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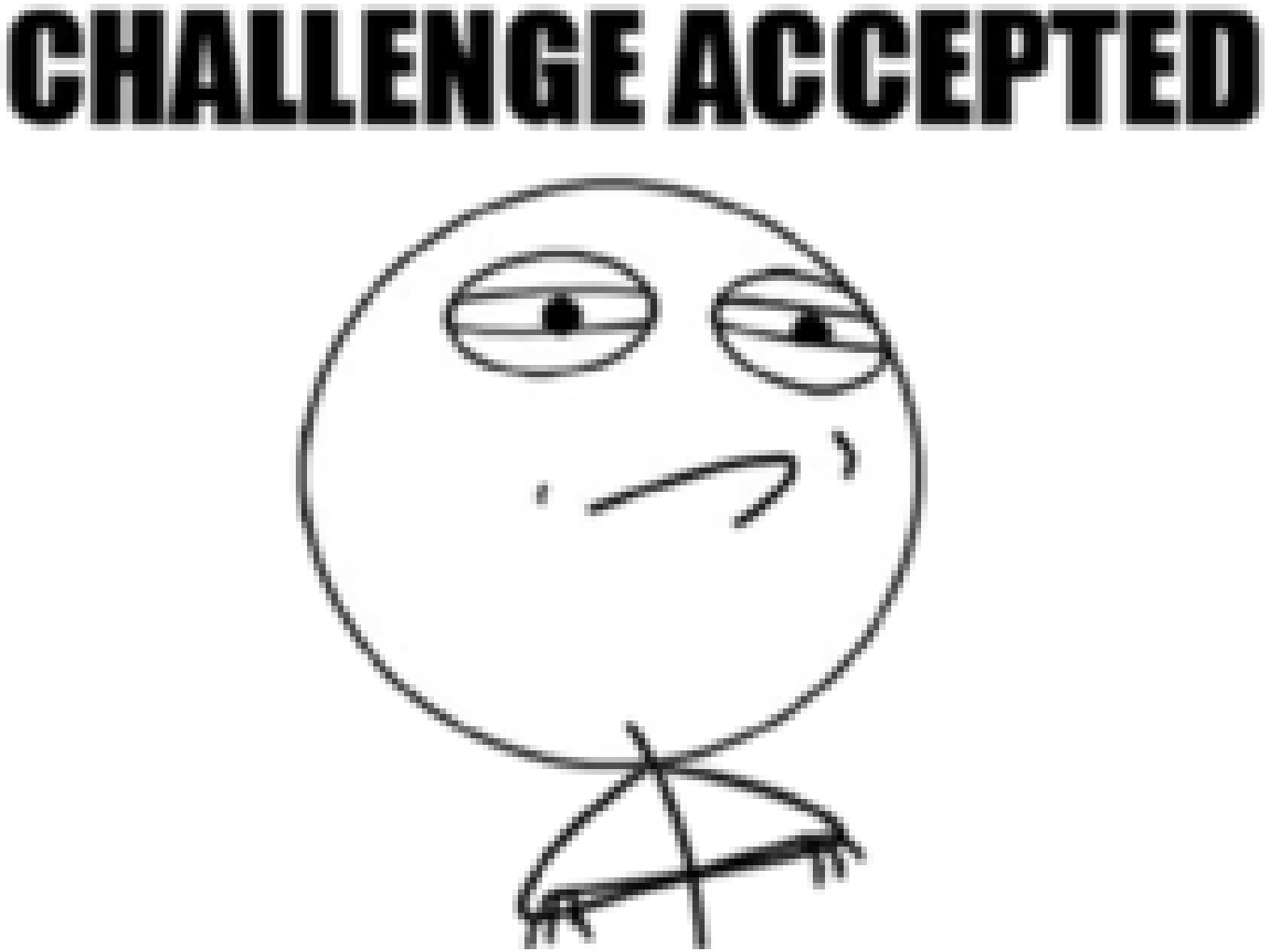
# THE IMPROVEMENT CHALLENGE

March 1, 2019

"Don't limit your challenges...
Challenge your limits"
-Jerry Dunn


CHALLENGE ACCEPTED

# Agenda

- Change Concepts
- Sharing QI challenges
- The Quality Improvement Challenge
- Report Back

# Learning Objectives

- Test quality tools to see if they can be used in conjunction with one another to investigate improvement ideas
- Understand how challenges can be overcome with team work
- Strengthen peer learning


While all changes do not lead to improvement, all improvement requires change. The ability to develop, test, and implement changes is essential for any individual, group, or organization that wants to continuously improve. There are many kinds of changes that will lead to improvement, but these specific changes are developed from a limited number of change concepts.

# Change Concepts

- A change concept is a general notion or approach to change that has been found to be useful in developing specific ideas for changes that lead to improvement.
- Creatively combining these change concepts with knowledge about specific subjects can help generate ideas for tests of change.

