



CREATIVE THINKING PRACTICES

Presenter: Aminat Ahmadu Abubakar

Venue: Stratford University, Falls Church, VA

Agenda

Agenda 1

Introduction

- Workshop Overview

Icebreaker

- Manage Resources: Four Triangles Exercise

The Innovation Test

Critical Thinking vs. Creative Thinking

Break

Discuss – PowerPoint Slides (1)

- Ask
- Learn

Video (1) - Six Creative Ways to Brainstorm Ideas

Group Exercise (1)

Discuss – PowerPoint Slides (2)

- Look
- Play

Video (2) - Where Good Ideas Come From

Group Exercise (2)

Agenda 2

Break

Discuss – PowerPoint Slides (3)

- Think
- Fuse

Video (3) - Creating Spaces for Creativity

Group Exercise (3)

Discuss – PowerPoint Slides (4)

- Choose
- Make
- Group Exercise (4)

Video (4) - How Creative Are You?

Value of Creativity in the Workplace

Q & A, Evaluation

Close of Workshop



Introduction

The goal of this workshop is to focus on creative thinking techniques to build on creative and innovative thinking skills through practice. Creative thinking is a way of looking at problems or situations from a fresh perspective to innovation, problem-solving and managing change that put forward unconventional solutions.

Practicing creativity can help organizations solve problems, increase productivity, creates a very collaborative environment, motivates and retain talents. It opens the door to new business opportunities.

Workshop Topics Overview

1. Ask
2. Learn
3. Look
4. Play
5. Think
6. Fuse
7. Choose
8. Make
9. Value of Creativity in the Workplace

Introduction – Cont'd

Workshop learning objectives

1. Describe the importance of creative thinking techniques in the discovery phase of problem solving.
2. Apply creative techniques tools to generate, manage, and implement creative ideas through practice.
3. Differentiate between existing process to problem-solving and new thinking patterns.
4. Compare the differences between creative thinking and critical thinking to finding creative and innovative solutions.
5. Formulate steps to foster creativity in the workplace.



Introduction – Cont'd

Workshop Activities

1. Icebreaker
2. Topics Discussion
3. Group Exercises
4. Refresher Break
5. Watch Video
6. Questions and Answers
7. Evaluation Form
8. Workshop Wraps Up

Workshop Tools

1. Paper
2. Sticky Notes
3. Pencils
4. Marker
5. Scotch tape
6. Toothpicks
7. Marshmallows

Icebreaker - Manage Resources: Four Triangles Exercise

This activity promotes thinking out of the box and utilizing current limited resources to the maximum. It enhances the importance of problem solving skills, creativity, and innovation.

