

Marshmallow Challenge

Overview

There are many versions of the Marshmallow Challenge available online, but this version is based on the original challenge developed by Peter Skillman. The briefing notes and reflection materials have been enhanced to develop further learning around effective team working.

The Marshmallow Challenge is often used to illustrate design thinking mindsets, such as prototyping and iteration, and the importance of 'failing' quickly or to make generalised points on effective teams. However, if the person running the session takes a facilitative approach then the challenge can also be used to take a deeper look at individual behaviours, and help participants discover what it is about their specific behaviours that helps and hinders effective team working.

Time	Level	Participants per team	Materials required per team	Materials required for the facilitator	Space per team
Intro: 10 min Task: 20 min Review: 30 min Total: 60 min	Intro	3 – 4	1 marshmallow 20 sticks of spaghetti 1 metre of string 1 metre of sticky tape Scissors Review sheets and pens (1 per team member)	PowerPoint Briefing Tape measure	Each team needs a small work-table

Discussion topics

- + Basic team processes including ideation, building consensus and agreeing objectives
- + The benefits of rapid prototyping and iteration
- + The importance of failing quickly, failing well
- + Appreciating and utilising individual differences

Preparation

Set each table so that they contain all the materials needed for each team. Place the review sheets face down.

Allocate teams, it's usually a good idea if the teams are arranged so they are composed of individuals with a range of interpersonal styles. This typically leads to a richer team dynamic, and more insightful review.

Briefing

Use the PowerPoint deck to brief the teams.

Top tips:

- + Just read the brief out, don't elaborate.
- + It's tempting to end the briefing by saying 'any questions?' Instead keep the energy high and start the activity immediately.
- + Use competition wisely. Setting teams in competition with each other can motivate, but it can make participants focus too much on task (i.e. making a tower), instead of thinking about how they worked as a team. Also move the focus from the most important part of the task, which is the team process to the task
- + Be careful not to sub-consciously manipulate team behaviour. It's usually most useful to review natural, emergent behaviour. Examples of introductions that might manipulate behaviour include: 'don't forget to involve everyone' or 'we're going to do a task where planning is important'

During the Task

Less is more. Ensure participants follow the rules but:

- + Avoid answering questions about the nature of the task. Repeating the brief is often the best approach. Working through any ambiguity is a useful exercise for the groups
- + If participants are struggling with the task these questions can help groups improve their team process:
 - How do you think you are working as a team?
 - What is your vision for the completed structure?
 - What is your objective?
 - What is your plan?
 - What is a realistic target?
 - How could the team improve its performance?

After the Task

If you are using the Marshmallow Challenge to build an understanding of effective team skills, then you can help participants make the transition between thinking about the task (building the structure) and thinking about the individual and team processes.

- + Measure the towers. A quick plenary discussion about successful design features may give participants 'closure' on the task and help them focus on the processes
- + Move participants away from the towers, either onto clear desks or into a different room. Again, this helps move focus away from the structures
- + Give participants a review sheet to complete individually
- + Get participants to discuss the answers to the review sheets in their teams. It may be appropriate to get teams to flipchart their key learning points
- + Pull out the key messages from each group

Target Learning Opportunities

The table below outlines the primary learning opportunities from the Marshmallow Challenge, and is based on [MTa's model of human behaviour](#).

Primary Learning Opportunities:	
Core Behaviours <ul style="list-style-type: none"> + Asking for help + Expressing self + Listening + Observing 	Complex Attributes <ul style="list-style-type: none"> + Builds on ideas + Problem resolution (solving) + Reviews progress Complex Behaviours <ul style="list-style-type: none"> + Takes calculated risks