# Sharing Challenges to Quality Improvement

15 Minute Discussion at Each Table

- Pre-selected QI project leads talk about a VLS QI project they have been working on and a challenge they are experiencing
- Each QI project lead has 3-4 minutes to present

# The Quality Improvement Challenge

## Using Change Concepts and Creative Thinking Tools to Overcome Challenges to Quality Improvement

# Instructions

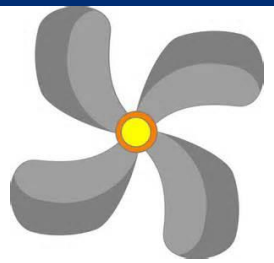
Four 20 Minute Sessions

- Each QI Project lead will visit each table where they will investigate possible ideas to improve their VLS project, particularly thinking about the challenges they are currently be facing
- Each group will use a specific set of change concepts in conjunction with a particular creative thinking tool
- Each QI Lead will take notes on possible improvement ideas
- QI leads rotate to a new table every 20 minutes

# Table One: Change concepts for increasing demand (serve more patients)

- Change Concepts for increasing demand
  - Focus on core process and purpose
  - Alliances and relationships
  - Mass customize
  - Offer product/service anytime
  - Emphasize intangibles
  - Differentiate product/service using quality dimensions

# Concept Fan



- Created by Edward de Bono
- The Concept Fan is a tool to assist in identifying alternative solutions to a problem. It helps the user to take a step back to gain a broader viewpoint.
- Use the change concepts and the concept fan to stimulate fresh ideas to overcome the quality challenge.

- The first step in the use of a Concept Fan is to draw a circle to the right of the middle of a large piece of paper.
- Write the quality challenge that you are working to resolve in the circle. Then draw lines from the right side of the circle representing possible solutions to the problem. Use three of the change concepts as possible solutions.


Figure 1: First stage of a Concept Fan

The first ideas generated may not be enough to solve the problem. Step back for a broader view of the problem. Draw a circle to the left of the first circle and write a broader description of the quality challenge into this new circle. Draw an arrow from the first circle to show that this is where it is coming from.

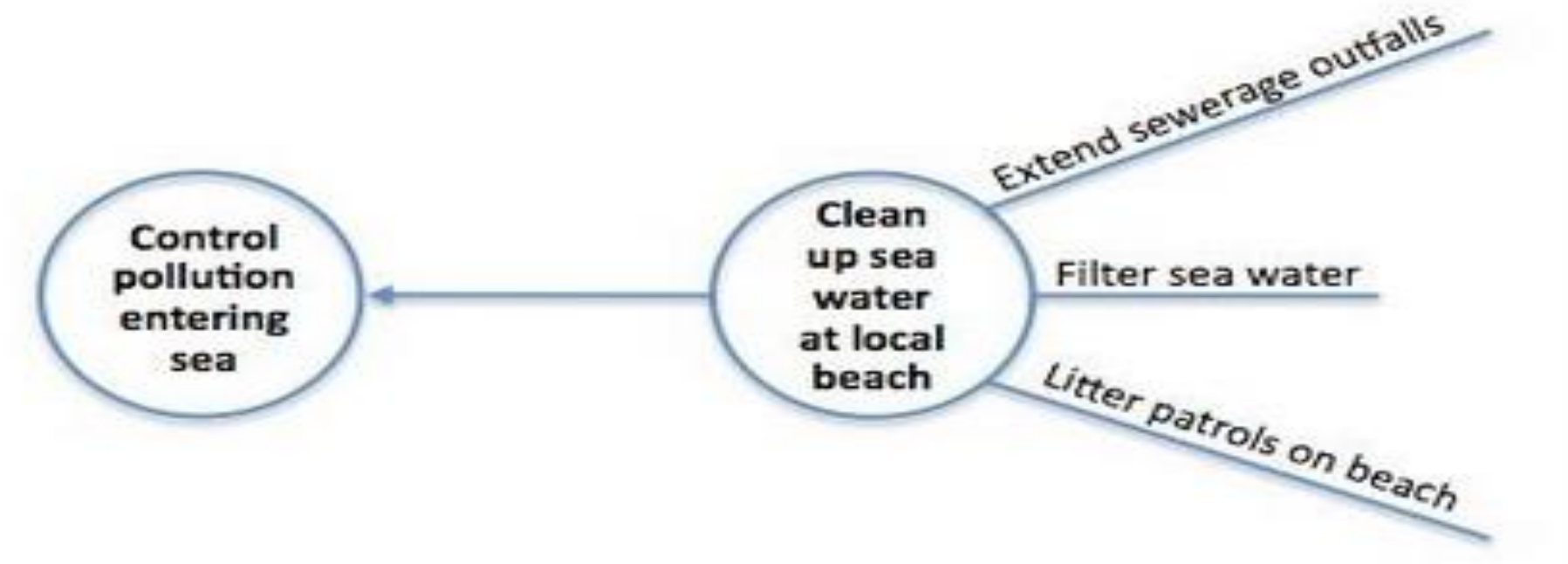



Figure 2: Broadening the problem definition on a Concept Fan

Continue from this starting point to fan out new concepts/challenges and possible solutions

