



# PLTW Engineering

# **12/Brainstorming**

April 9, 2020



12/EDD

Lesson: **4/9/2020**

**Objective/Learning Target: Students will be able to effectively use brainstorming techniques**



# Brainstorming

By definition, brainstorming is a process used to generate ideas or solutions to problems by collecting ideas from a group of people. The ideas or solutions don't need to be possible at the time of the brainstorming session.



## Rules for Brainstorming

The session should be a set length of time.

The group members should be free to say anything

Group members should scaffold or “piggyback” off others ideas

Quantity of ideas are more important that quality of ideas

There should be NO CRITISISM of one another’s ideas

## Rules for Brainstorming: Time

A set length of time should be established for each brainstorming session.

Different aspects of a problem can be broken into shorter sessions of a larger session.





## Rules for Brainstorming: Free-for-all

Often times the most crazy ideas can lead to a more obtainable one wherein lies the solution to the problem

Even the most outrageous, humorous, and seemingly unimportant ideas should be recorded.

Let everyone feel free to say whatever pops into their brain



## Rules for Brainstorming: Scaffolding

Group members should be encouraged to expand, imitate, and build on other ideas that are presented.

Piggybacking and piling on many times can lead to new ideas that were unrelated to the original statement.

The key is to record each idea as they are presented so that if need be backtracking can occur in the event an idea gets off track.



## Rules for Brainstorming: Quantity is king

Sometimes peoples best ideas come at the end of the session when they have exhausted all the ideas they brought with them but after draining their brain while listening to others, the most creative ideas will surface.

Therefore, the more ideas, the more likely those ideas at the end of the session will be of the best quality.





## Rules for Brainstorming: NO CRITISISM

Allow all team members to speak.

Make sure everyone feels safe by regulating crisis

It is human nature to evaluate ideas as they are presented. The key is to keep the judgements to yourself and encourage rather than discourage participation.



## Helpful Links

[Creative Brainstorming Session Ideas](#)

[Projectmanager.com Ideas for Brainstorming](#)