

Quality Improvement Learning Programme

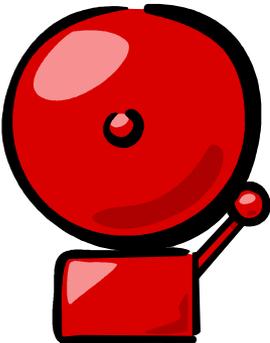
Learning Session 2



‘A person who never
made a mistake never
tried anything new’

Albert Einstein

Hello, Housekeeping, How will we do this?



Learning Outcomes

Programme:

Develop confidence & capability in Quality Improvement

Lead an improvement project

Develop skills to teach others

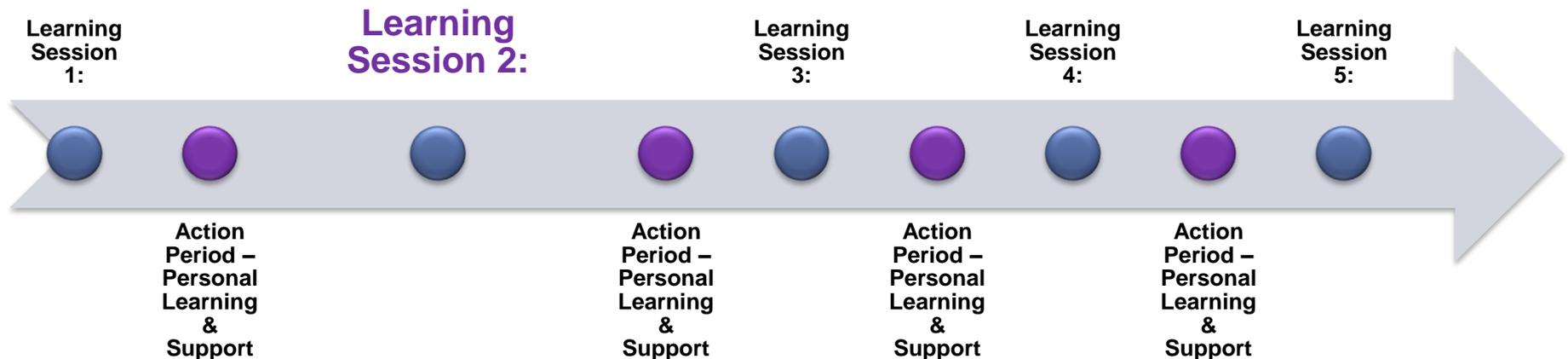
This session:

Reflect on learning so far

Understand how to develop Driver Diagrams including use of cascading driver diagrams.

Understand the Quality Improvement Measurement journey – measurement plans data collection, run charts.

Plan next steps for own project



Recap of Learning Session 1



QI Foundations incl. 3 Step
Improvement Framework

The Model for Improvement

Improvement Toolkit

Improvement in Practice

Let's check in!

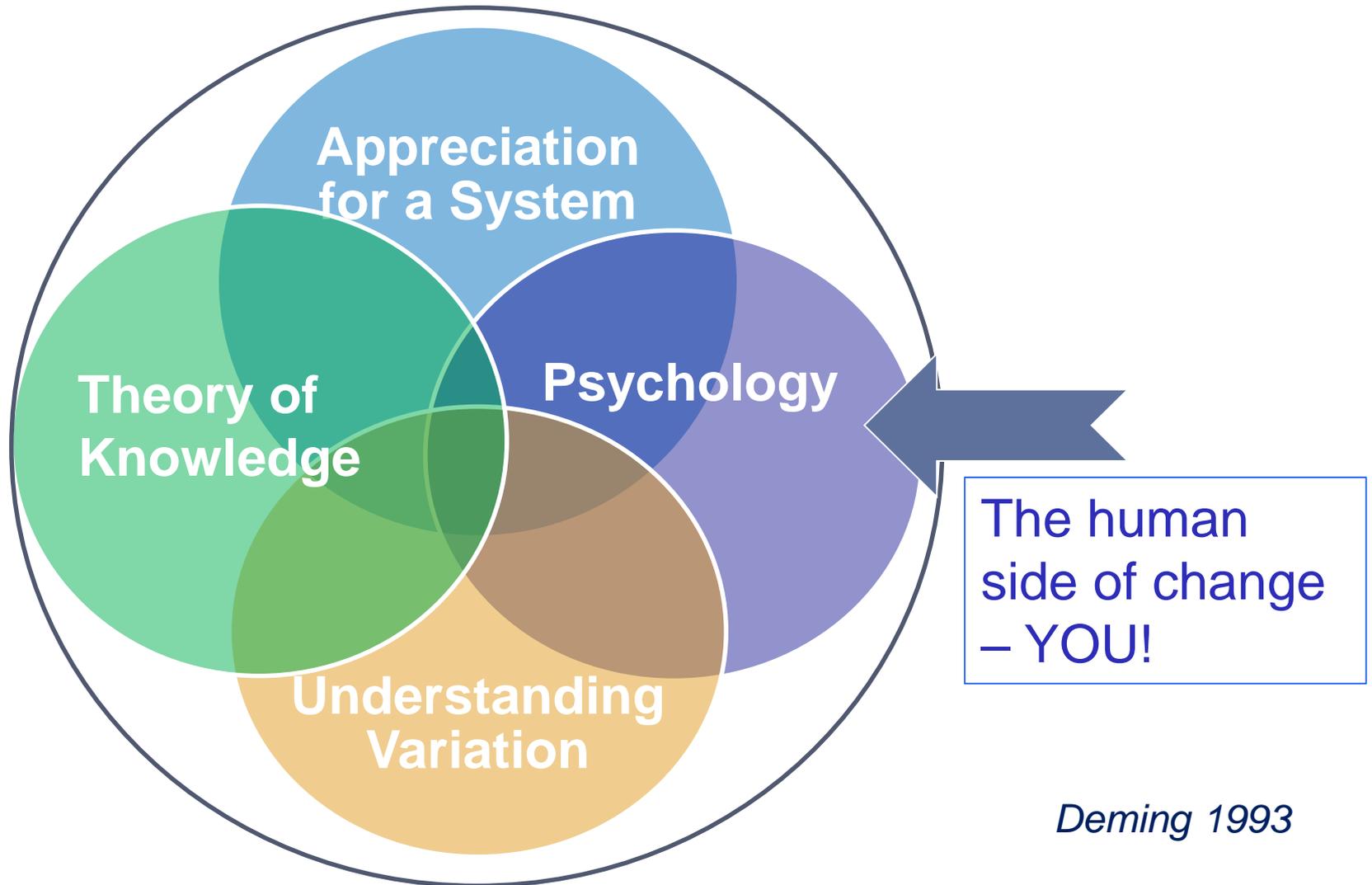


Jump in when you like, if you want to;

Say your name

Share as much or as little as you want about your hopes for today's session.

The System of Profound Knowledge



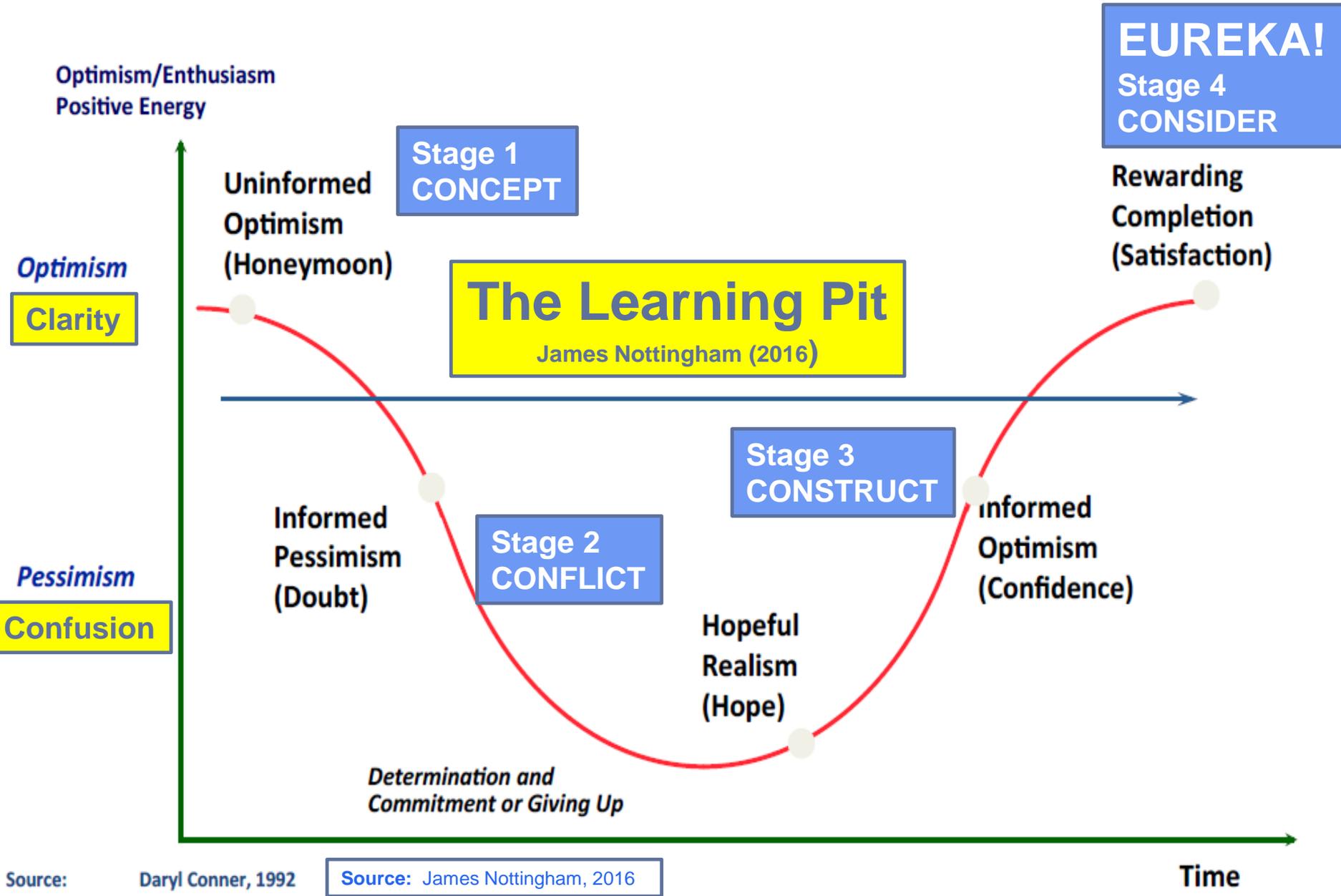
Deming 1993

Reflection Point: Habits of an Improver



Lucas, B (2015) The habits of an improver. Available at <http://www.health.org.uk/sites/default/files/TheHabitsOfAnImprover.pdf>

The Emotional Cycle of Change

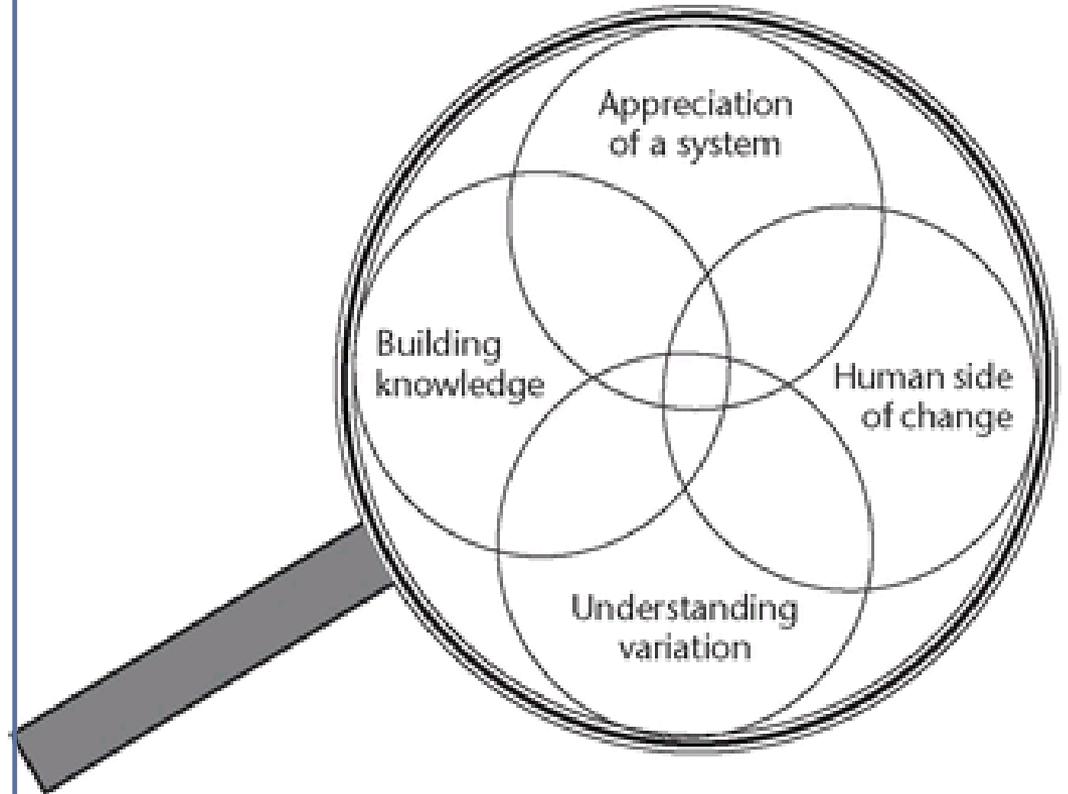


Reflection Point: All about you!

Individual reflection on
your experiences so
far

(5 minutes):

- Learning related to the Lens
- Developing habits of an improver
- **Use of improvement tools:**
 - Project Charters
 - Process Mapping
 - Forcefield Analysis
- Improvement team
- Baseline data



Project Surgery: 4 in each group

Step 1.

Individual presentations
(10 mins for each project)

Use the template to:

Remind the group of your project aim and any support you are seeking.

Share experiences and learning so far in relation to the project .



Step 2. All teach, all learn...

Each provide feedback (**W.W.W.** & **E.B.I**) and suggestions to support.