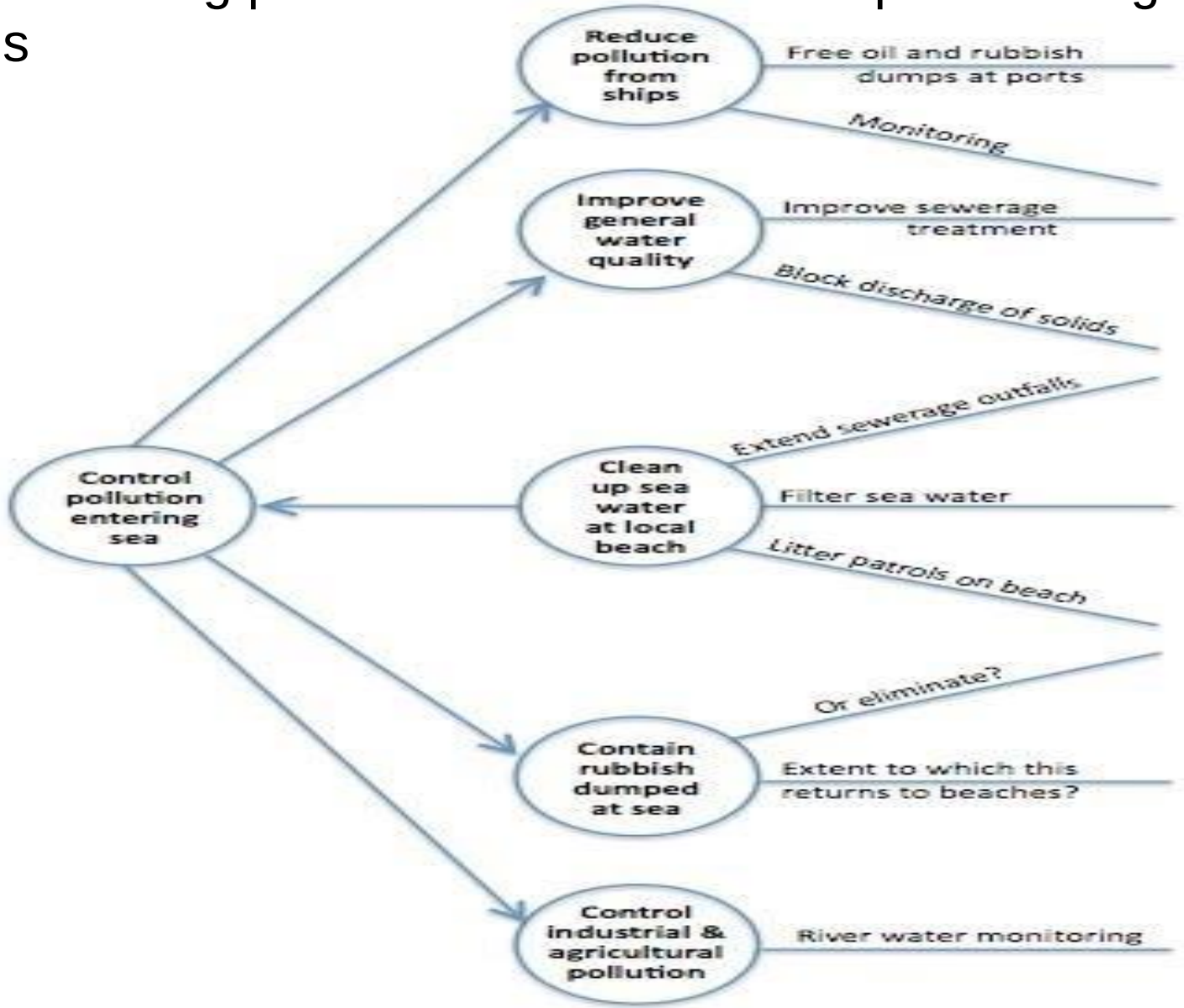



Figure 3: Generating ideas from a broader definition of the problem

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If the second circle does not generate strong solutions, repeat the process and take an additional step back by drawing another circle to the left of the second one and define the problem in even broader terms

