

# Granite State ASQ 0104

**Activity Based**

**Training Exercises II**

**March 26, 2013**

**Jack Meagher - NHBB**

# Agenda

Agenda - **NOT** today!

Why? We want you to concentrate on what is happening right NOW and not be thinking ahead to something that caught your attention.

Let's see how that feels.

# *Before we start ...*

**Ego - leave it at the door!**

Take an index card, put your name on it and then write "My ego".

Place the card in the envelope, put your name on the outside and place the envelope. Hand it in - you can pick it up later.

# Ground Rules

**Data** over opinion.

**Analysis** before action.

**Non-judgmental** thinking.

Involve those **closest** to the process.

Keep a **positive attitude** and an **open mind**.

One person, one vote - no position, **no rank**.

Create a **team** environment - **no EGO** allowed!

*Find something that  
makes you  
Smile ...*

*... look at  
it to start  
your day  
and then  
again to  
start your  
afternoon.*



# *Why smile?*

Smiling is **GOOD** for you!

Changes Our Mood

Is Contagious

Relieves Stress

Boosts Your Immune System

Lowers Your Blood Pressure

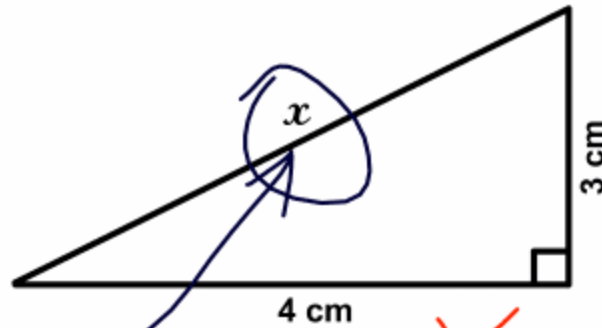


# How about a laugh?



# How about a laugh?

3. Find  $x$ .



Here it is ~~X~~ 0



# Part 1



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# Individual exercises

# *How do we think?*



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Problem # 1

A bat and ball cost \$1.10.

The bat cost one dollar more than the ball.

How much does the ball cost?

# *How do we think?*



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## Problem # 2

You are competing in a race on a straight racetrack, and overtake the runner lying in second place.

Which position are you in now?

# *How do we think?*



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## **Problem # 3**

How much dirt is in a hole that is  
one-foot high,  
one foot long,  
and one wide?

# Answers



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## Problem # 1

A bat and ball cost \$1.10.

The bat cost one dollar more than the ball.

How much does the ball cost?

**\$0.05**     \$1.05 minus \$0.05 = \$1.00

## Problem # 2

You are competing in a race on a straight racetrack, and overtake the runner lying in second place.

Which position are you in now?

Answer: **Second place**, you are still behind the first place runner.

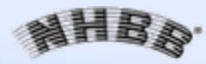


## Problem # 3

How much dirt is in a hole that is one-foot high, one foot long, and one wide?

Answer: **None** -  
there is no dirt in a  
hole.

# *Were you surprised?*



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**If you've answered NONE of these questions correctly, then you're probably in good company!**

# *How does this happen?*



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"Thinking, Fast and Slow" -Daniel Kahneman

System 1 thinking -fast, intuitive, and sometimes wrong

System 2 thinking -slower, more deliberate, more accurate

# *How does this happen?*



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System 1 - jumps to conclusions, makes connections and not prone to doubt. It sidesteps ambiguity and does its best to draw a conclusion on the available information.

# *How does this happen?*

System 1 thinking keeps us functioning

- by making fast decisions, usually right enough -
- but - it is gullible and biased

# *How does this happen?*

System 2 makes deliberate,  
thoughtful decisions

- in charge of doubt and unbelieveing
- but is often lazy - and - difficult to engage



# *Team exercise*

Framing - different ways of presenting the same information to evoke different emotions (what we see is all there is).

Anchoring - a short cut to making a decision. This is the process where we use an existing reference point as a springboard for starting the analysis.

# *Try this*

In preparation for your next meeting:

Gather everyone's ideas and plot the results.

Let the meeting run normally and at the end compare what the group came up with collectively to what they came up with individually.

# *Part 3*

## *Activity based exercises*

A different type of learning using kinesthetic movement, designed to create a social atmosphere and a full mind and body experience making it easy and fun to learn.

# Cone of Learning (Edgar Dale)

After 2 weeks  
we tend to remember...

10% of what we read

20% of what we hear

30% of what we see

50% of what we  
hear and see

70% of what  
we say

90% of  
what we  
say and  
do

Nature of  
Involvement

Reading

Hearing Words

Looking at Pictures

Watching a Movie

Looking at an Exhibit

Watching a Demonstration

Seeing It Done on Location

Participating in a Discussion

Giving a Talk

Doing a Dramatic Presentation

Simulating the Real Experience

Doing the Real Thing

Verbal Receiving

**Passive**

Visual Receiving

Receiving/  
Participating

**Active**

Doing

# *Activity based exercises*



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Count the steps

Manager - four commands -  
forward, left, right, stop

Operator - count your steps

# *Activity based exercises*



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Count the steps

Everyone is an operator - same commands - count your steps

Which felt better? Got more done?

Does micro-managing sound familiar?



# Activity based exercises

If your boss gives you too many things to do, relate it to factors in a DOE.