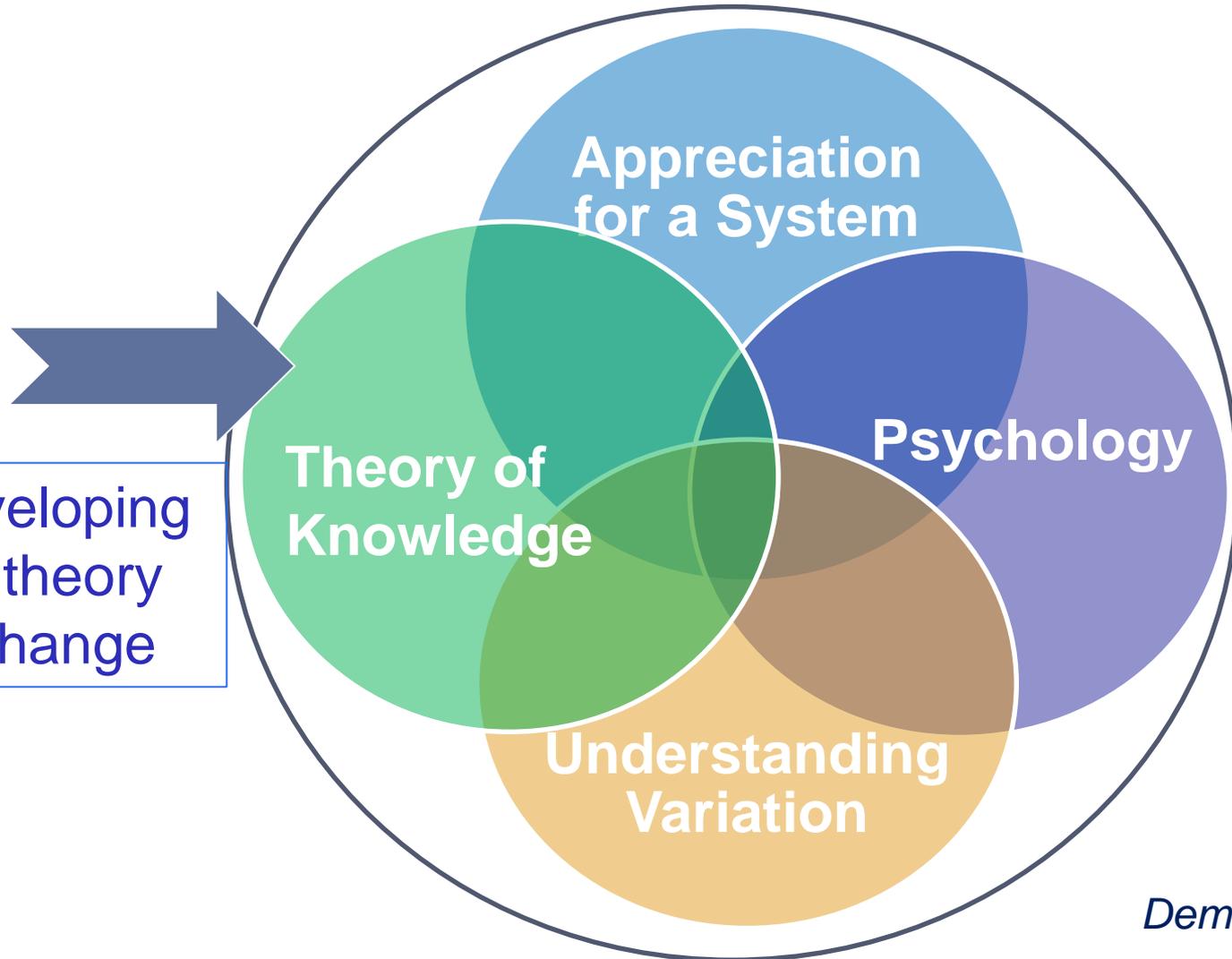
“ I CAN DO THINGS YOU CANNOT, YOU CAN DO THINGS I CANNOT; TOGETHER WE CAN DO GREAT THINGS.”

-MOTHER TERESA

Step 3. Agree actions

Summarise actions you will take based on feedback provided.

The System of Profound Knowledge



Developing our theory of change

Deming 1993

3 Step Improvement Framework & Driver Diagrams

1

Aim

Is there an agreed aim that is understood by everyone in the system?

2

Correct changes

Are we using our full knowledge to identify the right changes and prioritise those that are likely to have the biggest impact on our aim?

3

Clear change method

Does everyone know and understand the method(s) we will use to improve?

4

Measurement

Can we measure and report progress on our improvement aim?

5

Capacity and capability

Are people and other resources deployed in the best way to enable improvement?

6

Spread plan

Have we set out our plans for innovating, testing, implementing and sharing new learning to spread the improvement everywhere it is needed?

Improvement Toolkit: Driver Diagram

Describe theory of change

Develop your measures

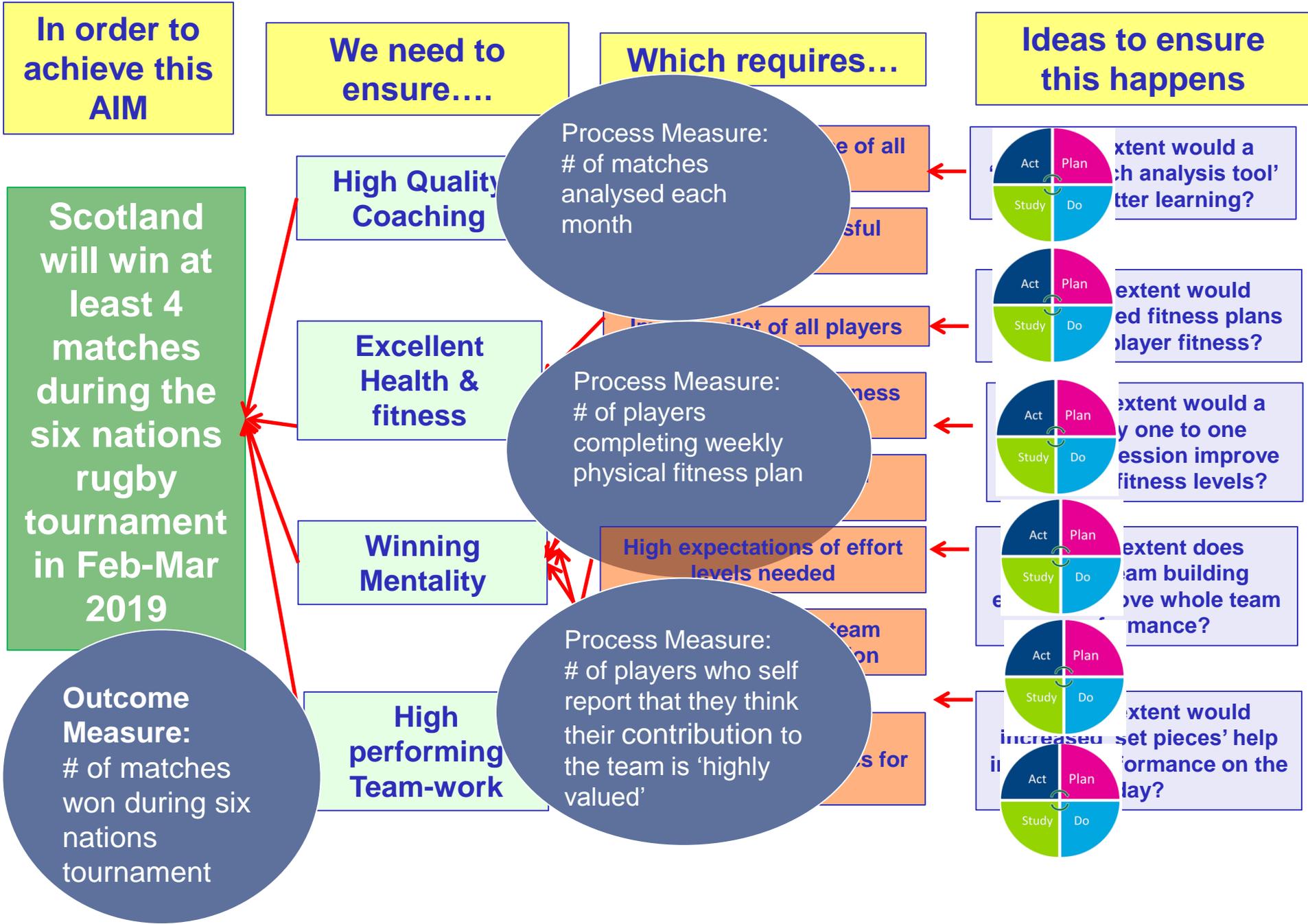
Communication tool

Track project progression

NB: It is not set in stone!



Driver Diagram



Vision – Scotland has the best rugby team in the world

In order to achieve this AIM

We need to ensure....

Which requires...

Ideas to ensure this happens

Scotland will win at least 4 matches during the six nations rugby tournament in Feb-Mar 2019

High Quality Coaching

Excellent Health & fitness

Winning Mentality

High performing Team-work

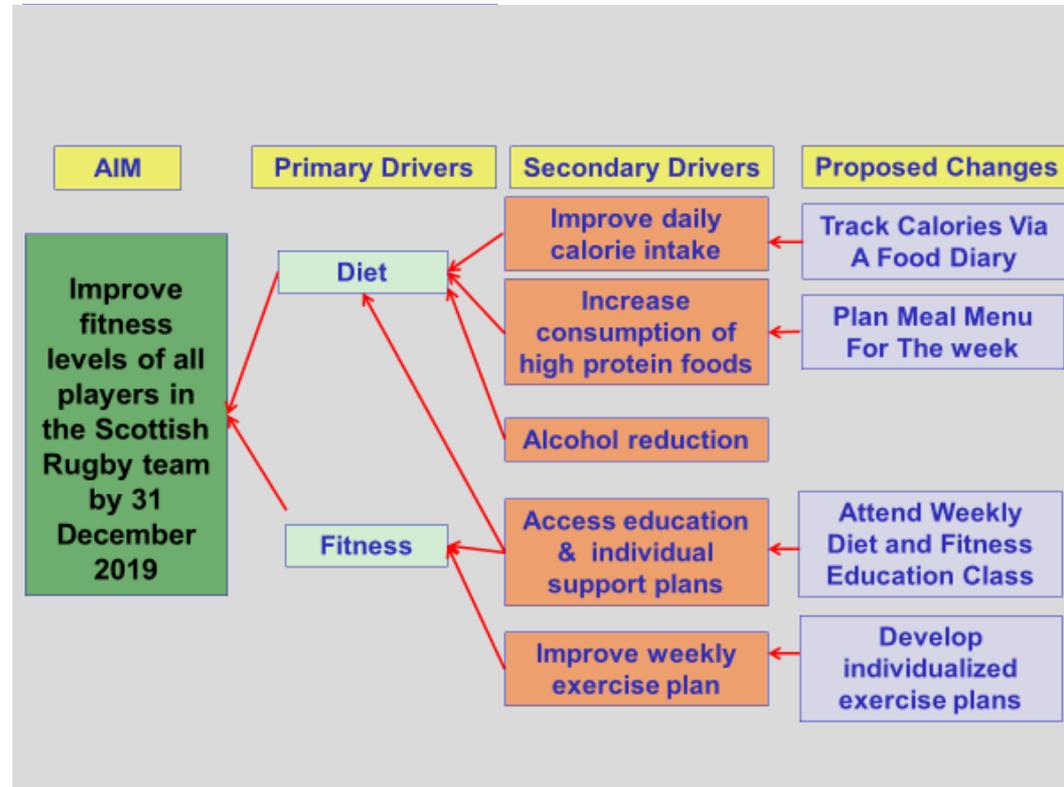
Analyse performance of all matches

Learn from successful teams

Improve diet of all players

To what extent would a 'formal match analysis tool' enable better learning?

To what extent would individualized fitness plans improve player fitness?



What can we learn from improvement
'experts'?

“When everything is a priority, nothing is a priority” Karen Martin

PRIORITISATION

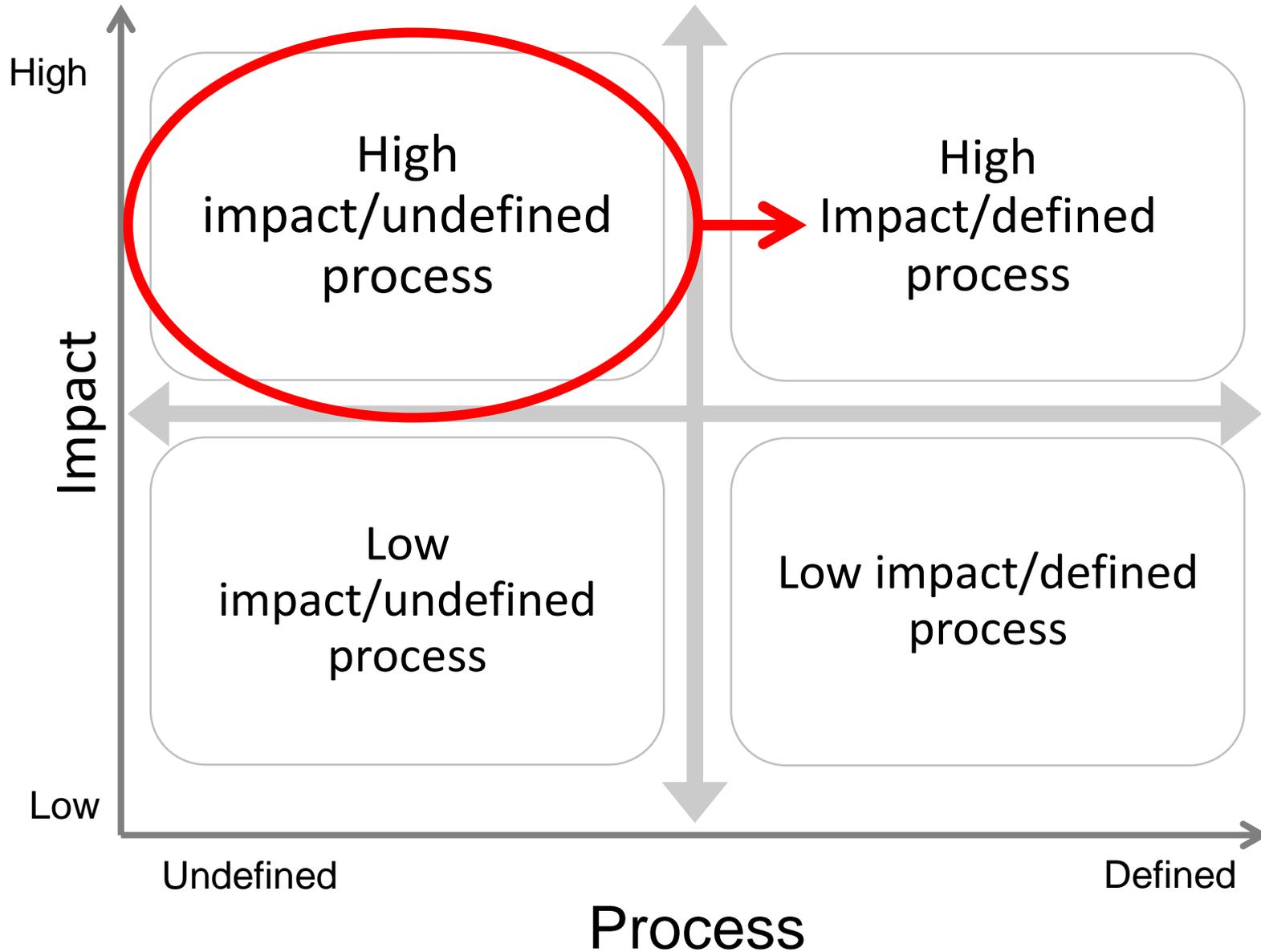
“The results of taking on too much is that nothing gets done.
Or it doesn't get done well.” Karen Martin

