The Design Process

Identified problem or question...

Brain dump

Empathise

...but if it doesn't work, don't be afraid to toss it out and return to another idea from the ideate stage!

Ideate

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List all ideas

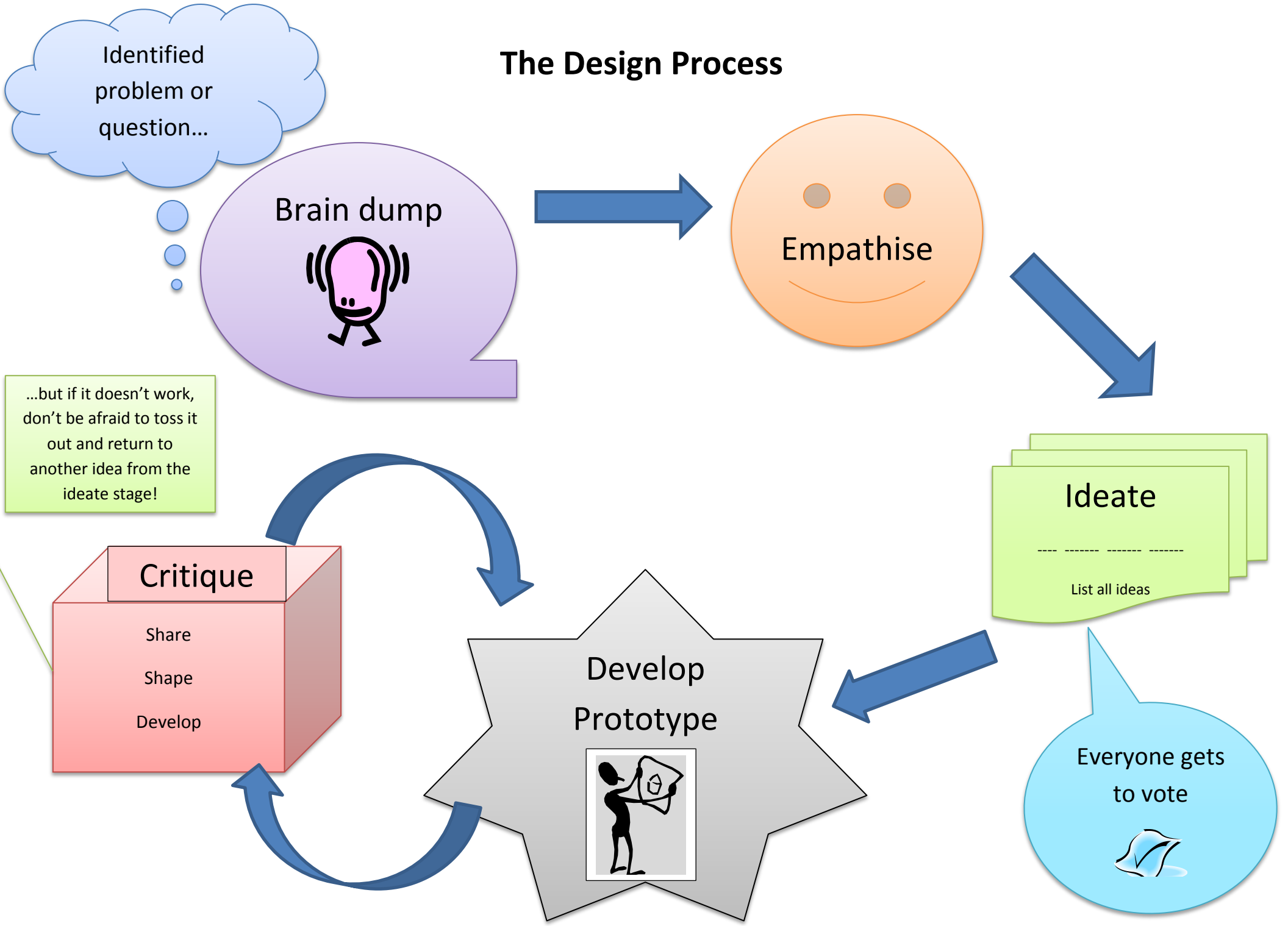Critique

Share

Shape

Develop

Develop Prototype

Everyone gets to vote

The Design Process

Step-by-step

The Design Process in our educational setting, is an active, collaborative exercise and can be used in a variety of ways. To begin, your team needs to have a clearly articulated question relating to an innovative idea or a problem you wish to solve.

The process needs to have a facilitator and an observer. The process works best when the team can visualise the thinking process, so materials such as large sheets of paper, post-it notes and textas are useful. Each step of the process should be recorded on large sheets of paper so that the team can see the collective development of the thinking. The easiest way to keep a record of the process is to photograph the recorded thoughts at each stage on an electronic device.

1) Brain Dump

On large sheets of paper, all members of the team record any thoughts that they have about the question or issue (this can be done with each member having a small post-it note pad to record their thoughts). There are no limitations to what can be recorded. At this stage, the team are not trying to offer solutions, rather, it is a gathering of thoughts, possible resources or references that may be helpful later. It may be random thoughts, research ideas, articles, references, websites…There are no "wrong ideas". During this step, observer looks for key themes that are emerging and begins to collate responses as such.

2) Empathise

This is a very important step in the process. This is where the team empathises with the "end-user". It works best if your team actually draws a stick figure and describes the type of person including their context, attitudes, beliefs, values, motivations and frustrations. There could be more than one end-user but it is best to limit this step to a maximum of three. The end-user could be staff, student, parent or it could be a type of student, a type of teacher etc. The facilitator and observer assist in developing the detail and depth to the characteristics of the end-user.

3) Ideate

This step is essentially a more focused and targeted version of the brain dump. It is where the team begin to formulate and list ideas that could be used to resolve the issue or address the key question. Again, ideas are listed on large sheets of paper and there are no "wrong ideas". (The large sheets of paper are helpful for the voting process which follows). All team members should feel free to record their ideas, no matter how unusual.

4) The Vote

The voting process allows the distilling of the most viable ideas. Each team member gets three votes (or three ticks next to ideas listed on large sheets of paper). The idea that receives the most votes is taken through to the next stage. It is important not to discard the list of ideas that are not being taken forward to prototyping. These ideas may still be valid and can be used at another time. The facilitator and observer need to address any conflicts of opinion or disagreements by asking appropriate questions which assist the team to come to a decision.

5) Develop Prototype

The agreed upon idea is developed further. The actual details of the solution are mapped out down to actual steps for implementation, time frames for implementation, names of people responsible for certain actions etc. It is important to refer back to the identified end-user throughout this process.

6) Critique

The action plan is tested through sharing with others, tested against the end-user identified in the empathising step. The plan is shaped, tweaked and refined to ensure successful implementation.

N.B.

- It is important to note that after critiquing the plan, the team may recognise that the plan that they have developed is not going to work at this stage. This is where you can return to the other ideas listed at the ideate stage and develop a prototype around another idea which may be a more effective solution.

- If you are planning to implement this process with a group larger than 6- 8 people, it is worthwhile to split the group into two and have them develop two prototypes around the same idea. They would then come together and have the opportunity to justify their thinking in order to amalgamate the ideas into a single prototype/plan.

  Alternatively, the two groups could develop prototypes for two DIFFERENT ideas. Both may be viable and could be implemented concurrently.

A note about timing…

- It is possible to go through the design process in a two hour professional learning session, however, the process could take place over an extended period. What is most important is that the team feels that each step of the process is completed before moving on to the next. This can take various amounts of time. Despite this, it may be helpful to place time limits on each step to move the process on in a timely fashion.