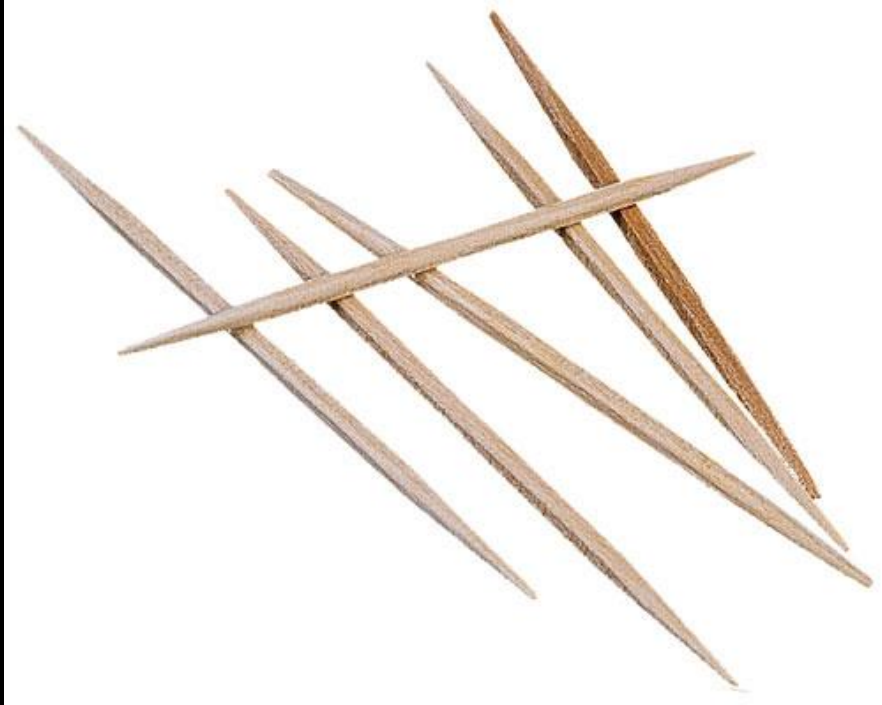
Materials

Marshmallows

Toothpicks

Task

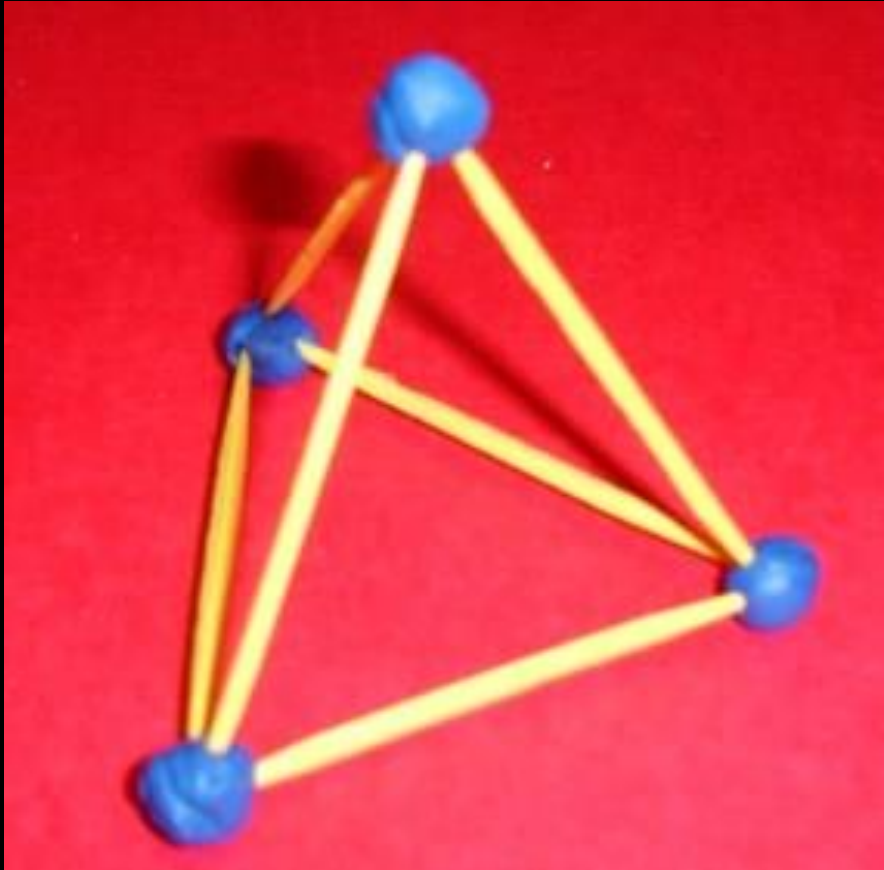
1. Create four triangles with the toothpicks and marshmallows that touch each other.
2. Only six toothpicks allowed per participant.
3. Think out-of-the-box.



Manage Resources: Four Triangles Exercise - Cont'd

Solution

Use the marshmallows as connectors and arrange the six matches into a tetrahedron with a triangular base.



The Innovation Test

Before the workshop starts, let us check your innovation level by trying to answer the following question about your organization.

Question	Strongly disagree	Moderately disagree	Moderately agree	Strongly agree
Score	1	2	3	4
1. Everyone understands the overall goals and direction of the organization				
2. Fresh ideas are encouraged and tried out				
3. We often have brainstorming or other creative workshops				
4. People are trained in creativity and innovation				
5. People are praised and rewarded for being creative				
6. We deliberately copy and adapt good ideas from outside our field				
7. We appoint teams from different department to solve specific problems				
8. When we are looking to solve a problem we generate a lot of ideas before choosing one or two to try				
9. We often build prototypes or pilots to test a new idea rapidly before a production version				

The Innovation Test – Cont'd

Before the workshop starts, let us check your innovation level by trying to answer the following question about your organization.