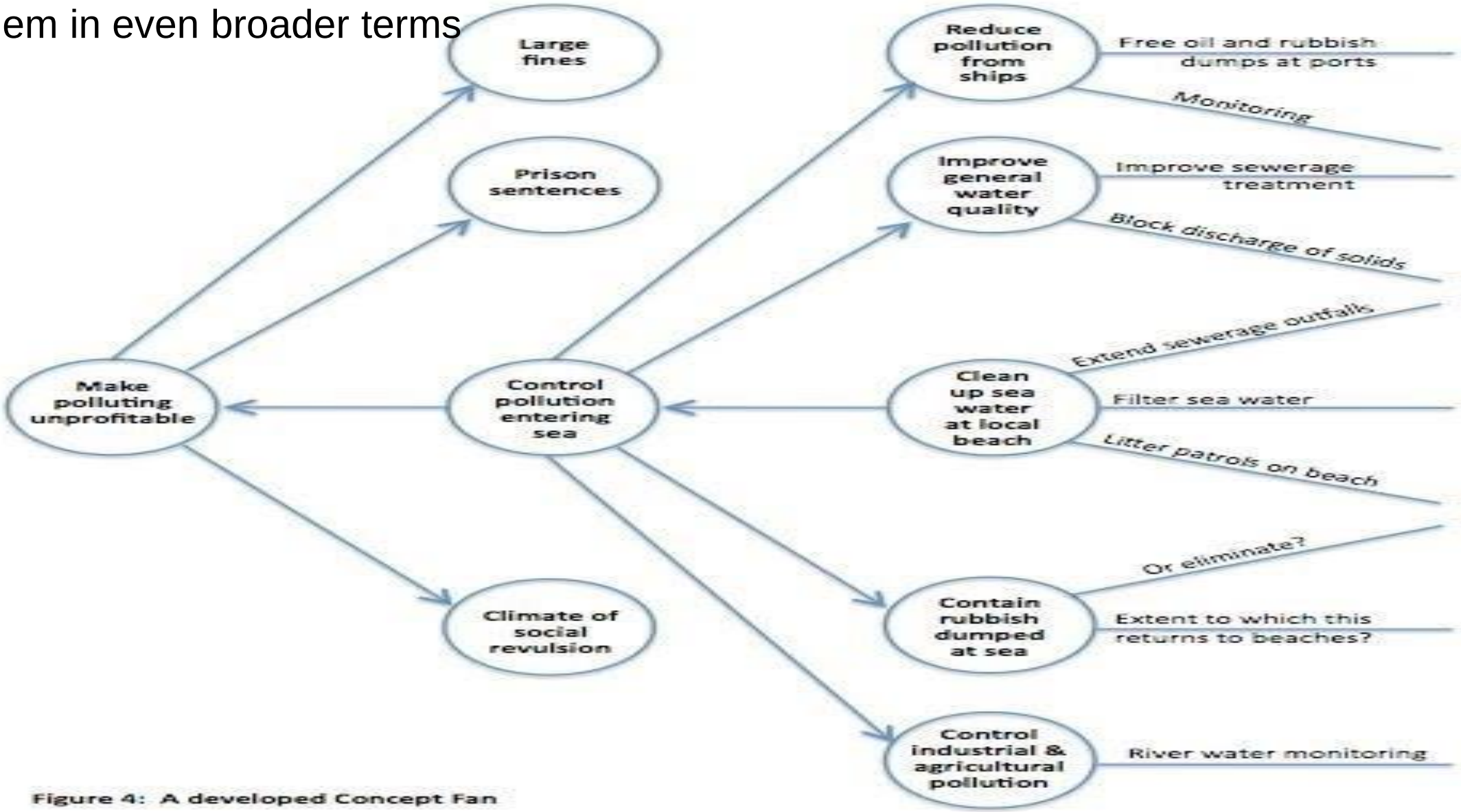
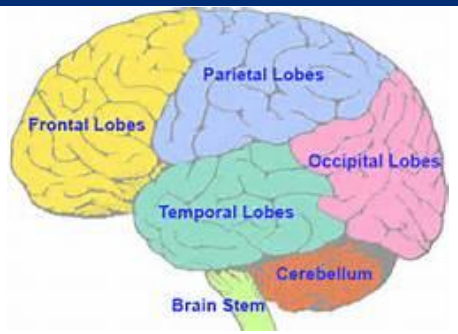



Figure 4: A developed Concept Fan

# Table Two: Change concepts that are useful for program redesign, focused on consumer challenges

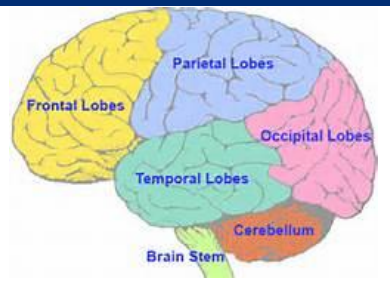
- Address customer problems
  - Listen to customers
  - Coach customers
  - Reduce wait time
- Meet customer expectations
  - Focus on outcomes for customers
  - Use a coordinator
  - Reach agreement on expectations

# Mind Map




Conventional writing imposes a structure that may inhibit you from freely expressing your creative ideas. You have to express the idea sequentially being sure to choose the right words to clearly define and communicate your notion. A mind map can help to express ideas in a fashion that is more along the lines of how the human mind works.

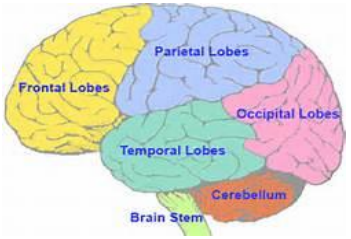
# Brain Characteristics




Your brain is made up of a system of connected neurons. Some crucial characteristics of the workings of the human brain include the following:

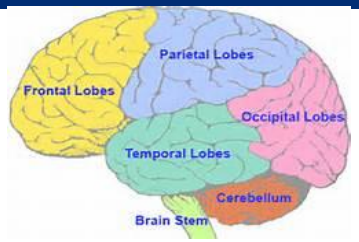
- Parallel Processing
- Senses
- Recall
- Learning
- Functions