Understanding the status of your drivers

Level	Driver Status
0	Driver not defined or status unknown
1	Informal understanding by some people. No formal description
2	Driver documented and understood by all (including 'customers' where appropriate)
3	Driver defined and carried out reliably. Measures to track the quality of the driver defined
4	Regular monitoring of driver with stakeholders acting on data for further improvement
5	Driver outcomes predictable and embedded in the system. Driver consistently meets the needs of all requiring it

Level	Predicted impact
0	Driver has no impact / irrelevant to our 'customers' or staff
1	Driver has minimal impact on outcomes
2	Driver will improve services for our 'customer' but others are more important
3	Driver has impact on outcomes
4	This driver is necessary for delivering services. It has a direct and significant impact on outcomes for the 'customer'
5	Driver essential for achieving results. Improvement in this driver alone would have a direct, immediate impact on outcomes

Prioritising Projects: What is your priority?



Population Segmentation: Who is your priority?

The whole
population
receiving
your 'service'

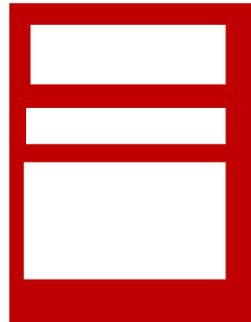


Population Segmentation: Who is your priority?

The whole population receiving your 'service'



People who have "fallen through the cracks" of our system.

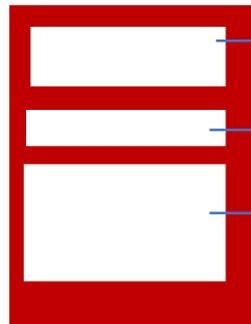


Population Segmentation: Who is your priority?

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People who have "fallen through the cracks" of our system.



Sub-groups based on needs

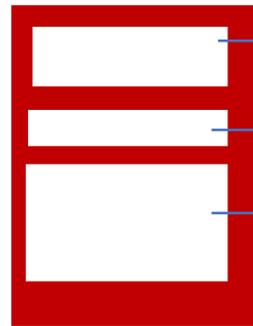


Population Segmentation: Who is your priority?

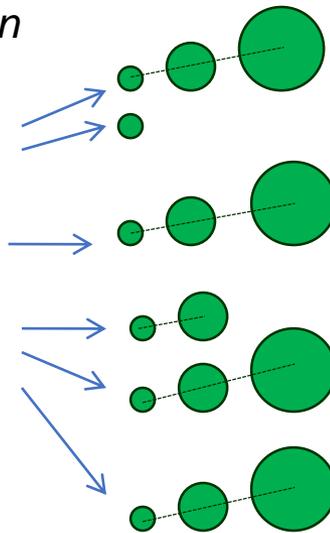
The whole population receiving your 'service'



People who have "fallen through the cracks" of our system.



Sub-groups based on needs



Interventions intended to address the needs of sub-groups:

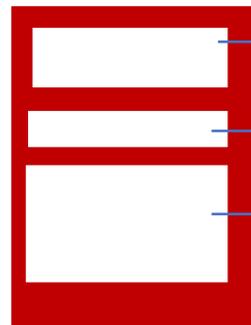
Test using Plan Do Study Act cycles.

Population Segmentation: Who is your priority?

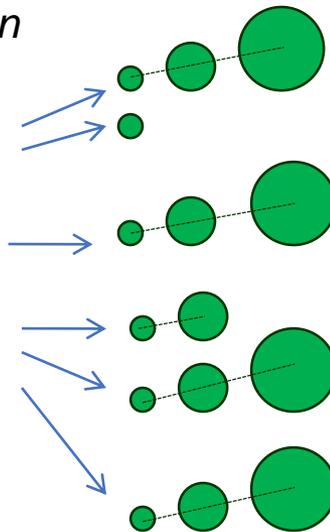
The whole population receiving your 'service'



People who have "fallen through the cracks" of our system.



Sub-groups based on needs

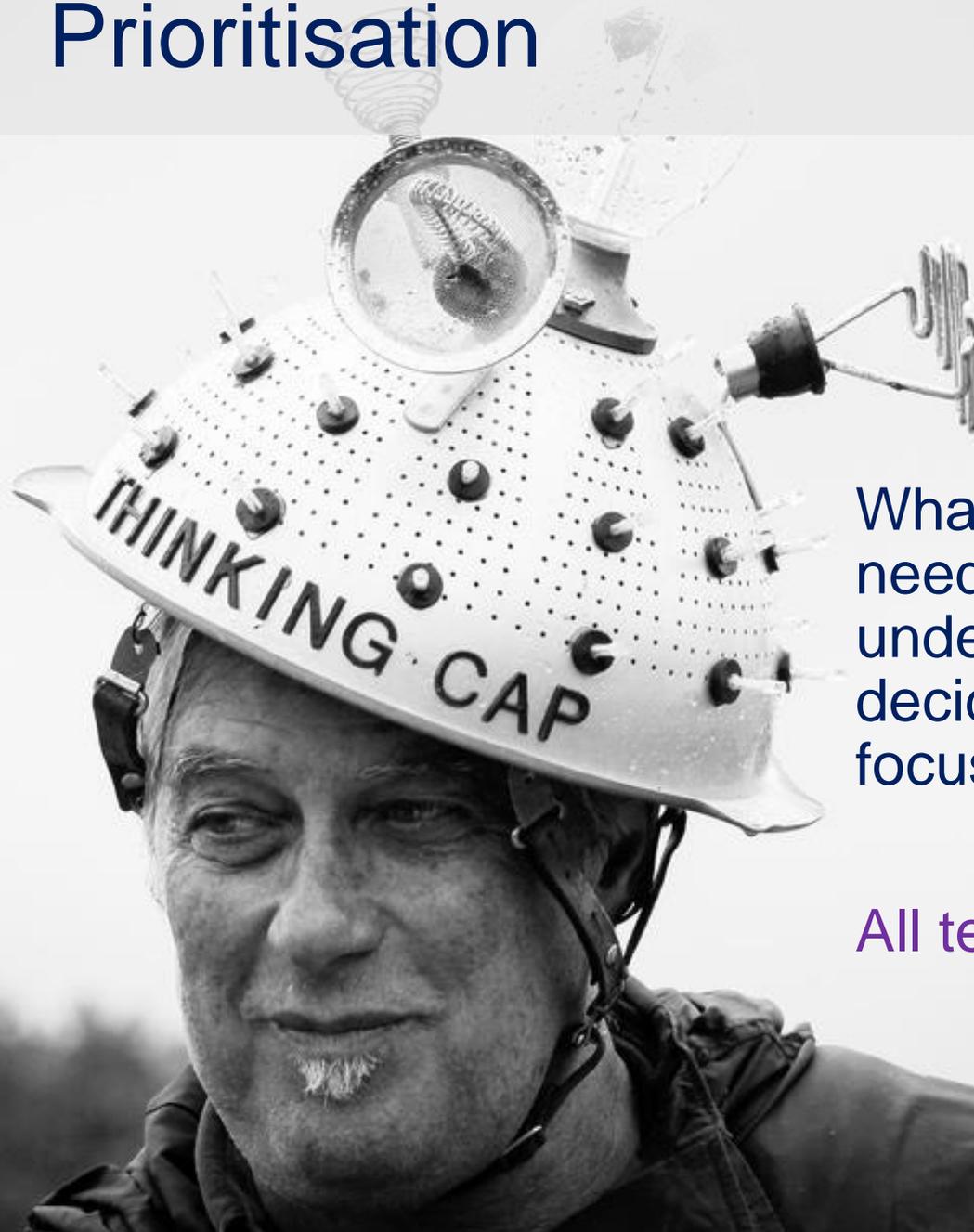


Interventions intended to address the needs of sub-groups:

Test using Plan Do Study Act cycles.

Some interventions will work and some will not. All should result in learning and start on the smallest practical scale.

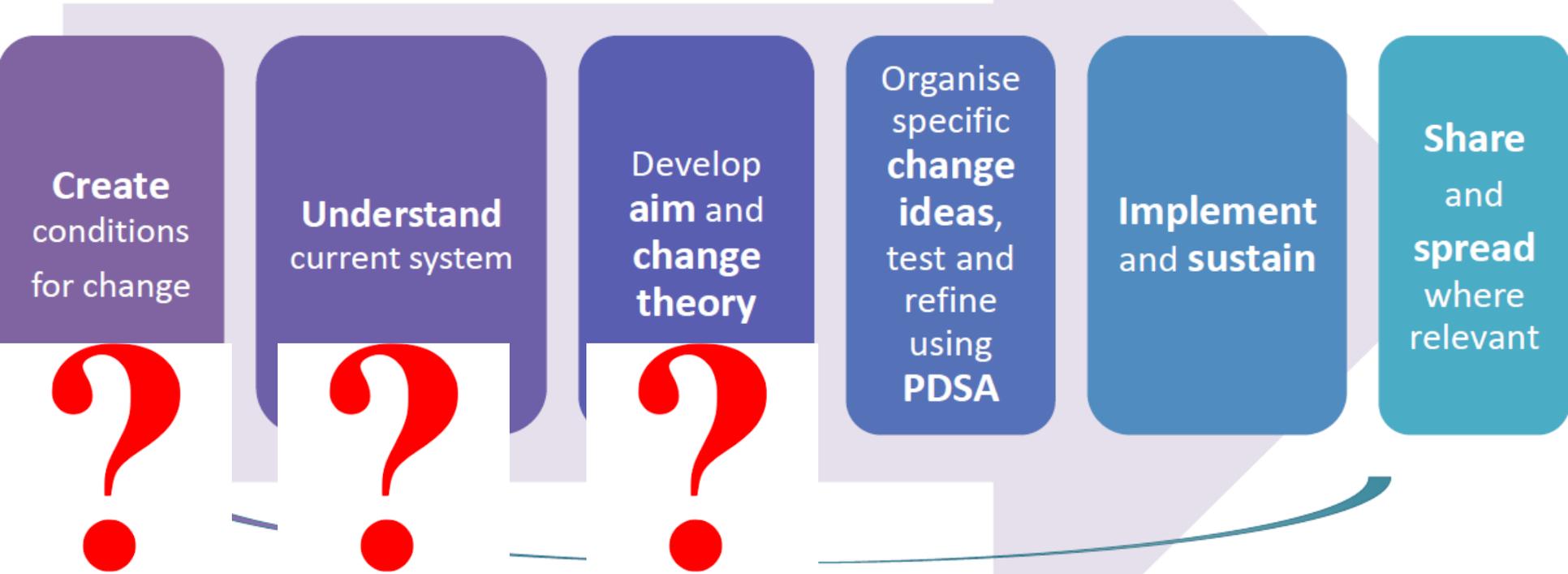
Task: Prioritisation



What actions do you need to take to understand and decide the priority focus for your project?

All teach, all learn!

CHECKPOINT: The Improvement 'Journey'



Stakeholders & Team?
System?
Aim & Change Theory?

Lead - Organise & Plan - Communicate - Measure

Lunch

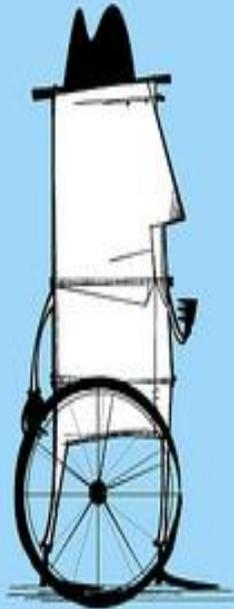


Start again at ?

**WHAT DO YOU SAY?
Let's DO LUNCH!!**

Too busy to improve?

ERRR...



