BIG IDEAS

What is the challenge we will solve and what is our "Big Idea"

1. Once your team understands the basic necessities of the central challenge then theoretically the next step is to develop a plethora of possibilities. The team's task is to have plenty of alternatives, so many in fact, that among them is the mathematical likelihood of finding the ideas they need, want and love!

2. The solution concept must be plausible, powerful and useful. Novelty is not enough. The solution concept must be truly original. A by-product of plentiful ideas is that the usable ideas show you where the solution does not lie. They narrow the possibilities. Criteria to use for evaluating solutions include cost, creativity, availability of materials, ease or difficulty, humor, how much the team knows, artistic value time required, uniqueness, originality, audience or Appraiser appeal.

How Does A Team Get ideas?

- Think Tank – brainstorming and recording as free-flowing idea generation – no blocks or filters.
- Collecting – have each team member keep a notebook and record ideas as they occur during the day, prior to sleep, upon waking, etc. Bring them to the meeting and share – keep one big notebook of all ideas.
- Questioning – both the team and the team manager should ask lots of open-ended questions to add ideas. There is a page in this manual on Questioning.
- Raw Data Research – Interview experts in the field, search the Internet, go on a field trip, go to the library.
- Idea Generation – require each team member to come up with 10 – 20 ideas independently then combine, evaluate, reduce the ideas for use as a team.
- Start A BIG BOX – containing idea starts, clippings, articles, drawings or design attempts, great lines to add to a script later, etc.
- Set aside time for thinking – perhaps in different areas of the room so that they can think without distraction. Sometimes this is very helpful after a wild, free-for-all brainstorming session but before questioning or evaluating as a group.

Performance Challenges –

- Keep in mind that the Appraisers and audience will have only one brief opportunity (8 minutes or less) to understand your performance, skit and storyline. Every word, movement, and prop must be crystal clear to them.
- Do research **after** you do some initial brainstorming on theme, concept or direction.
- Brainstorm through LOTS and LOTS of theme ideas until one is really THE ONE. Then adapt, enhance and embellish that. Don't write a script until everyone is sure of the overall theme or storyline and has done plenty of "playing" with it. Only then does it make sense to start narrowing down and distilling into an actual script or performance.
- Write many mini-scripts or stories then choose one and integrate the best ideas or characters from the others.
- Flesh it out with dialog – try characters on and improvise with them before writing an actual script – (hint – set up a videocam and let the kids go – later you and they can evaluate ideas rather than losing spontaneity by writing as they go)

- Research is an important step in refining ideas – make your concept or theme decisions early on and then reinforce with research.
- Don't be afraid to take risks – add, delete and revise the script as needed.
- Make sure that your side trip requirements fit into your theme/concept (or vice versa). The side trips are to enhance and embellish your story.
- If your challenge has a technical side trip or element – look at the kinds of considerations you need to take into account below (technical challenges section)
- Props, costumes, set should all highlight the essence of your theme or concept and your script - not be a distraction from it.
- Have team members practice the performance until it flows and becomes a smooth interaction between materials and performers.

Technical Challenges –

- Don't shy away from a technical challenge just because you or your team don't know how to do it. Get books, watch videos, go look at real life examples, talk to some expert for general knowledge, check the Internet, and learn some building skills!
  opportunity to learn something new!
- First Question – How many ways or methods can we dream up to solve the problem? Pose these as questions.
- Turn these questions into statements and they become hypotheses. Which ones are most likely to work, and why? Experiment with several.
- Take into account the kinds of tasks or obstacles the challenge requires.
- List variables such as speed, accuracy, strength, flexibility, weight considerations, size and accessibility of materials.
- Design, draw, build models and test them. Make adjustments or throw out unworkable ideas.
- Brainstorm as above (notes about performance challenges) to come up with a unique theme, concept or storyline.
- Flesh it out to highlight the tasks.
- Put razzle-dazzle on it like icing on the cake as you near competition date – WOW those Appraisers and your audience.