAIL = First Attempt In Learning.

Encourage students to explore well known products and inventions that have been created from “failures”.