**CAN'T STOP.
TOO BUSY!!**



“ BE THE
CHANGE
YOU WISH
TO SEE
IN THE
WORLD ”

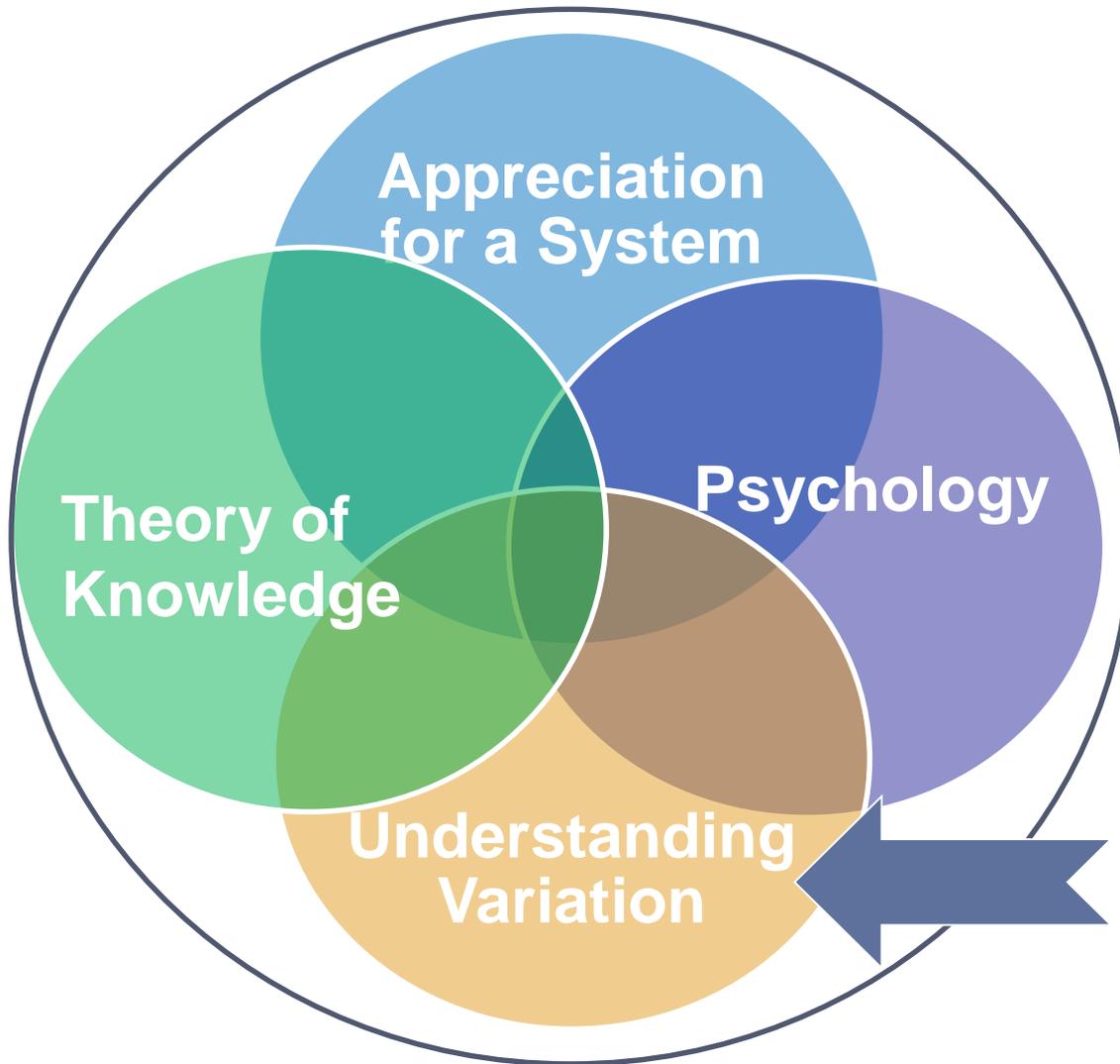
- GHANDI

What are your big
rocks?



**PUT THE BIG
ROCKS FIRST**

The System of Profound Knowledge



The Quality Improvement Measurement Journey

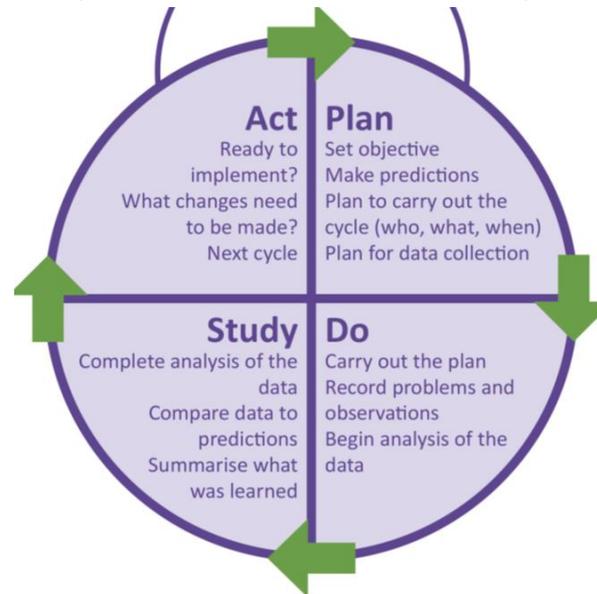
Deming 1993

The Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?



The Quality Measurement Journey

AIM (How good? By when?)

Concept

Measures

Operational Definitions

Data Collection Plan

Data Collection

Analysis

Share



Case Study

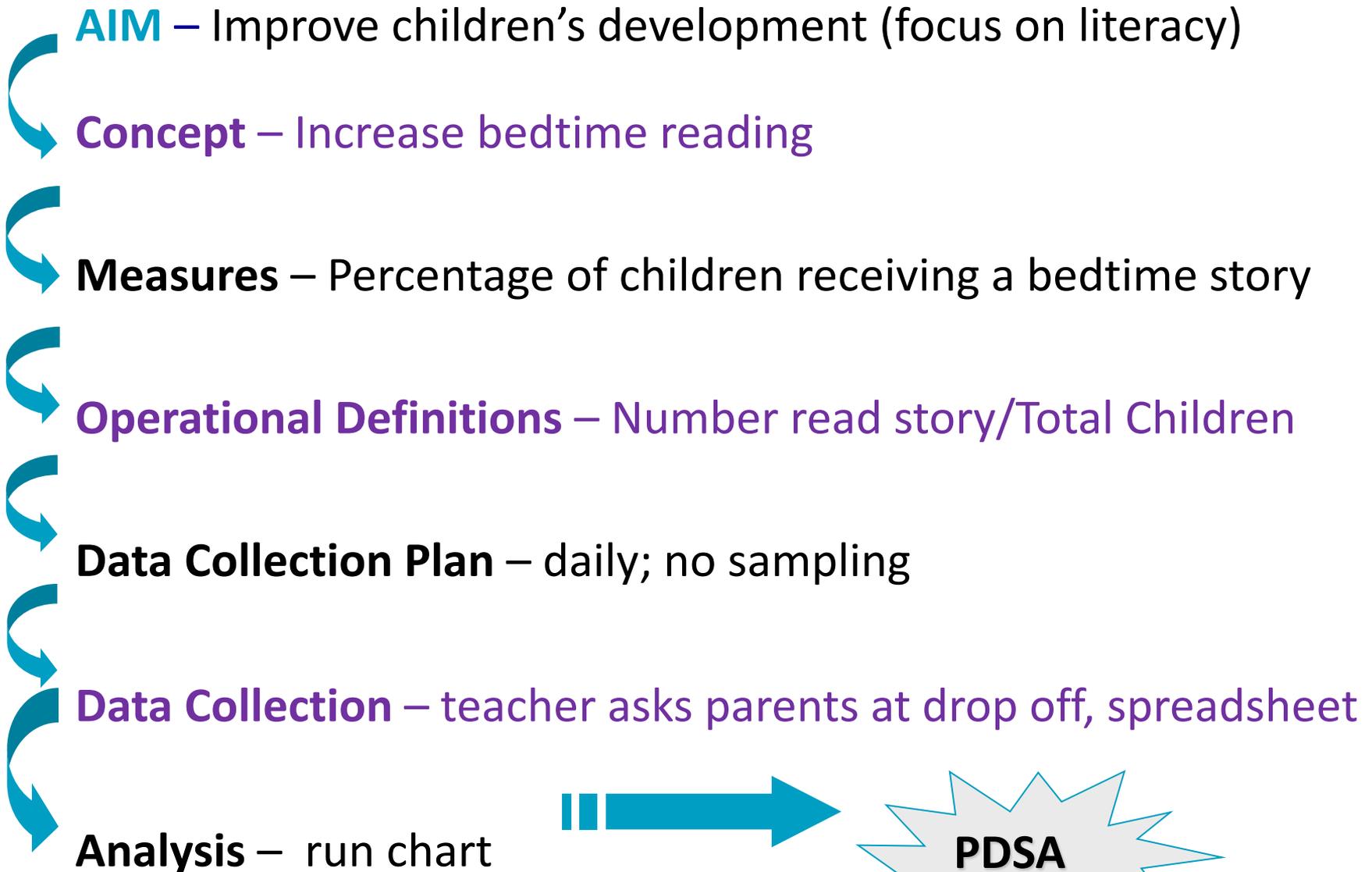


Promoting Bedtime Reading

Lochrin and
Grassmarket Nursery
Schools, Edinburgh

Lead: Donna Murray

The Quality Measurement Journey



The Quality Measurement Journey



Project Aim Statements

What, how much and by when

Overall aim:

“90% of children at Grassmarket Nursery have all the developmental skills and abilities expected at the start of primary school by June 2016”

Project aim:

“By the end of November 2015, 90% of children at Grassmarket Nursery will receive a bedtime story at least 3 times a week”

Check Point



Do you have an overall aim and a project aim for your work?

Would this be helpful to consider?

Discuss!

The Quality Measurement Journey



Theory of what drives developmental milestones

Theory of what actions will ensure developmental milestones are reached at the start of primary school

Aim

1°

2°

Children have all the developmental skills and abilities expected at the start of primary school

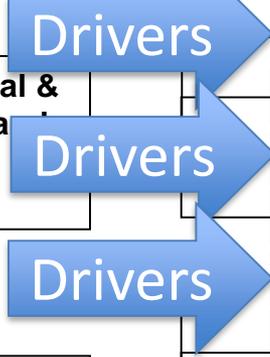
Detailed Aim:
90% of all children within each CPP have reached all of the expected developmental milestones at the time the child starts primary school, by end-2017

Societal Issues

Child's physical & mental health and emotional development

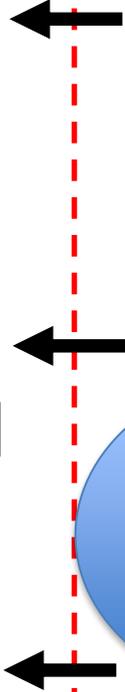
Carer's physical & mental health and skills

- Poverty
- Quality Of Home Environment
- Domestic Abuse & Violence
- Workforce Issues
- Transport, Community Capacity & Cultures
- Access To Services
- Employment



- Early Learning & Play
- Health
- Attachment
- Additional Support
- Level of education
- Misuse of alcohol & drugs
- Nutrition
- Disabilities & Mental health
- Parenting skills & knowledge

- Improved teamwork, communication and collaboration
- Improved uptake of benefits
- Improved child's dental health
- Improving child nutrition
- Improving brain development and physical play
- Improved family centred services
- Improved sharing of information
- Improved leadership, culture & planning
- Identification & reasons for current resilience



Concepts and Measures

Concepts:

Your choice of concepts/theory will drive the focus

Your knowledge and evidence based practice

Measures:

- Outcome
- Process
- Balancing

Check Point



What is the concept/theory you are testing?

Have you identified some measures?

Discuss!

Three Types Of Measure

Outcome

- Tells a team whether the changes it is making are helping to achieve the stated aim

Three Types Of Measure

Outcome

- Tells a team whether the changes it is making are helping to achieve the stated aim

Process

- Tells a team whether a specific process change is having the intended effect

Three Types Of Measure

Outcome

- Tells a team whether the changes it is making are helping to achieve the stated aim

Process

- Tells a team whether a specific process change is having the intended effect

Balancing

- Makes sure that changes to improve one part of the system are not causing problems in other parts of the system