# Parallel Processing

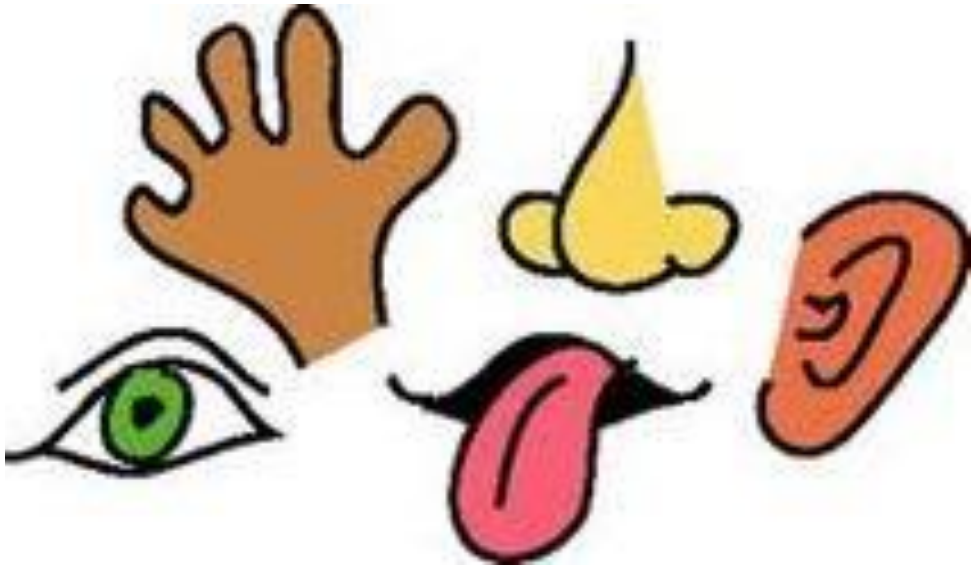



- You can think of more than a single thing at a time. Ideas stream into the conscious mind and then are swiftly gone. Something else flows in to take its place.
- In creating a mind map, when something flows into your mind write it down in a quick word or a slight picture, so that it can be recalled again. Go with the flow of thoughts streaming into your mind. Don’t worry about making a structured logic!

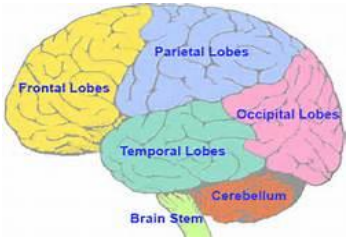
# Senses




- You constantly process information from your five sense.
- Allow your senses to flow free to capture the things that stream through your head in all of the senses – picture, colors,  emotions, smells, sound, etc.

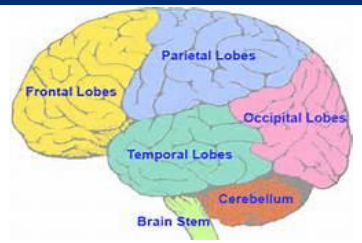


# Recall




- We can remember things.
- Recollection stimulates the connections in the brain, bringing associated memories. For example, if one thinks of a place once visited it can be pictured; one can remember the smell, the sounds, the sights. This is all triggered by remembering the place.

# Learning




- The neuron connections in the brain change with stimulation and use.
- Examining your mind map can help you to draw new connections between disparate points in the map.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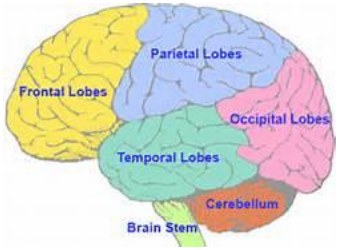
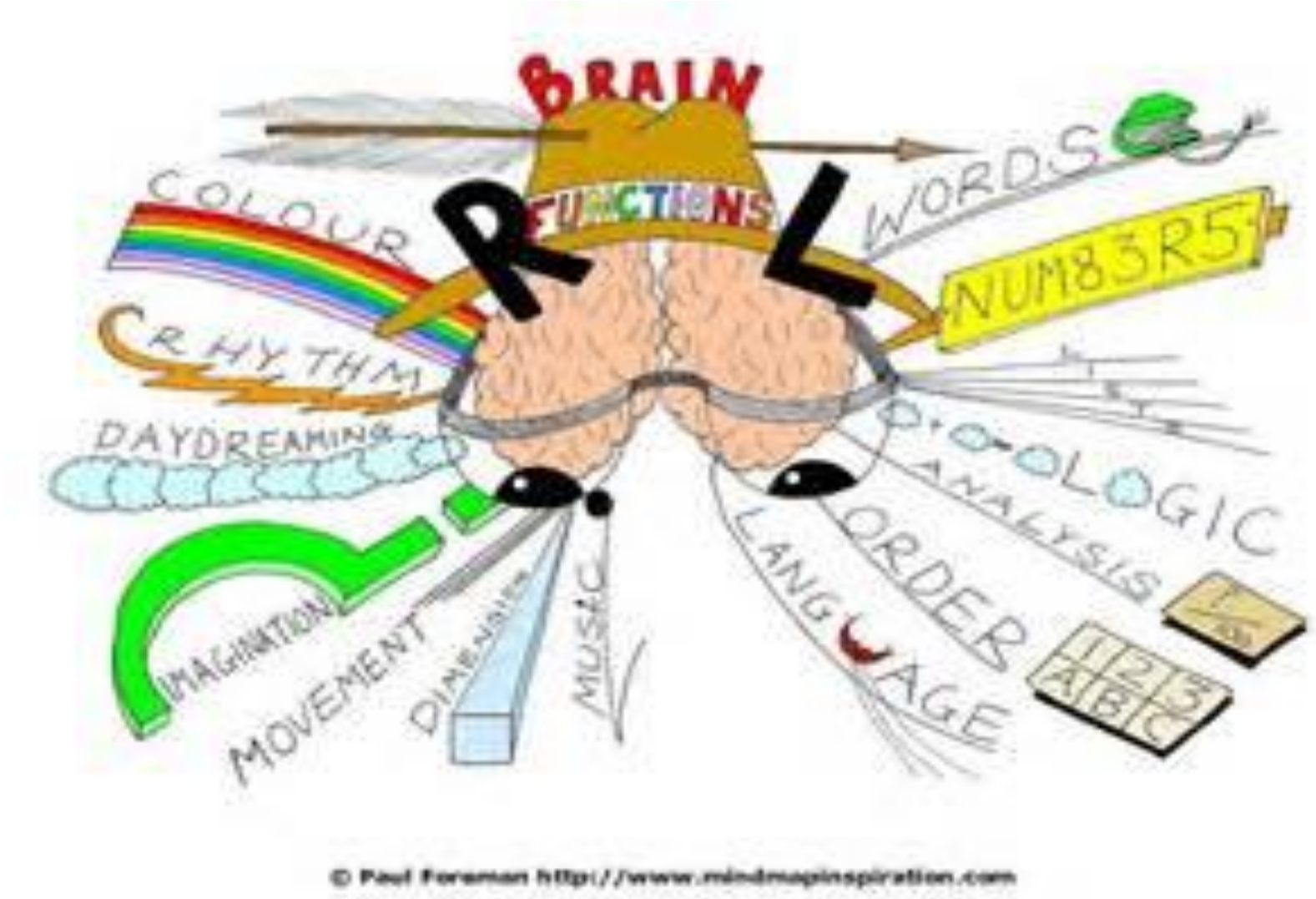
# Functions