Question	Strongly disagree	Moderately disagree	Moderately agree	Strongly agree
Score	1	2	3	4
10. To solve a problem in one department we would call for ideas and help from other departments				
11. We identify current products and processes that are due for retirement and replacement				
12. We set goals for innovation, including the introduction of new products and processes				
13. We have a 'not invented here' attitude to ideas from outside				
14. People are scared to take too many risks for fear of failure				
15. The boss's ideas carry the greatest weight				
16. We are too busy fixing today's problems to spend much time thinking about the future				
17. New ideas stand little chance of being carried out if they are not in the budget				

The Innovation Test – Cont'd



How to calculate:

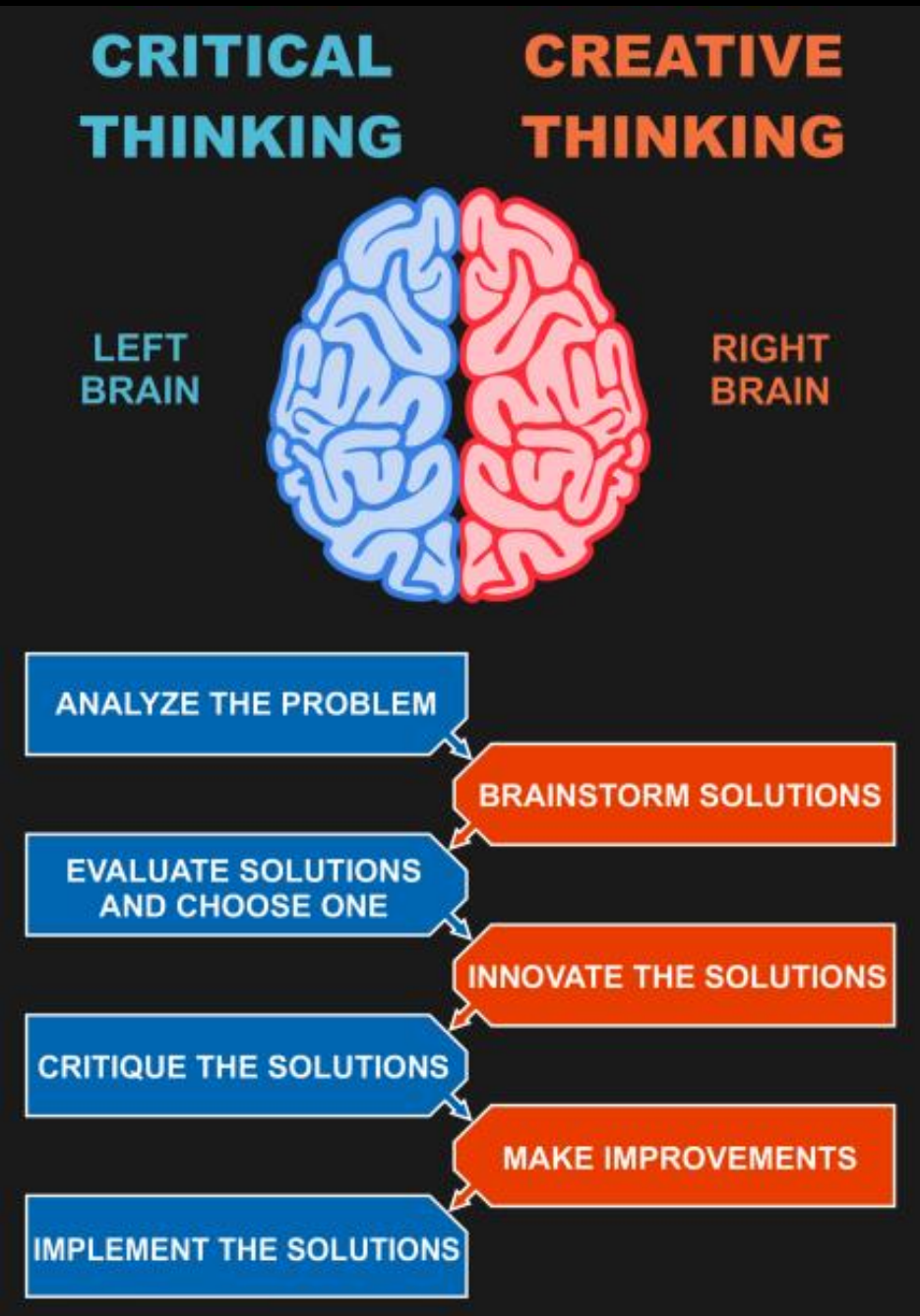
1. First twelve questions equals positive scores.
2. Last five questions equals negative scores.
3. Calculate question 1 to 12, subtract the score from 13 to 17.
4. The grand total is your innovation index score.