Driver Concept and Measure

Measures to provide feedback on the concept

% children meeting developmental milestones

% children with improved communication skills

% children receiving a story

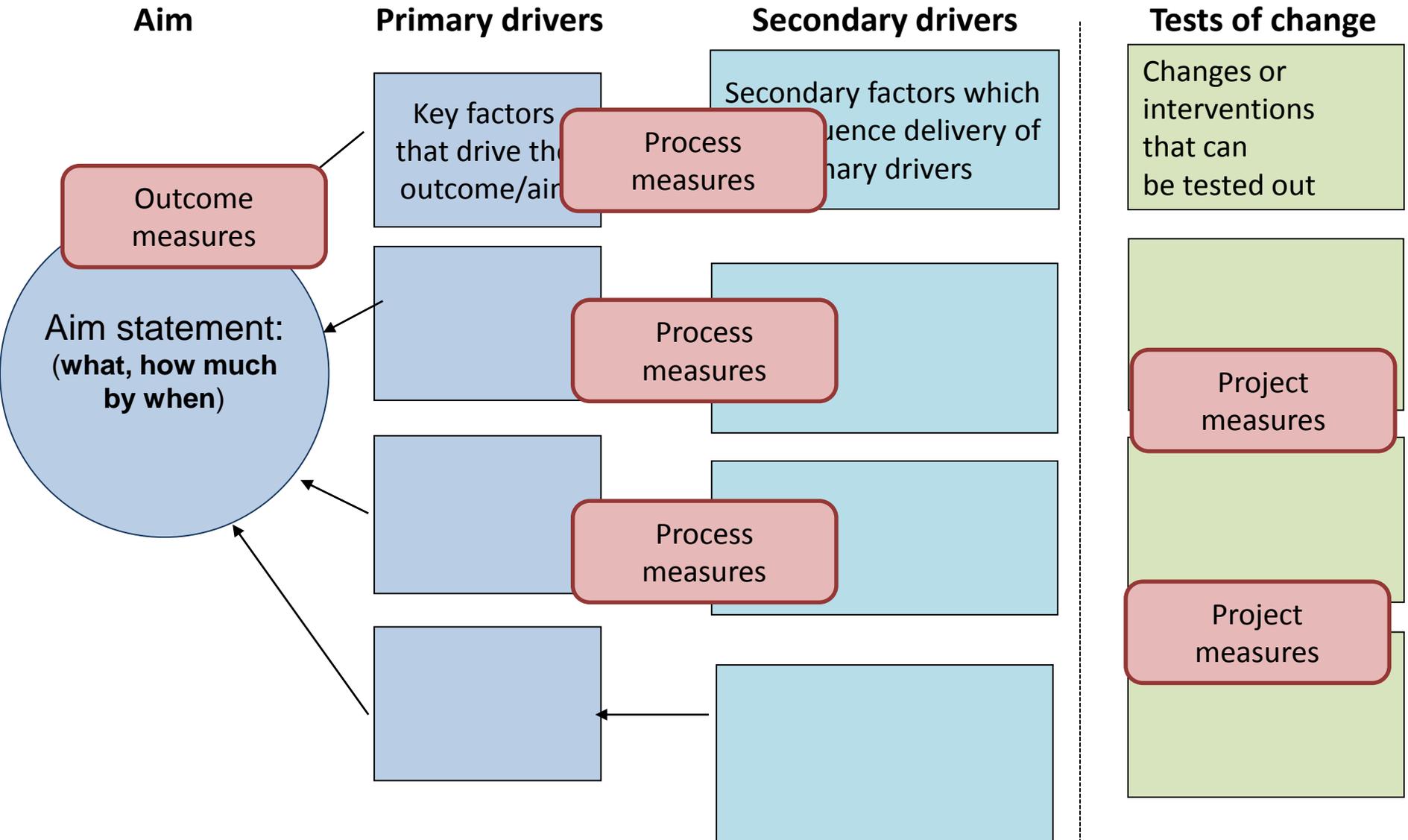
% of stories read at bedtime

% enjoying the bedtime story

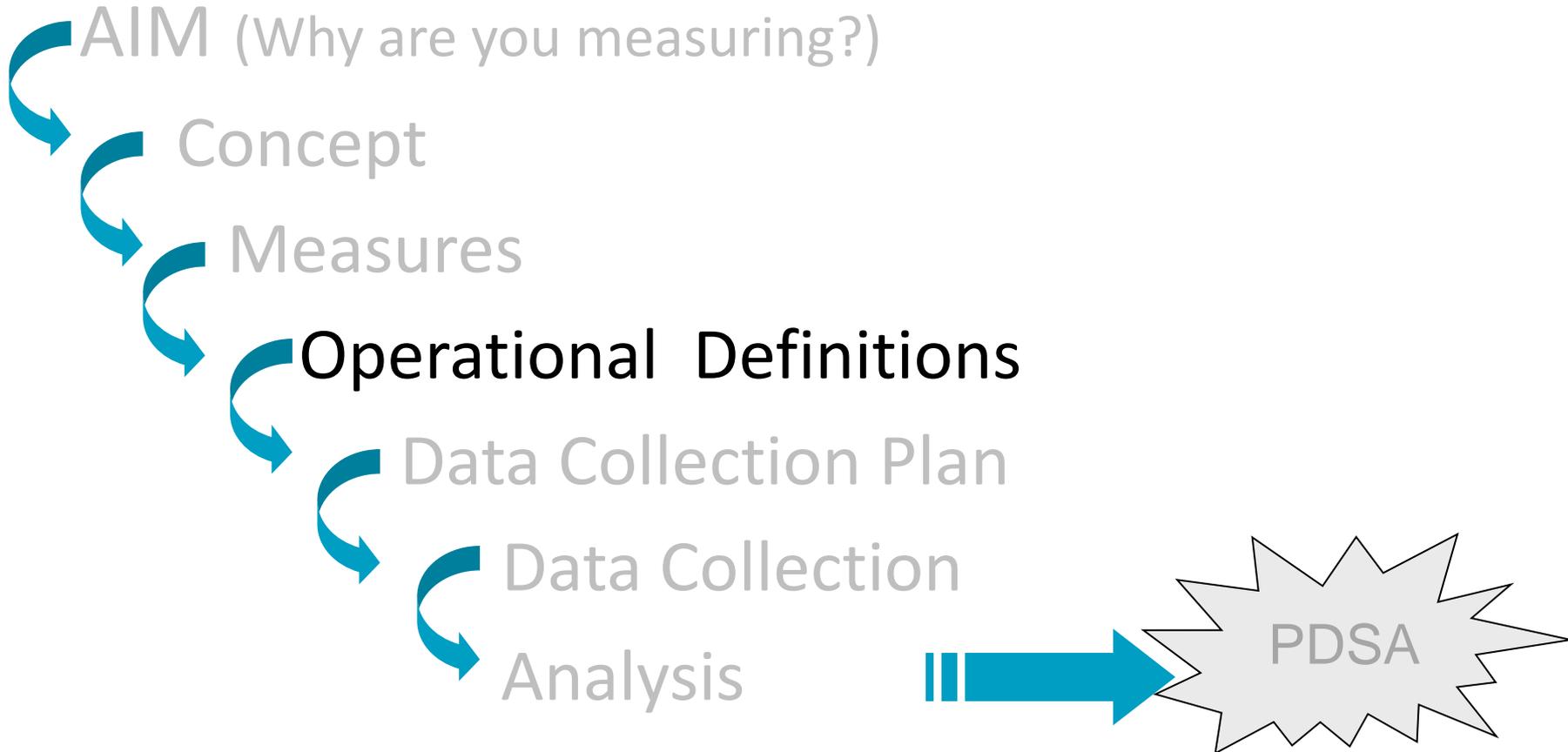
% reporting increase in bedtime story reading

% children with reduced attendance

Measures and data inform us of progress

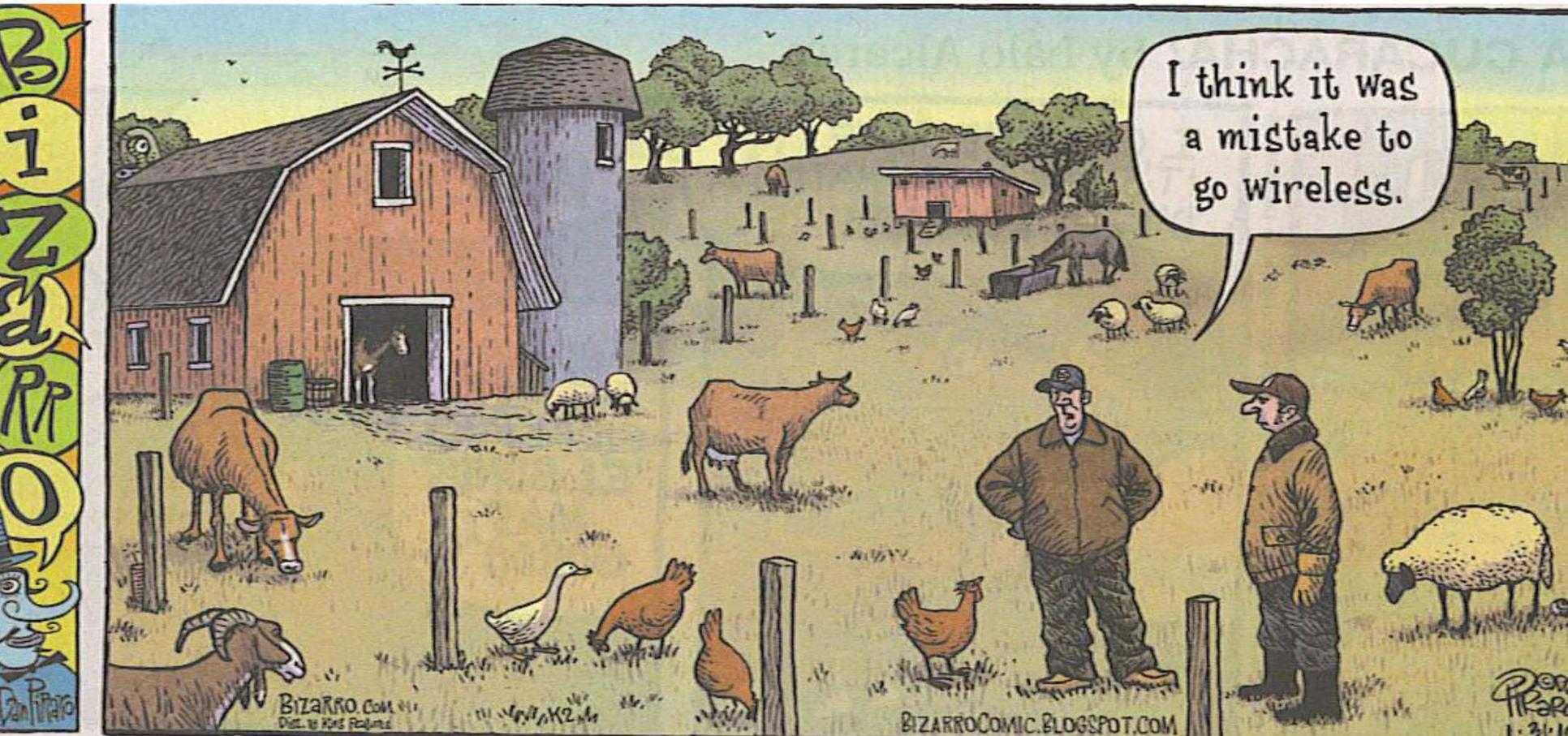


The Quality Measurement Journey



Operational Definitions

Failure to develop a clear Operational Definition often leads to confusion and misunderstanding



Operational Definitions

Method of measurement

Set of criteria for judgement

Lickert 5 point scale

supports qualitative data

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<input type="radio"/>				

Operational Definitions

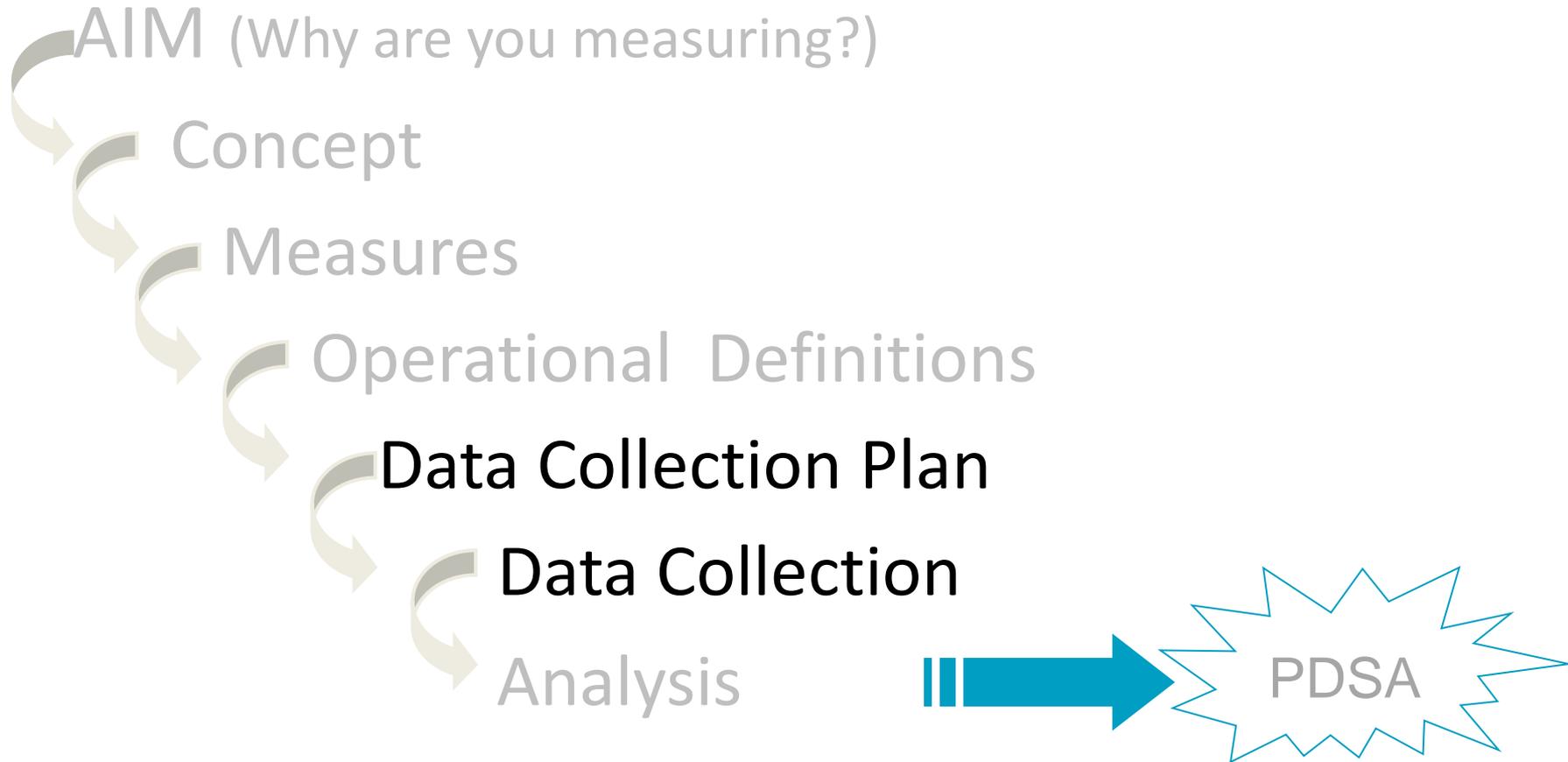
What does reading a story mean?

When is bedtime versus other time?

What is improved bedtime routine?

What is the definition of enjoyed?