- Different parts of the brain are responsible for varied functions. Only a portion of the human brain is conscious. There are several functions in the brain that we are not conscious of but that support our consciousness.
- Mind maps can help to engage your subconscious brain. Creating the mind map stimulates your subconscious to stream ideas. The subconscious does not appear to have a direct link to time. Ideas from your subconscious bubble up. This may occur instantly, or in a few minutes, an hour, a day, or a month. The mind map helps to capture the idea when it bubbles up.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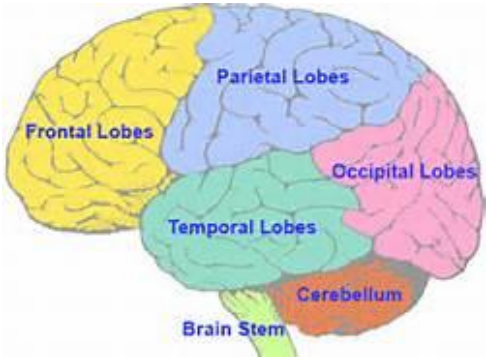
# Mind maps facilitate the effective use of these brain functioning characteristics rather than getting in the way.

Mind Mapping

# Mind Maps




To use a mind map:

1. Write the quality challenge in the middle of the paper.
2. Write your change concepts in the circles stemming from the main idea.
3. As your team allows ideas to stream, draw pictures and words as you choose to represent your thoughts and ideas and lines connecting items.

# Table Three: Change concepts useful for program redesign focused on eliminating waste associated with errors

- Eliminate Mistakes
  - Reminders
  - Differentiations
  - Constraints
  - Affordances

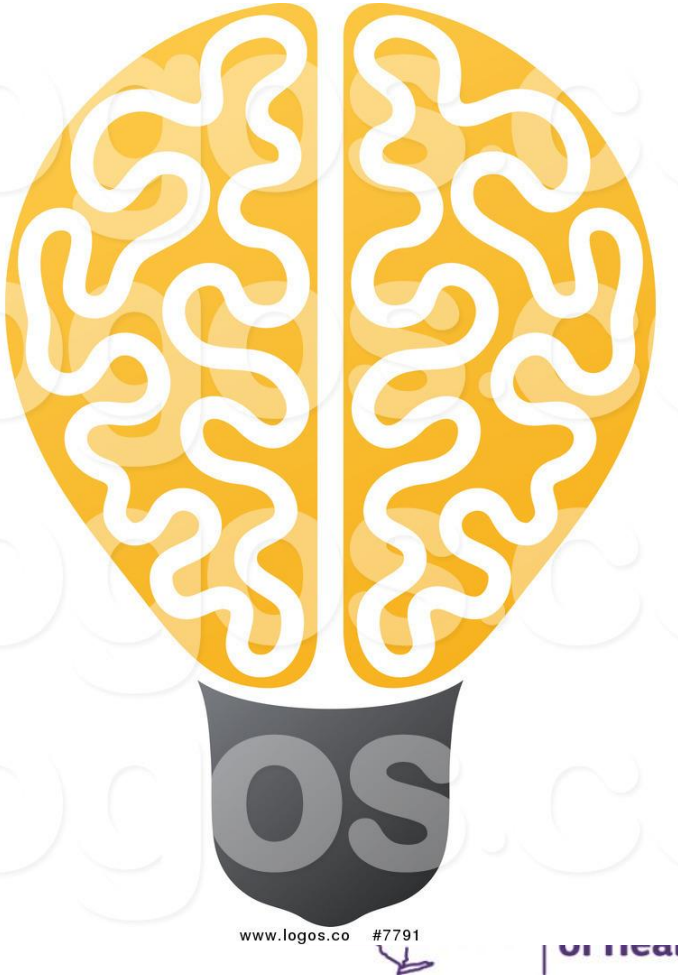
# Random Word Stimulation

- Switched on thinking

# The use of randomly selected words can stimulate new patterns of thought, ideas and solutions.

Edward de Bono suggested the following word list:

1. Weed
2. Rust
3. Poor
4. Magnify
5. Foam
6. Hole
7. Diagonal
8. Vacuum
9. Tribe
10. Gold
11. Puppet
12. Nose
13. Link
14. Drift
15. Duty
16. Portrait
17. Cheese
18. Chocolate
19. Coal
20. Tribe



# Random Word Stimulation Directions

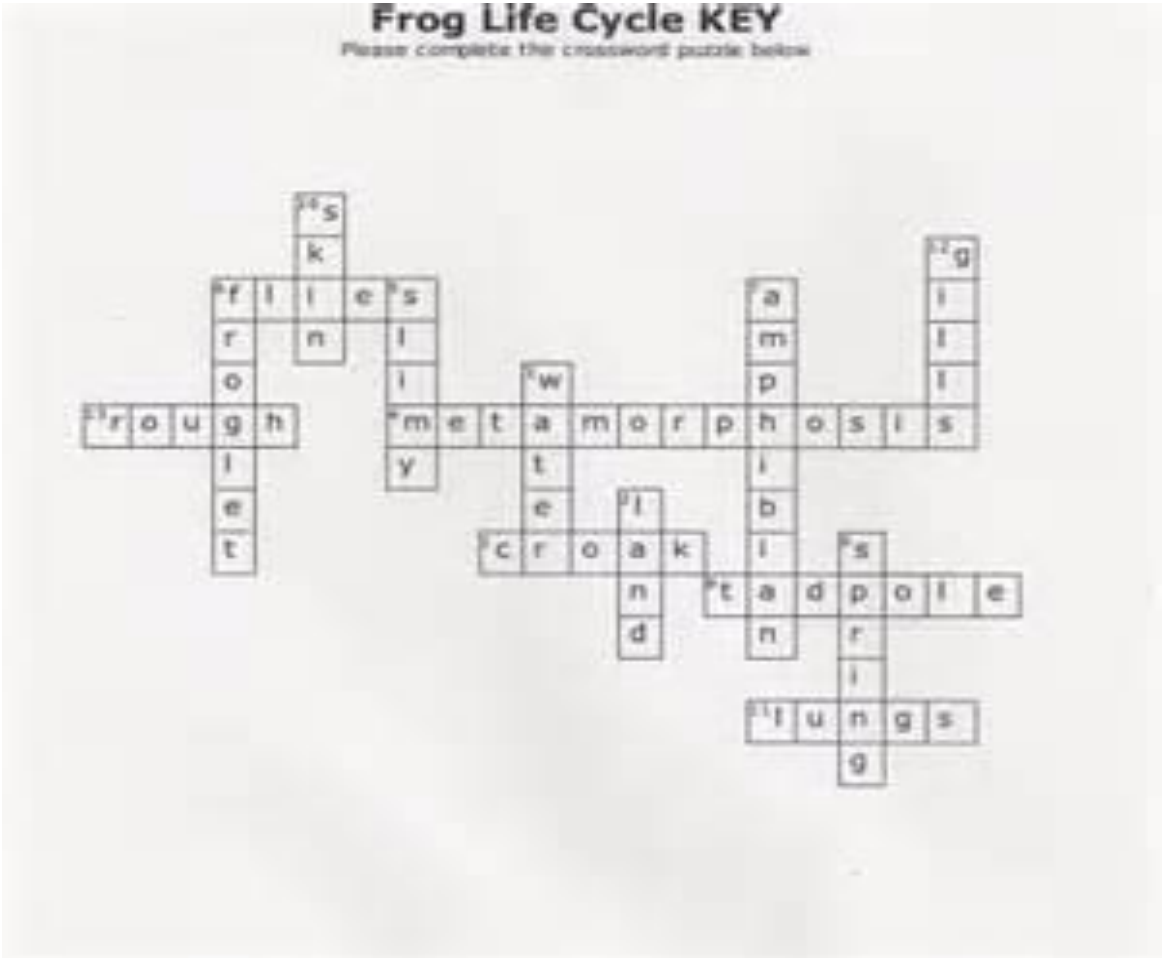
- The participants select a number between 1 and 20
- Participants think about the selected random word associated with the selected number in conjunction with one of the change concepts to overcome the quality challenge that is being focused upon
- Write down any ideas that come to mind from the combination of the quality problem, the change concept and the random word.
- This is repeated for 3 other random words, and the 3 other assigned change concepts.
- Collect the results and discuss them

# Table Four: Change concepts useful for program redesign to better cope with and learn from variation

Manage Variation

- Match the amount to the need
- Standardization
- Improve Predictions
- Contingency Plans
- Sort product into grades
- Exploit variation