Interpreting results:

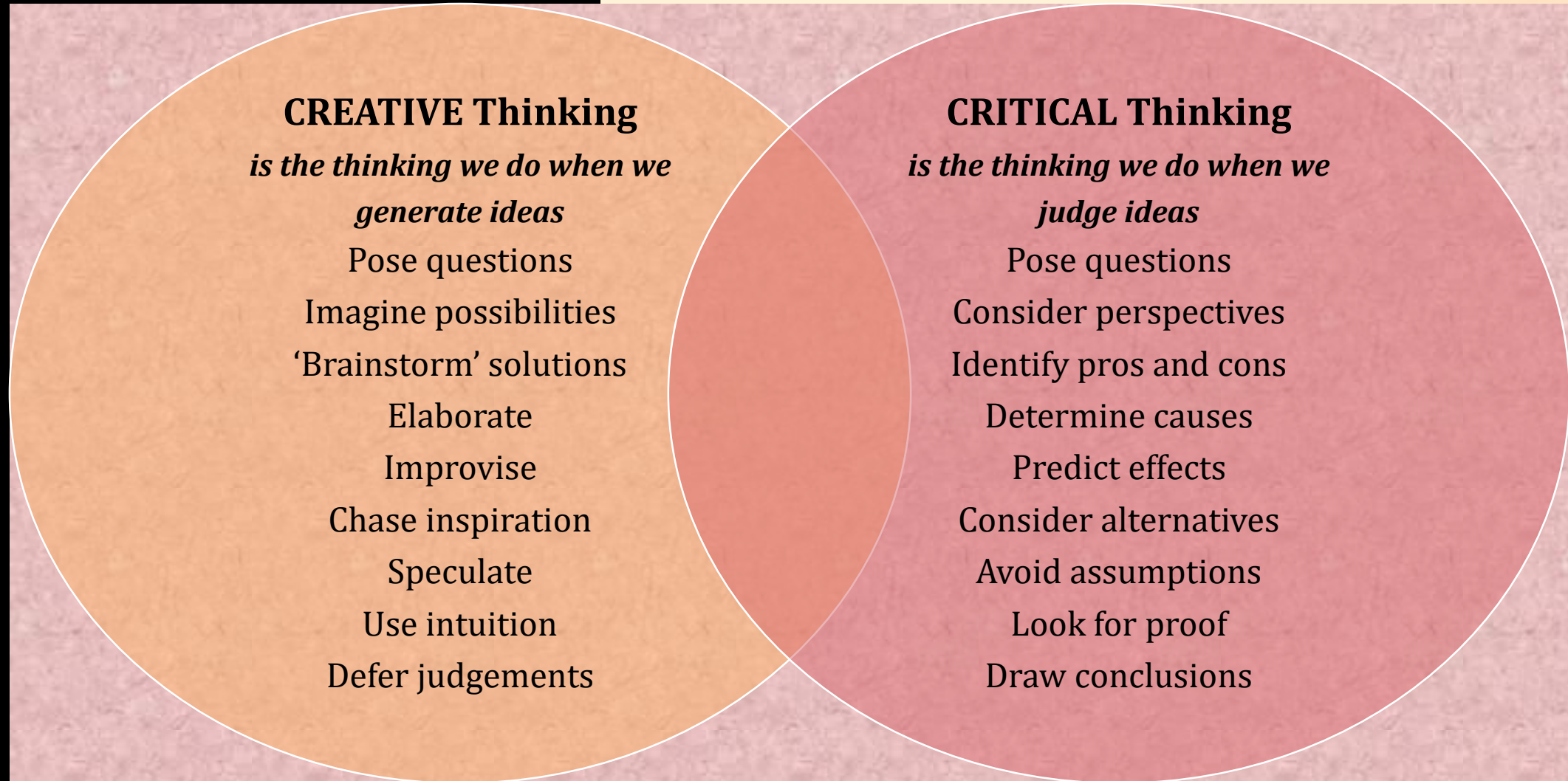
1. **Over 33:** You are working in a very enlightened organization where innovation and communication levels are high.
2. **25 to 32:** There is a good atmosphere for innovation and new ideas are welcomed but there is still scope for improvement.
3. **18 to 24:** You are a little better than average but there is a long way to go to reach the innovation levels of the best organizations.
4. **11 to 17:** You are below average and need to work on improving your climate for innovation and creative problem solving.
5. **5 to 10:** Significant barriers exist to your organization coping with change or adapting to new conditions. This could be dangerous and needs a major program to address it.