The Quality Measurement Journey



Data Collection Planning & Doing

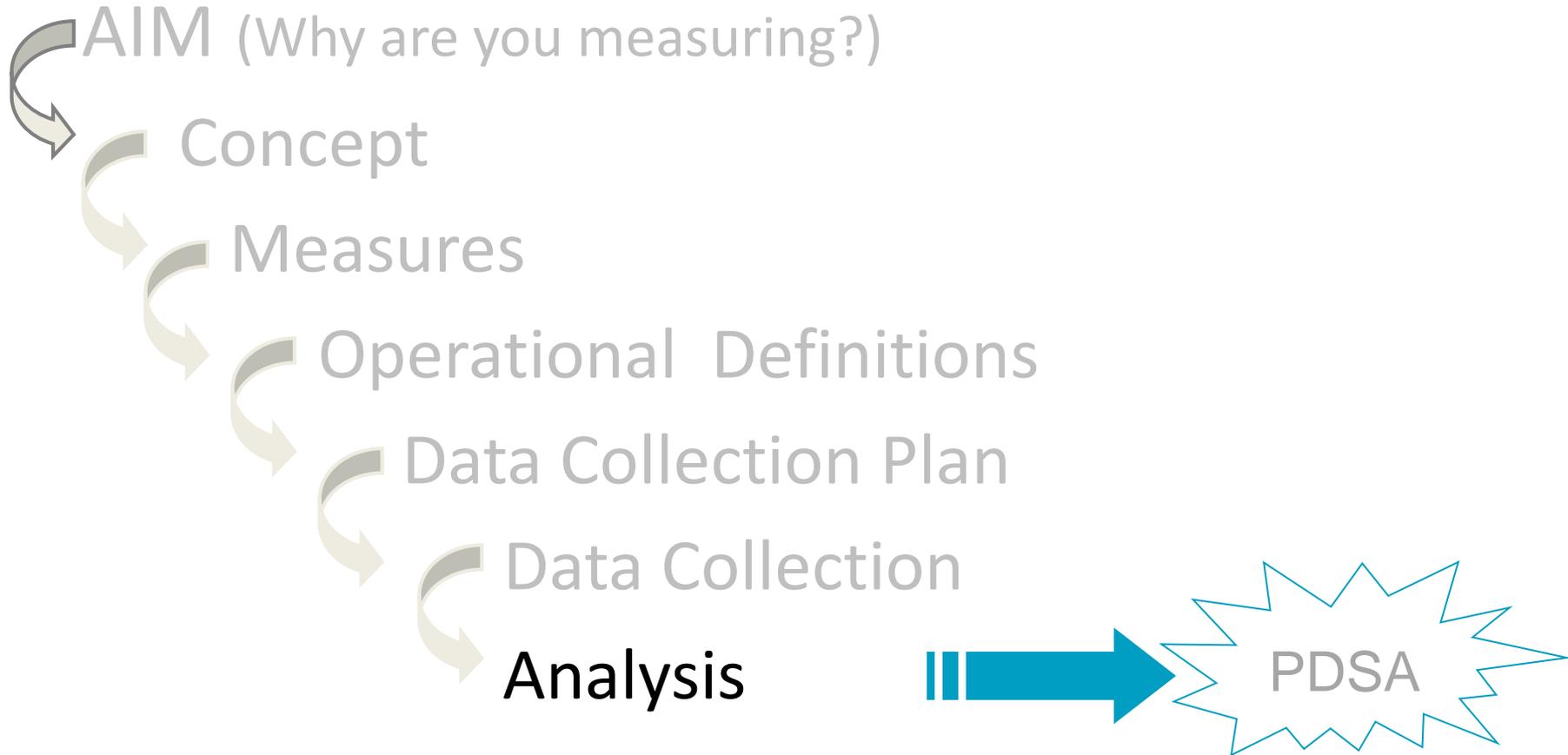
All children are included, no sampling, 7 days a week

Donna will inquire with each parent at drop off Monday through Friday

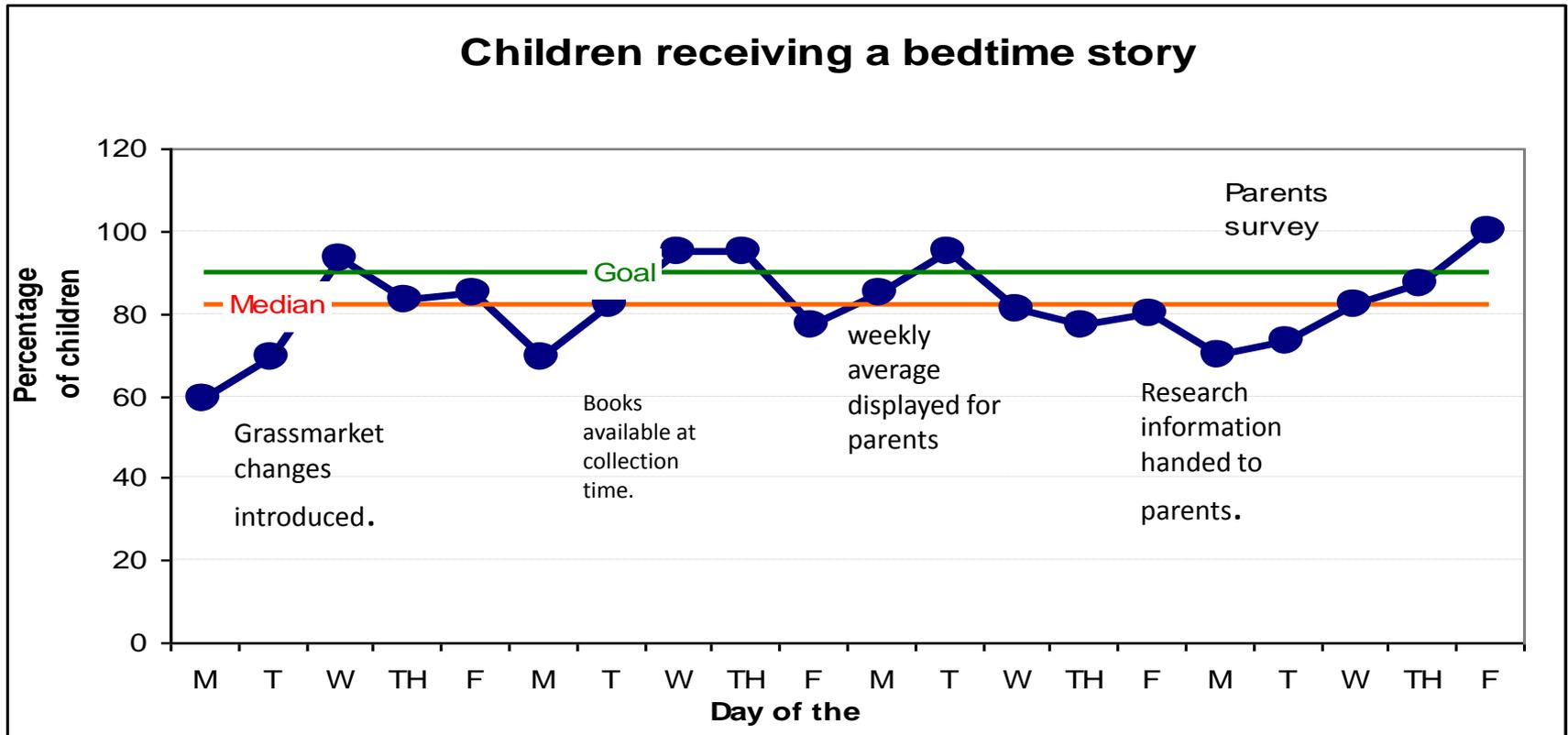
Data will be captured on a paper form

Donna inputs daily data into spreadsheet following drop off

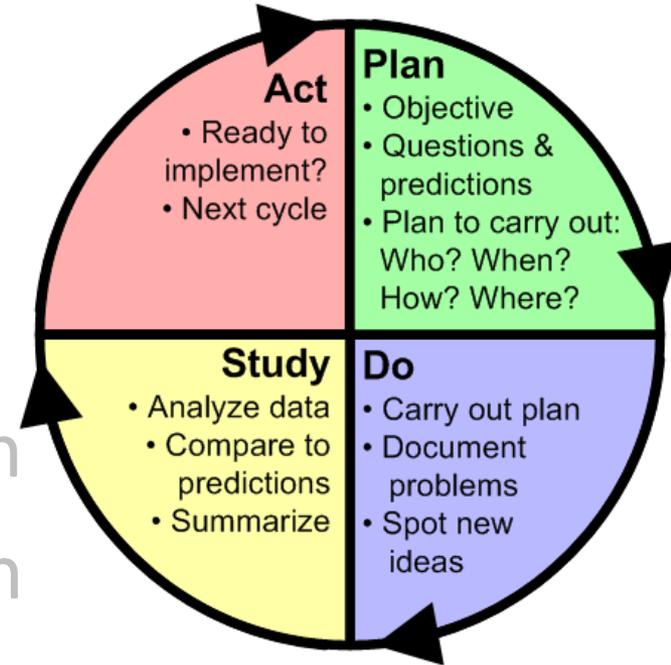
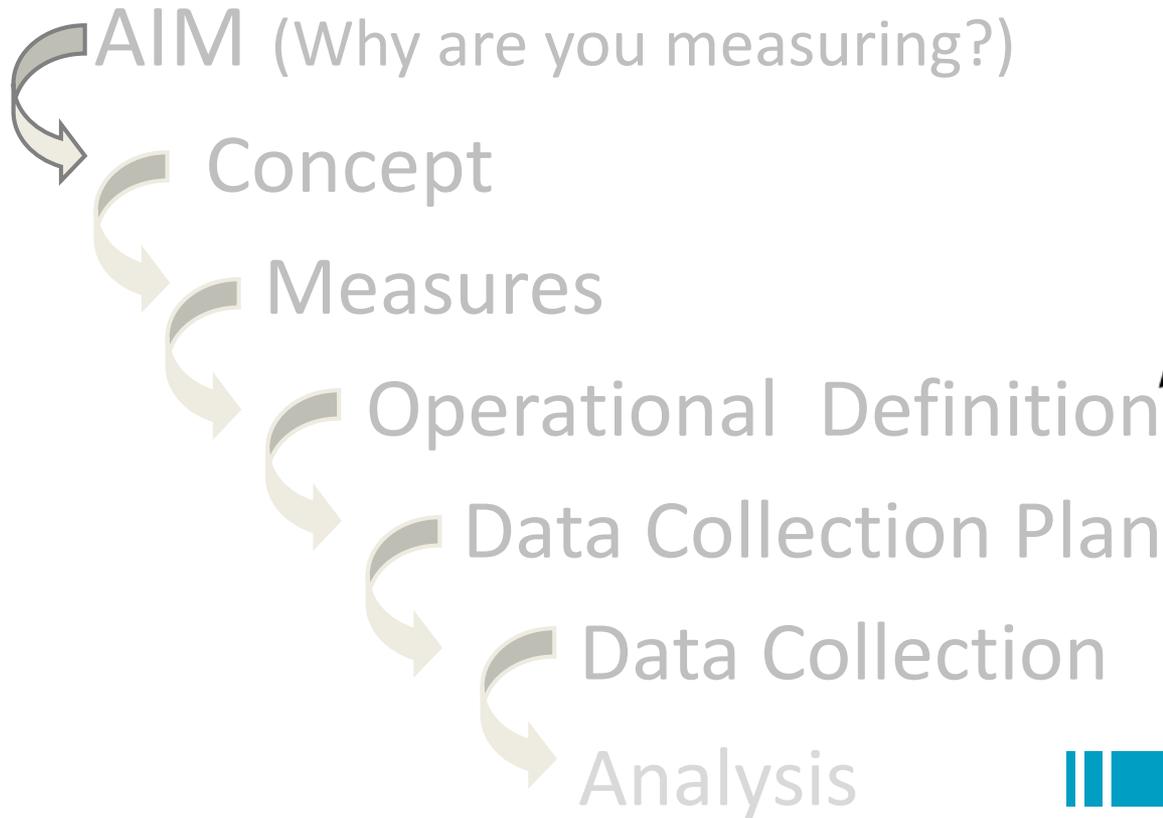
The Quality Measurement Journey



Analysis – Run Charts



The Quality Measurement Journey



Overall Project Measures and PDSA Cycle Measures

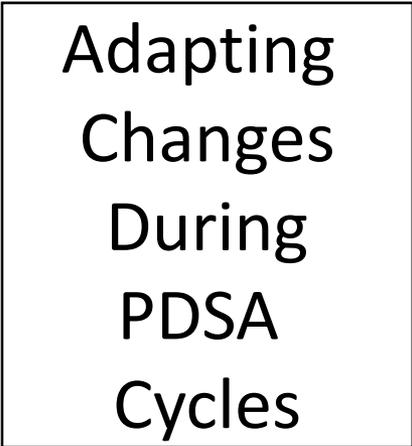
Achieving
Aim



Data for Project Measures:

- Overall **results** related to the project aim (outcome, process, and balancing measures) for the life of the project

Adapting
Changes
During
PDSA
Cycles

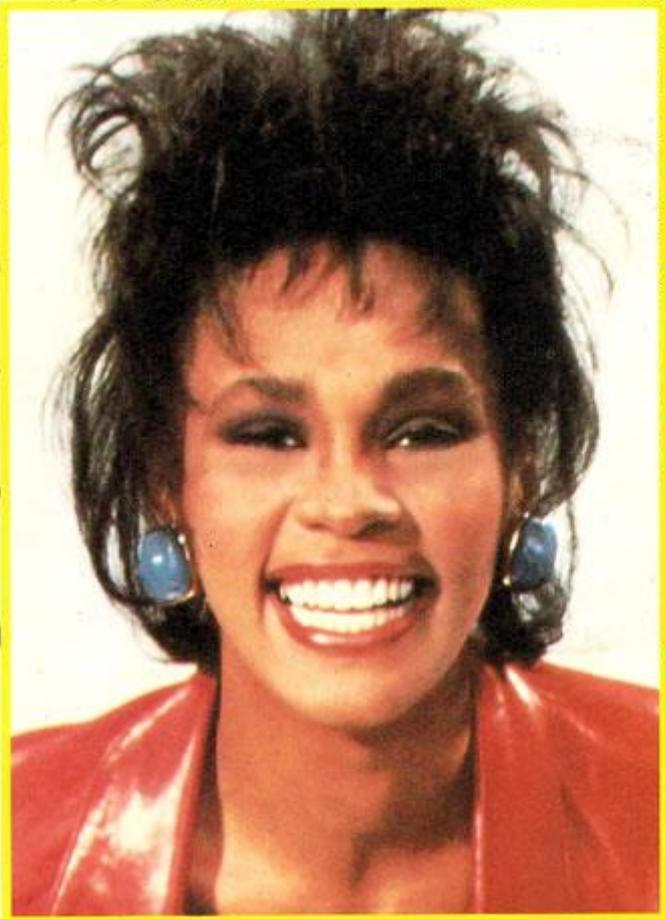


Data for PDSA Measures:

- Just enough data
- Quantitative data on the impact of a particular change
- Qualitative data to help refine the change
- Subsets or stratification of project measures for particular patients or providers
- Collect only during cycles

TASK: Measurement plan

WHITNEY HOUSTON



H O W

W I L L I

K N O W

What will you measure?

Outcome?