Create Factorial Design - Display Available Designs

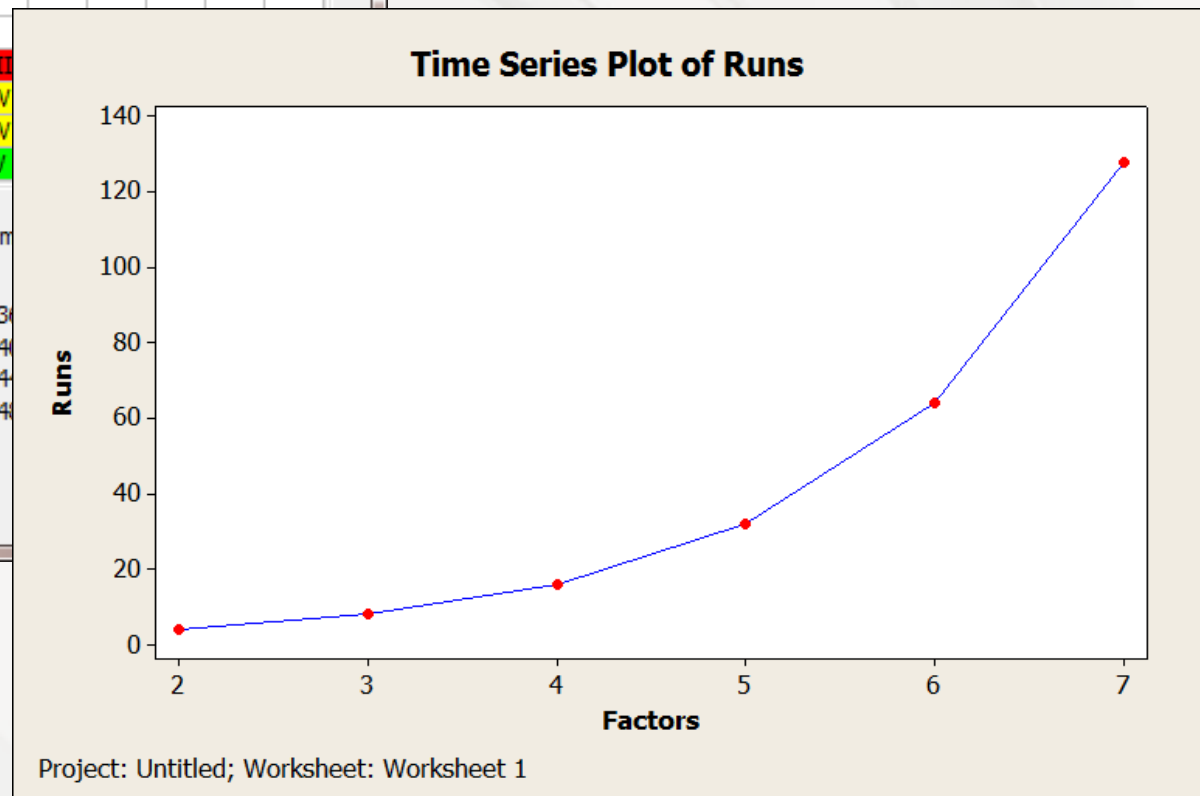
Available Factorial Designs (with Resolution)

Run	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4	Full	III												
8		Full	IV	III	III	III								
16			Full	V	IV	IV	IV	III	III					
32				Full	VI	IV	IV	IV	IV					
64					Full	VII	V	IV	IV					
128						Full	VIII	VI	V					

Available Resolution III Plackett-Burman

Factors	Runs	Factors	Runs
2-7	12,20,24,28,...,48	20-23	24,28,32,36,40,44,48
8-11	12,20,24,28,...,48	24-27	28,32,36,40,44,48
12-15	20,24,28,36,...,48	28-31	32,36,40,44,48
16-19	20,24,28,32,...,48	32-35	36,40,44,48

Help



# Leading/Lagging Indicators

Leading indicators -  
process inputs, forward  
looking  
(machine, operator,  
speeds, feeds)



Lagging indicators -  
process outputs,  
rearward looking  
(profit, scrap,  
rework, delivery)



*Shouldn't you always be looking at what's coming at you?*



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# *Activity based exercises*



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Need 3 volunteers, capable of walking backwards without falling over.

1<sup>st</sup> trials - looking at inputs

2<sup>nd</sup> trials - looking at outputs

Need to record time and deviation from straight line

How did they compare?

# *Activity based exercises*



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Human knots (only if everyone agrees and is feeling well!)

Make two groups, form two circles, move together and shake hands (both hands) with different people.

Now - untangle yourselves!



# *Activity based exercises*



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## The Human Histogram

Everyone work together to identify the shortest and tallest individuals. Starting with the shortest individual, line up in 1 inch increments ending with the tallest individual. How did that feel?

# *The Cash Register*

When I say, turn over the sheet in front of you and answer the questions.

First - by yourself

Second - with a partner

Third - with the table

How do they compare?



# *Five easy questions*



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Favorite color?

**Red**

Piece of furniture?

**Chair**

Flower?

**Rose**

Number between one to four?

**Three**

Animal in the zoo?

**Lion**

# *A read and do test*



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This is a timed exercise, you have 3 minutes. Ready, set, go.

# *Closing Comments*

Circles in the air

No agenda - how did that feel?

Which worked best - individual, group or active learning?

Have you used any of these before?

Would you use any of these back at work?

Thank you for coming.

Comments/questions?

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