Critical Thinking vs. Creative Thinking

- Creative thinking is a way of looking at problems or situations from a fresh perspective to conceive of something new or original.
- Critical thinking is the logical, sequential disciplined process of rationalizing, analyzing, evaluating, and interpreting information to make informed judgments and/or decisions.



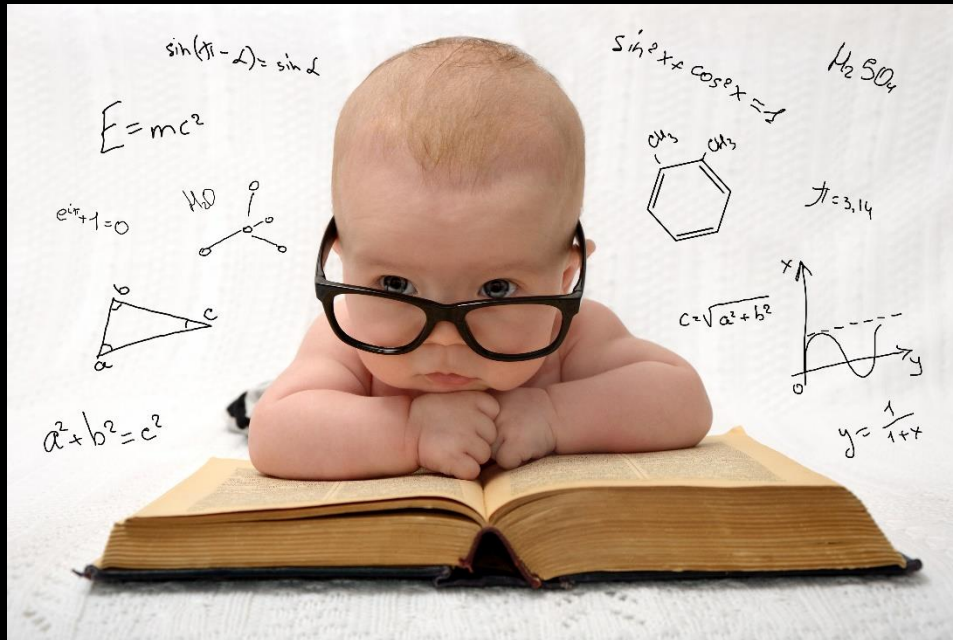
Creative Thinking vs. Critical Thinking – Cont'd



5 Minutes Break

Pause





Discuss – PowerPoint Slides (1)

ASK - How the right questions lead to the most novel ideas. 3 practices leads to successful creativity.