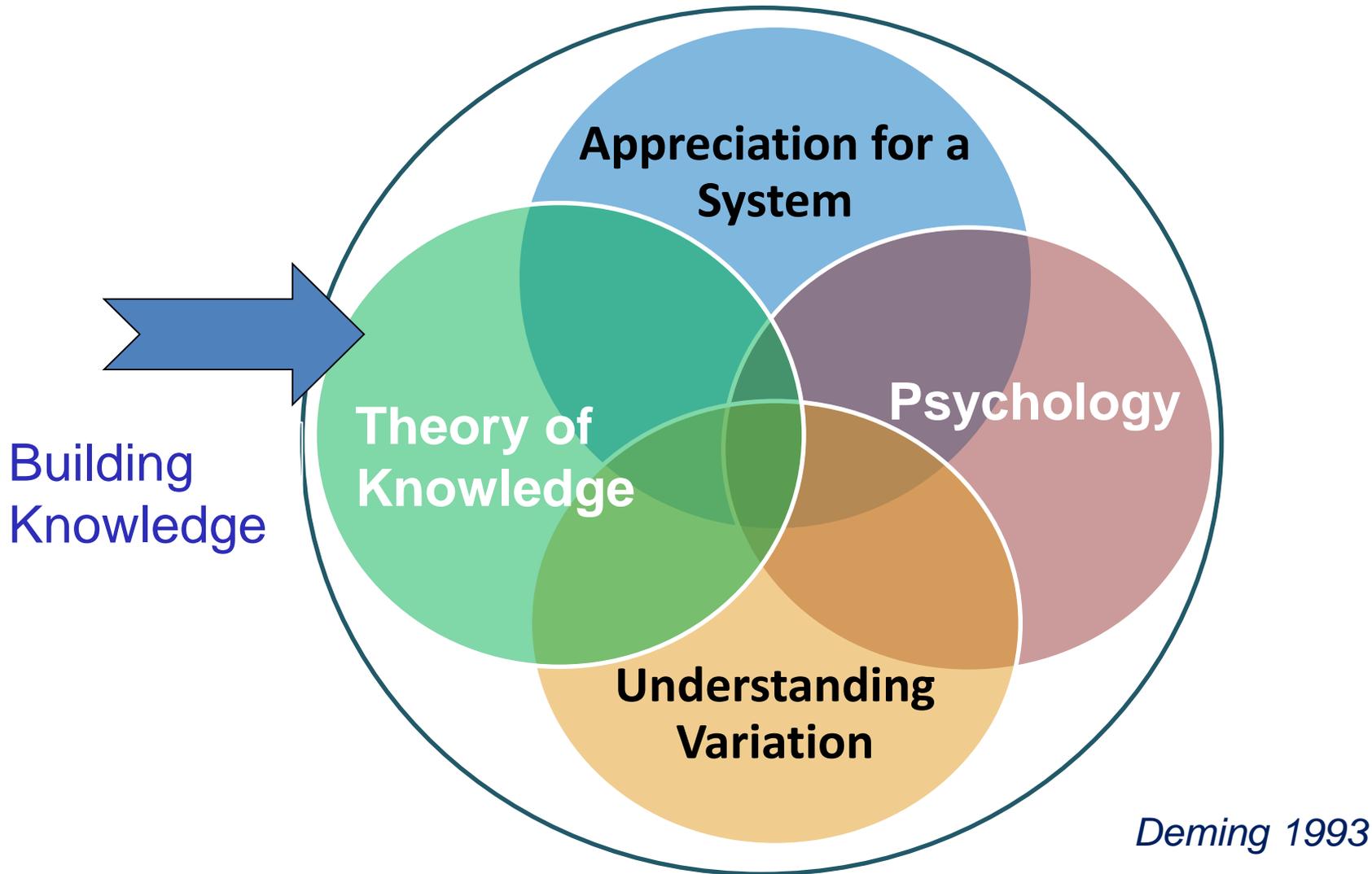
Progress?

Balancing?

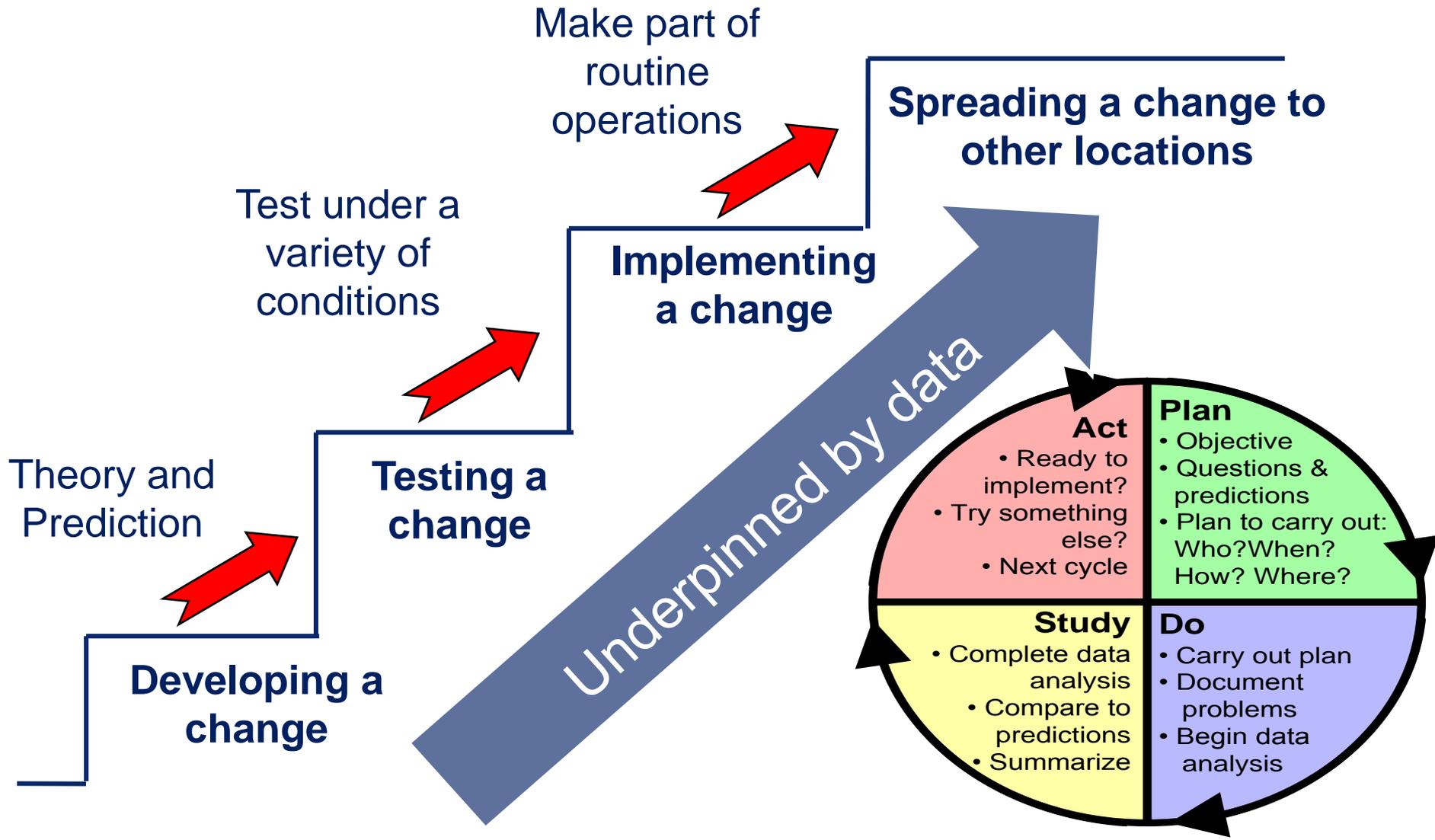
Who do you need to help with this?

What actions do you need to take?

The System of Profound Knowledge



The Vital Sequence for Improvement



Building Knowledge: PDSA cycle

The Skittles Challenge

Aim: To be left with one skittle at the end

Measure: Number of skittles left (outcome)

Changes: Which one to remove first?
What order to remove them in?

RULES

- Put a skittle on each circle
- Remove one to start
- Jump over one at a time and remove it

Execution

- Keep going until you can't jump over any more
- How many are left?
- Think about how it went and how you could improve it for next time
- **DO NOT EAT THE SKITTLES!**



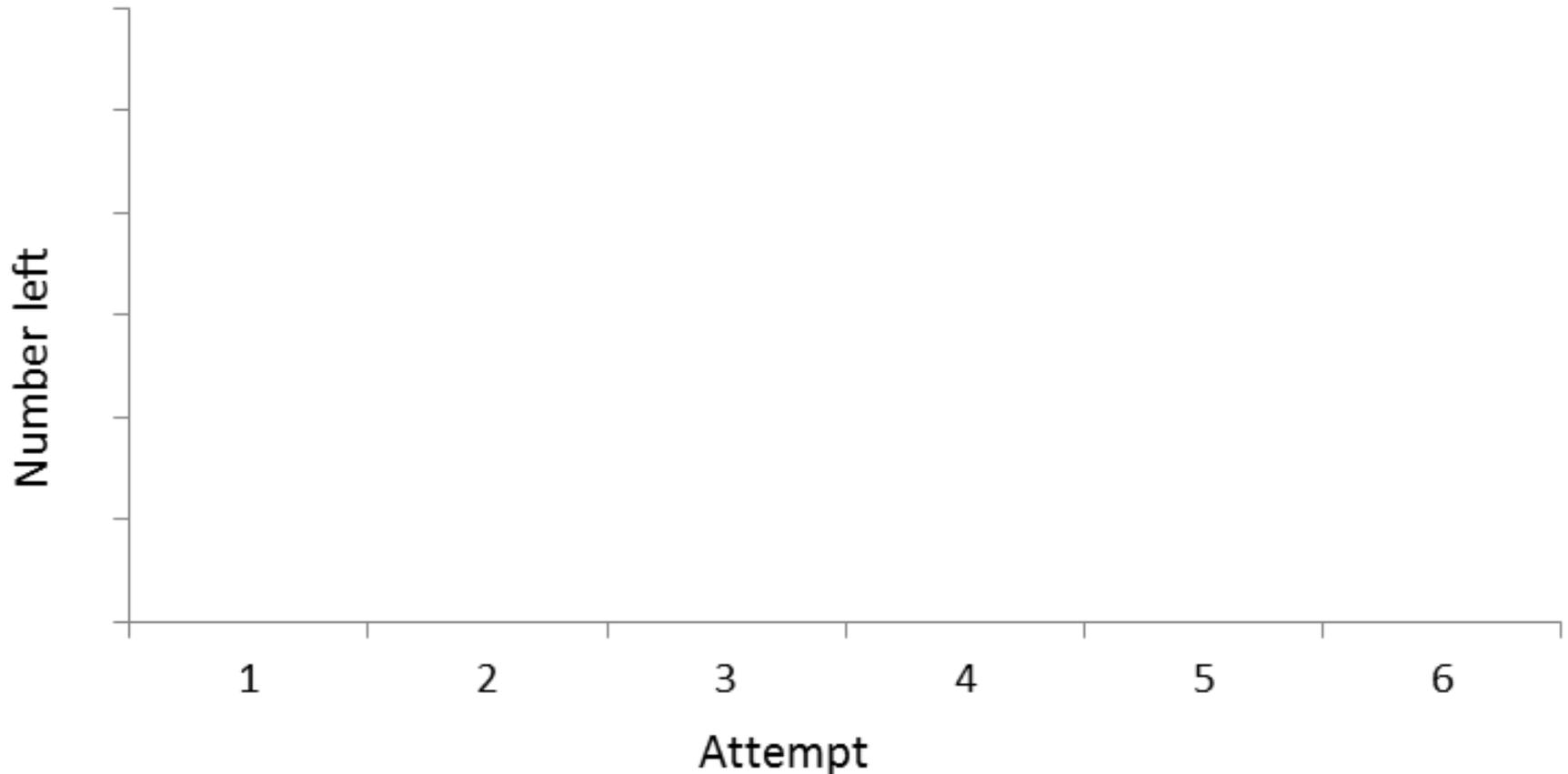
Recording



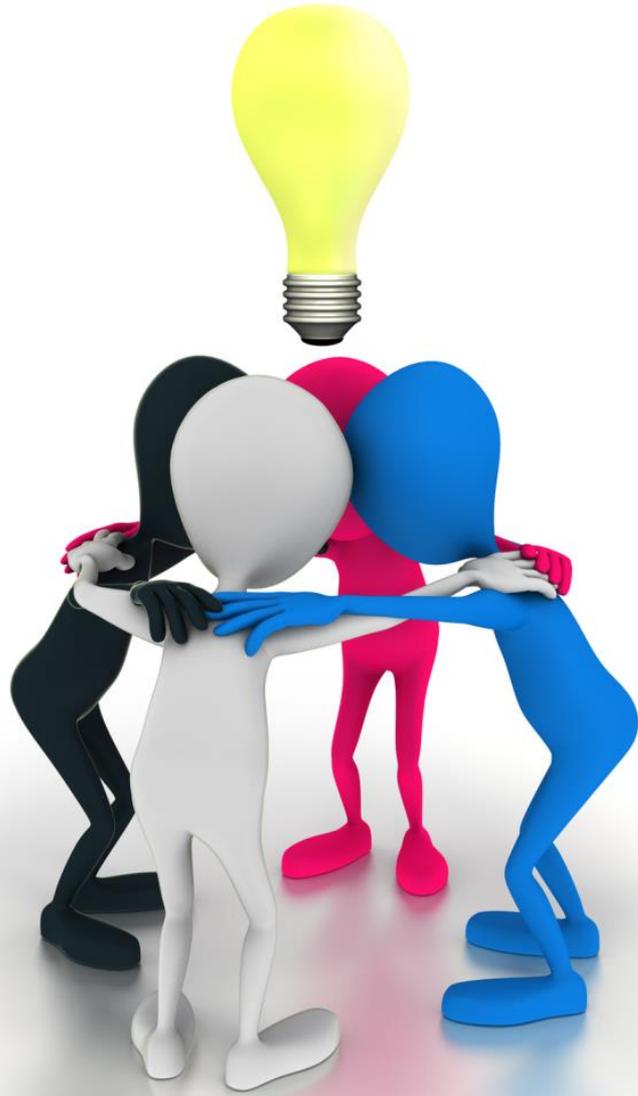
The Skittles Challenge						
PLAN	DO		STUDY		ACT	
	Aim of test	Theory/ plan	Predict number left	Number left (actual)	Observations	What we will do next time
Attempt 1	Discover how many we will be left with if we start at the top of the pyramid?	Removing top skittle will help us achieve the aim	1			
Attempt 2						
Attempt 3						
Attempt 4						
Attempt 5						
Attempt 6						

Recording: Outcome data

Skittles Challenge: Number of Skittles left



The Skittles Challenge: Learning



Consistency of purpose

Prediction & Learning

Planning

Documentation

Sharing and Stealing

Learning from Failure

The Skittles Challenge: The Solution

6-1, 4-6, 1-4, 7-2,

13-4, 2-7, 11-4, 14-5,

10-3, 3-8, 4-13, 12-14, 15-13.