# Fractionalization

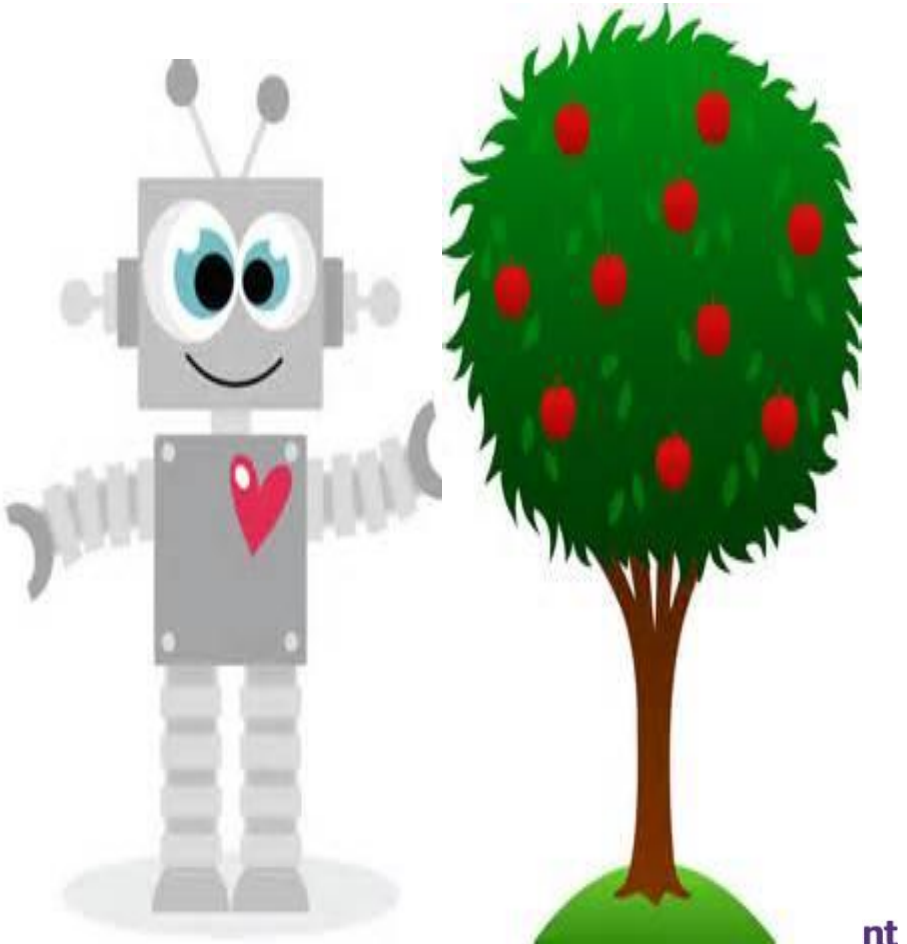


# Fractionalization


Preconceived notions and static patterns of thought can make it hard to think of new ideas. Fractionalization is a technique developed by Edward de Bono to break existing ideas or patterns into separate parts so they can be rearranged to spark fresh ideas and concepts.

# One example: if the challenge is how to design an apple picking robot, then the fractions could be

- Reaching
- Finding
- Picking
- Safely placing apples undamaged into baskets



# The fractions can then be reassembled:

- Reaching-finding-picking (perhaps you think to try shaking the tree for all three)
- Reaching-undamaged apples-place in baskets (maybe you think up an elevated canvas platform which could be raised towards the apples)

# Fractionalization: Step One


Write down the current step-by-step process related to the quality challenge.

- For example, if the challenge is educating virally unsuppressed patients about the importance of taking ARV medications, the current process might be:

1. The patient receives a clinic appointment
2. The patient receives a reminder call
3. The patient attends clinic
4. The patient sees the nurse
5. The nurse takes vitals
6. The patient sees the peer educator who provides tips on taking medications regularly
7. The doctor gives the patient VLS results and discusses the importance of taking ARV medications
8. The patient sees the case manager who provides support and referrals
9. the patient receives the next appointment
10. The patient goes home

# Fractionalization: Step Two


- Randomly reorder the steps of the process. For example:
  8. The patient sees the case manager,
  4. The patient sees the nurse,
  1. The patient receives a clinic appointment, etc.)

- Select a change concept to help focus your thinking and stimulate discussion about redesigning the process.

# Fractionalization: Step Three


- Try this with two other randomly selected change concepts, each time using the change concept to stimulate discussion about what the new step-by-step process might help you to overcome the quality challenge and result in an improved quality outcome.

- At the end, answer the following:
  - What new ideas did you come up with to solve the quality challenge?
  - What are the best ideas?

# Report Back

# Report Back: and the winner is…

- QI Leads report back on what they have learned and what process changes they plan to make based on the lessons learned.
- Participants applaud quietly or loudly based on how much they like the QI process changes proposed by each QI lead. The QI Lead who gets the loudest applause wins.
- The winner tells us which table was most helpful in identifying the process change.
- The identified team wins!
- The winners win… (hold onto your Six Hats!)

# The Mystery Prize!!!

# Special thanks to

- QI leads
- Edward de Bono
- The fans (it’s all really for them)
- The human mind
- The thought police (for letting us off the hook)
- The English language

# References


- The Improvement Guide (Langley GJ, Nolan KM, Nolan TW, Norman CL, Provost LP. San Francisco, California: Jossey-Bass Publishers, Inc.; 2009)
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