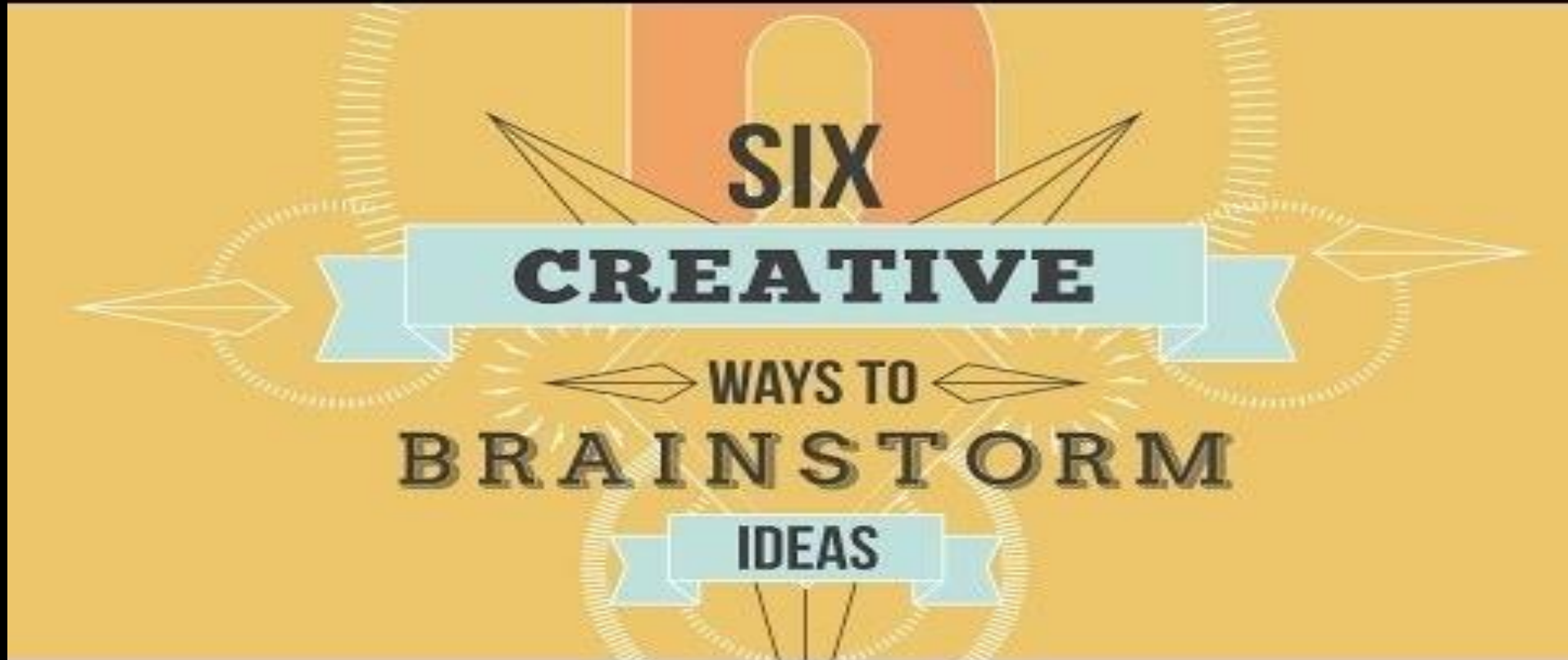
1. Find the Question
2. Search the Space
3. Transform the Problem

LEARN - Being an expert in knowing what has come before, what had been tried before, and what has and has not work. Leads to searching for good problems, and seeking new inspiration.

4 process trains to master the art of learning.

1. Practice Deliberately
2. Master Your Domain
3. Learn Forever
4. Balance Specialty with Generality

Video (1): Six Creative Ways to Brainstorm Ideas



INSTRUCTION:

1. Select three numbers at random, between one and fifteen.
2. Choose a number between one and eight.
3. Write all four numbers on a sheet of paper.
4. Use the first three numbers to identify three shapes from the numbered display shapes.
5. Assemble the three shapes in any way into an interesting, potentially useful object, and sketch it.
6. (Note – you cannot deform any of the shapes with the exception of the wire (6), and the tube (7).
7. Take the fourth number (1 – 8), and pick a category from the list below:
 - Furniture
 - Personal items
 - Transportation
 - Scientific instruments
 - Appliances
 - Tools and utensils
 - Weapons
 - Toys and games
 - Take the design and rethink it to fit into the category your selected.

8. Group feedback on the exercise.

Group Exercise (1)

Reinterpret - This technique helps in changing the context of a product/service/process into new inventions.