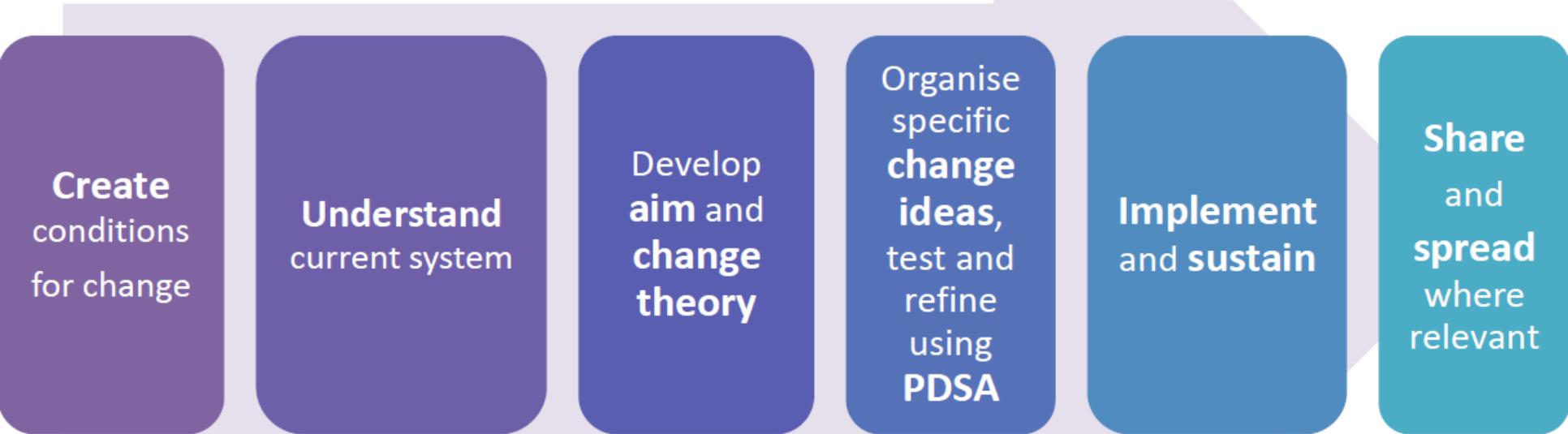
The PDSA puzzle



Part 1 – Match the actions to the relevant section of the Cycle

Part 2 – Put the Cycles into the correct order

The Improvement 'Journey'



Lead - Organise & Plan - Communicate - Measure

From Testing To Implementation

Current Situation		Resistant	Indifferent	Ready
Low Confidence that current change idea will lead to Improvement	Cost of failure large	Very Small Scale Test	Very Small Scale Test	Very Small Scale Test
	Cost of failure small	Very Small Scale Test	Very Small Scale Test	Small Scale Test
High Confidence that current change idea will lead to Improvement	Cost of failure large	Very Small Scale Test	Small Scale Test	Large Scale Test
	Cost of failure small	Small Scale Test	Large Scale Test	Implement

Learning Outcomes

Programme:

Develop confidence & capability in Quality Improvement

Lead an improvement project

Develop skills to teach others

This session:

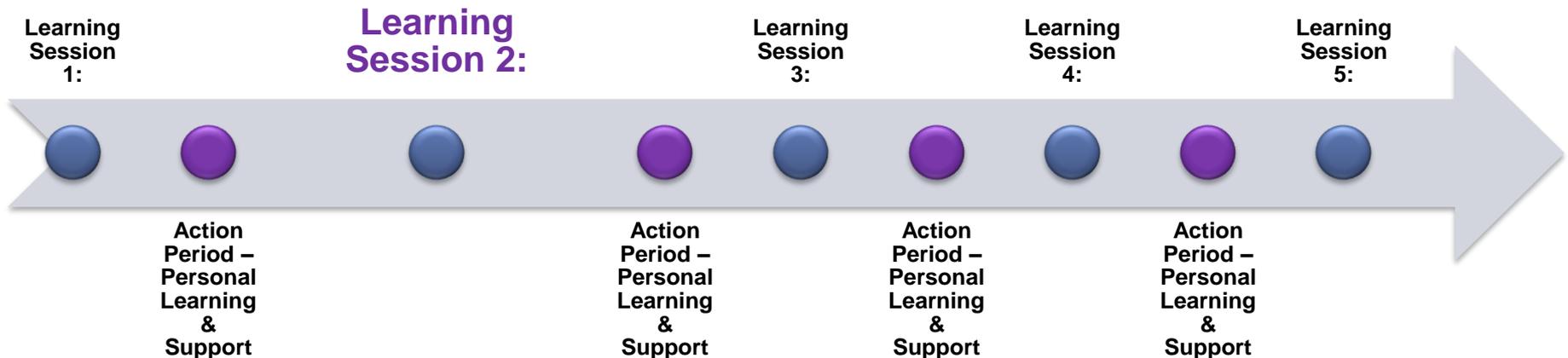
Reflect on learning so far

Understand importance of prioritisation and techniques to help.

Understand the Quality Improvement Measurement journey – measurement plans data collection, run charts.

Understand the PDSA cycle and benefits of using this to build knowledge.

Plan next steps for own project



Next Steps...



- Update Charter?
- Develop Driver Diagram?
- Develop measurement and data collection plan?
- Prioritise and Test changes using PDSA cycles?
- Contact mentor/buddy & agree support plan for this period.
- Complete monthly progress update by 15th November & prepare for next project surgery

Next Learning Session: Tuesday 19 November @ 10am

Check out:

Choose to share
your thoughts
about today and
your next steps

Please feed-forward....
What Went Well?
Even better if?



Monthly Progress Update

Project Title:

Project Lead Name:

Report Date:

Contact Info:

What are we trying to accomplish?
(Include Project Start/End Date and Goals)

PDSA's In Progress Now

-

Changes We Plan to Test

-

Team

Team Project Progress Score (0.5-5.0 Scale) and Reason

- Project score:

Barriers and Specific needs to Overcome Them.

List of Measures

(Please include data/run charts on additional slides)

Recommendations / Next Steps

EXAMPLE Monthly Progress Report

Project Title: *Improving Attachment-led Practice in Aberdeen*

What are we trying to accomplish? (Include Project Start/End Date and Goals)

Project Start Date: 1 Feb 2014

When assessed, 80% of children in Angels & Co will demonstrate high levels of emotional wellbeing by 31 October 2014

End Date: 31 October 2014

Team

AS – Manager & Project Lead

SM- Asst. Manager & Data Lead

J M– Practitioner

SZ – subject matter expert

SW – IA

PDSA's In Progress Now

- To what extent does the 'Smiley Face' chart help parents, staff and children understand the reasons for assessing children's emotional wellbeing
- To what extent does the 'Smiley Face' chart help the staff team to analyse children's level of emotional wellbeing?
- To what extent do the weekly staff meetings help staff feel more confident about the new system.

Team Project Progress Score (0.5-5.0 Scale) and Reason

- Project score: 3.5
- PDSA cycles carried out, data collected, improvement evidenced and implementation plan is being developed.

Changes We Plan

To what extent does the article in the nursery newsletter help parents to understand the purpose and benefits of observing and responding to children's level of emotional wellbeing and involvement.

Barriers and Specific needs from Sponsor to Overcome Them.

Ensure SW has capacity to support the local authority settings who have volunteered to test the use of the Leuven Scale.

List of Measures

Outcome Measures

Children's emotional wellbeing

- % of children who have high levels of emotional wellbeing **(O1)**

Process Measures

Assessment

- % of practitioners using assessment tool **(P1)**
- % of children who have been assessed using assessment tool **(P3)**

Support plans

- % of children with individual support plans related to supporting emotional wellbeing **(P4)**

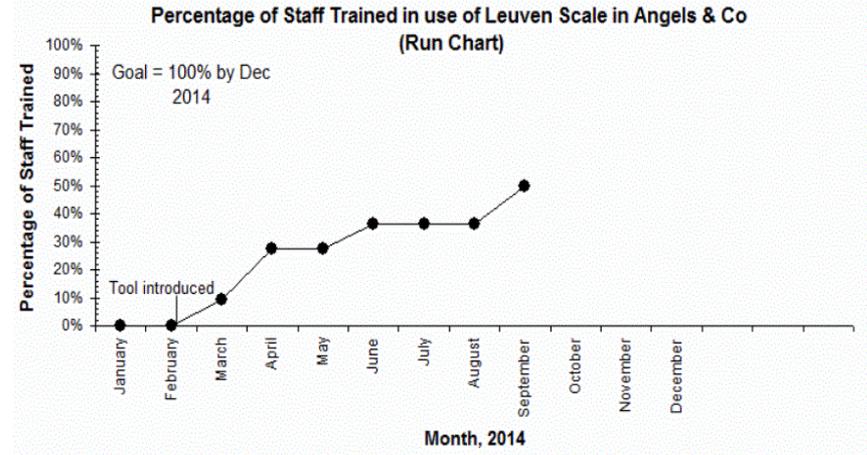
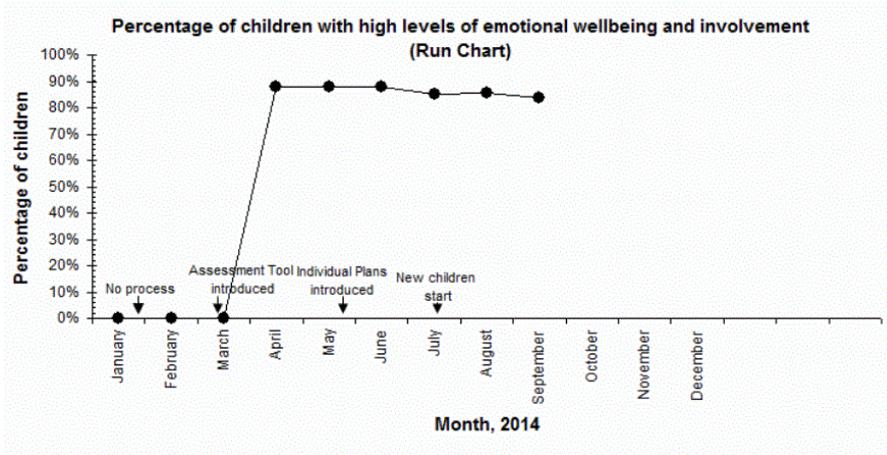
Balancing Measure

- # of children who have reduced ability to self-regulate. **(B1)**

Recommendations / Next Steps

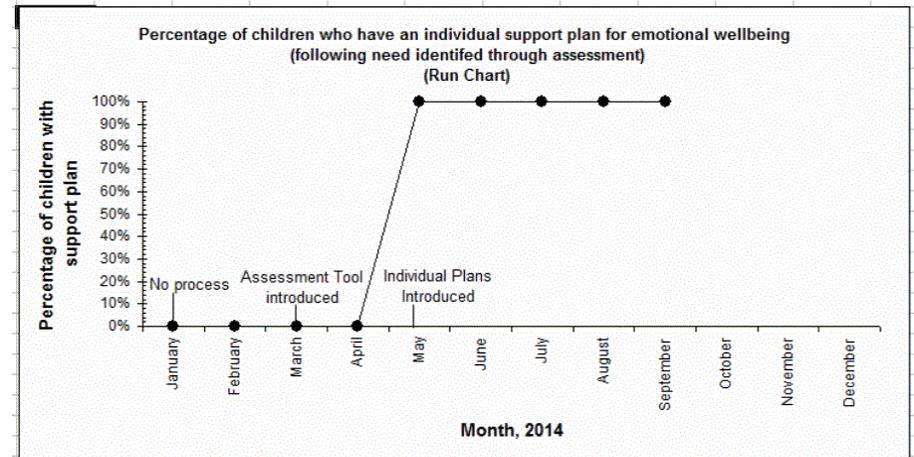
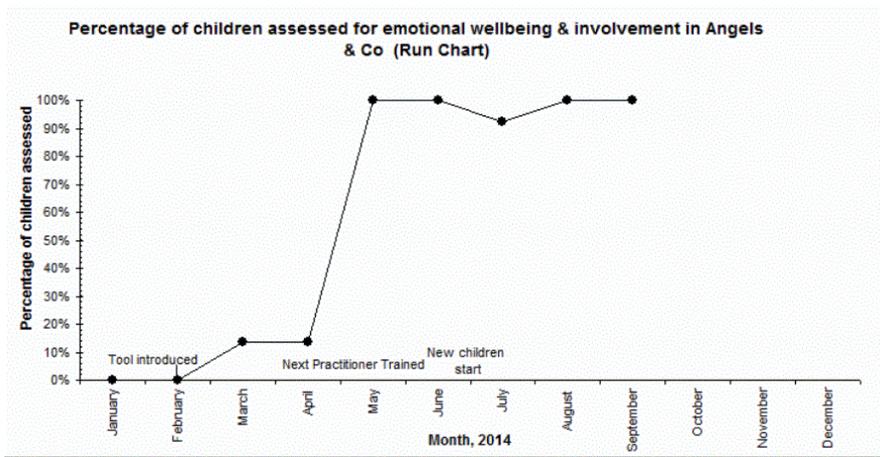
- [Develop implementation plan for wider use of assessment tool in setting](#)
- [Review policies & procedures.](#)

- [Share learning with other settings](#)



OUTCOME MEASURE 1

PROCESS MEASURE 1



PROCESS MEASURE 3

PROCESS MEASURE 4