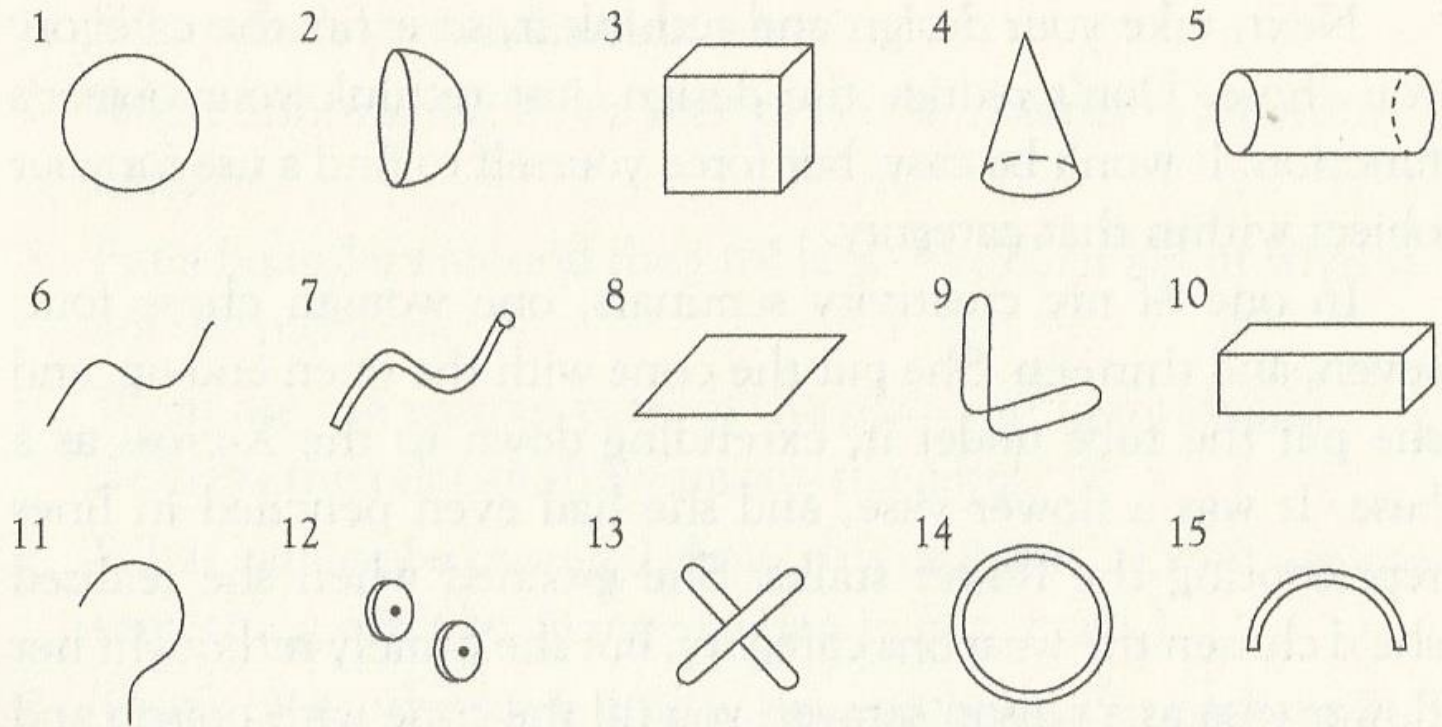


Figure reprinted by permission of L. Erlbaum Associates



Discuss – PowerPoint Slides (2)

LOOK – How to be aware of the answers all around you. Seeing the same thing in a new way. Develop awareness and mindfulness in a way into perceiving the world differently.

3 practices of to enhance Looking:

1. Use Fresh Eyes
2. Grab New Sights and Cool Sounds
3. Render It Visible

PLAY – Create space in your schedule, provides the unconscious mind an opportunity to suggest ideas and solutions.

4 practices boost mastery in art of Play:

1. Visualize
2. Relax
3. Find the Right Box
4. Be a Beginner

Video (2) - Where Good Ideas Come From





Group Exercise (2)

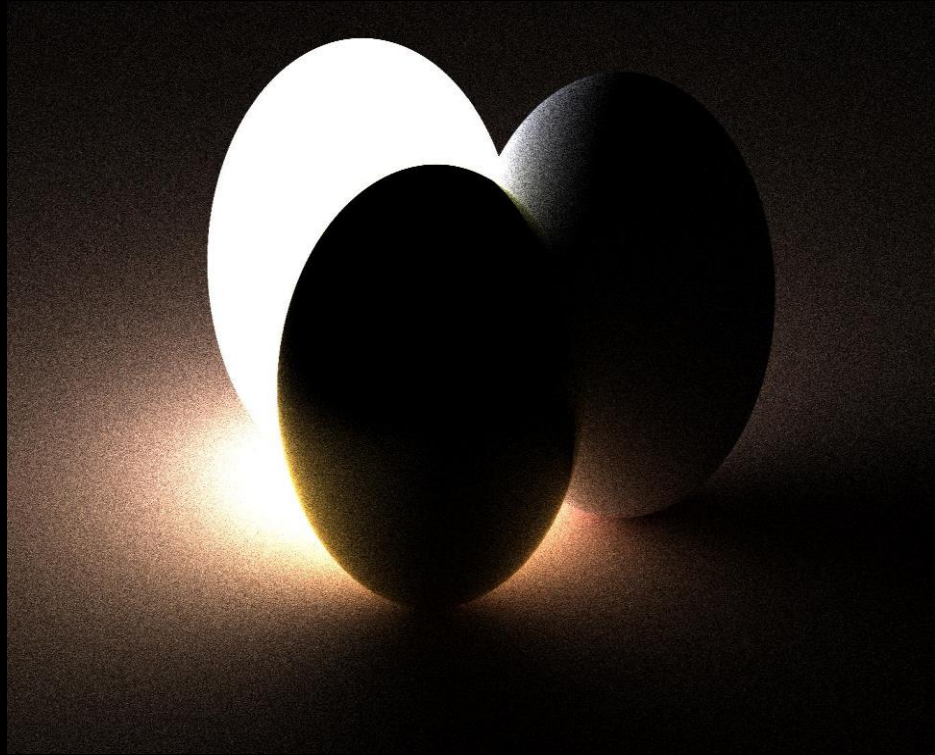
Professor Richard Wiseman's Find the Photographs Newspaper Experiment. (Lucky People and Unlucky People experience, the ability to be awareness of the things and answers all around you).

1. Get newspapers, insert on the second page a printed instruction "Stop counting --- there are ... photographs in this newspaper" in a very large type that took up half the page.
2. Provide participants with the newspapers.
3. Ask them to look through the paper and write down how many photographs were inside.
4. Group feedback on the exercise.



It's Time For A Break





Discuss – PowerPoint Slides (3)

THINK – Creative life is filled with lots of small ideas that builds into great ideas.

Three practices of thinking are:

1. Ideate
2. Transform
3. Schedule

FUSE – Combining unrelated ideas leads to great creativity.

Three practices of fusing are:

1. Force Fuse
2. Make Analogies
3. Do a People Mash-Up

Video (3) - Creating Spaces for Creativity



<https://www.youtube.com/watch?v=a92vFfLmP5A>



Group Exercise (3)

Practice Thinking technique – Ideate. This is called divergent thinking due to the exploration of wide range of ideas.

1. Look around and select an object in your mind
2. List as many unusual uses for the selected object
3. (For example, a brick can be a doorstop, a paperweight, a weapon, a pedestal, hammer etc.)
4. Write down the ideas as quickly as possible, do not ponder
5. Look at your list of unusual uses. Do you see fluency, originality, and flexibility?



Discuss – PowerPoint Slides (4)

CHOOSE – How to pick the best ideas and then make them even better.

Four practices of Choosing are:

1. Know What You are Looking For
2. Host an idea Competitions
3. Look Past the Good
4. Edit, Revise, Improve

MAKE – Helps to refine your idea, often leads to new questions, new ideas, and new fusions of ideas.

Five practices of Making are:

1. Draw It
2. See It
3. Build It
4. Make It Concrete
5. Reflect on It



Group Exercise (4)

Draw an Affinity Diagram - This technique shows the collective geniuses of a group.

1. Write each idea on a sticky note and stick on a whiteboard
2. Look at the ideas that are related to each other
3. Move ideas with potential connection closer together
4. Stop as ideas are in cluster and comfortable with the grouping
5. Identify the commonality of ideas in the cluster and give a name.
6. Look for differences among ideas in the cluster
7. Reflects on the idea, this drives the process forward.

Video (4) - How Creative Are You?



Creativity in the Workplace: How to Build Cultures of Innovation

Creative leaders are able to inspire, empower, listen to, and direct their employees while simultaneously cozying up to the dynamic, interdependent, uncertain landscape around them and see patterns and opportunities.

Austin Hill Shaw



CREATIVITY MATTERS
WITH AUSTIN HILL SHAW



Value of Creativity in the Workplace

To foster creativity in the workplace and begin building a better business, implement these nine techniques (Newcomer, 2016):

1. Allow people to share ideas anonymously
2. Recognize, and reward creativity
3. Encourage (and hire for) diversity thinking
4. Design an engaging work environment
5. Invest in professional development
6. Limit bureaucracy
7. Allow anonymity
8. Create a shared sense of purpose
9. Set reasonable expectations and encourage self-care

Companies Committed to Creativity

Google

The work environment includes a relaxed campus and plentiful space for collaboration, plus a long list of perks meant to keep workers inspired.

Airbnb

Allows employees to learn from different teams and switch departments and roles more easily, Airbnb encourages workers to always look at issues with new ideas.

HubSpot

Employees are encouraged to make important decisions and are offered several opportunities for professional development both inside and outside the company.





- Q & A
- Contact Info
- Evaluation

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Close of Workshop

