# THE HABITS OF AN IMPROVER

## Making improvement normal

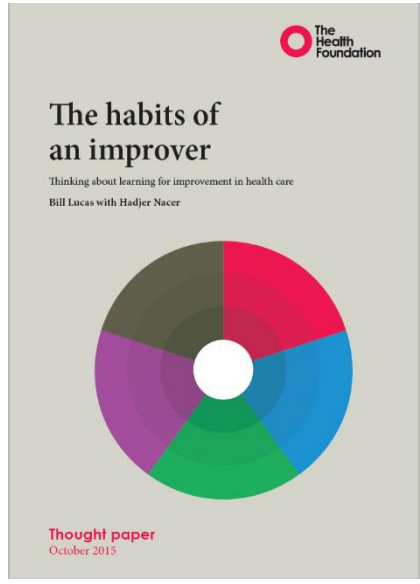
Prof Bill Lucas
Centre for Real-World Learning

@LucasLearn

The Health Foundation
Inspiring Improvement

UNIVERSITY OF WINCHESTER


QUESTIONING
PROBLEM FINDING
REFLECTIVE
LEARNING
EMPATHETIC
FACILITATIVE
COMFORTABLE WITH CONFLICT
INFLUENCING
COMMUNICATION
CO-PRODUCING HEALTH AND SOCIAL CARE
CONNECTION MAKING
SYNTHESISING
ACCEPTING OF CHANGE
SYSTEMS THINKING
OPTIMISTIC
CALCULATED RISK TAKING
TOLERATING UNCERTAINTY
RESILIENCE
COMMUNICATION
CREATIVITY
TEAM PLAYING
CRITICAL THINKING
GENERATING IDEAS


The Health Foundation
The habits of an improver
Thinking about learning for improvement in health care
Bill Lucas with Hadjer Nacer
Thought paper
October 2015

# Getting the improvement habit



Bill Lucas

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Improving healthcare services can all too easily become synonymous with the use of certain in vogue tools for improving quality. Trigger tools, run charts and driver diagrams are just three examples of techniques used by frontline staff who are undertaking improvement work. Educators seeking to teach improvement are similarly faced with long lists of possible approaches and techniques with which to fill their course descriptions. As a consequence the temptation for improvement leaders and teachers is to include yet another technique in an already crowded curriculum, to add in more 'stuff'.

But what if focusing so much on the tools is actually unhelpful? What if our attempts to create better and safer organisations is muddled rather than enhanced by the growing interest in so many techniques? Could we be putting off the very people we need to engage by the use of what can be seen as jargon? Might it lead people to see improvement as an event or a 'project' rather than as a way of working?

Sure, knowledge and skill are vitally important and we must be able to measure the impact of any changes over [illegible] we need a way of [illegible]where

conversation might change if it were framed in terms of the kinds of habits which successful improvers demonstrate.[2] If we could agree on the kinds of habits which seem to matter, then it might be easier to consider which knowledge and what skills will be needed according to specific contexts. And then (and only then) it may become clearer to frontline staff which improvement tools they will wish to use. By the same token, if we are clearer about what the habits of improvers are, it might be easier for educators to select pedagogies most suited to the cultivation of these target habits.

A theory of change[3] to underpin this line of argument looks like this:

If:

- we clearly articulate the range habits which improvers need to have, and the knowledge and skills which will help them improve care.

Then:

- we can more precisely specify the learning required and the best learning methods.

So that:

- all caregivers embrace an ethic of learning, and considerable value is created for all those who create, deliver and use care services.

By articulating a set of habits it [illegible]easier to decide which techni- [illegible]nowledge needs

# Homer’s fixed mindset

“Every time I learn something it pushes some old stuff out of my brain.”

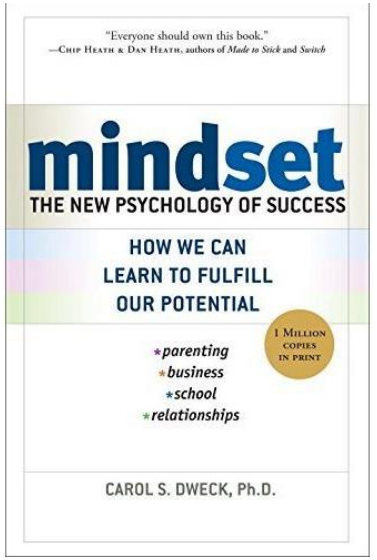
# Carol Dweck : the importance of having a growth mindset

## Ability is fixed

- Proving
- Safe learning
- Failure/mistakes bad
- Effort averse
- Fragile - depressive
- Shirk/blame/cheat
- Comparative/competitive
- Inaccurate self-image

## Ability is expandable

- Improving
- Adventurous learning
- Failure/mistakes useful
- Effort pleasurable
- Resilient - determined
- Try/commit/be open
- Collaborative/generous
- Accurate self-image



‘Healthcare will not realise its full potential unless change making becomes an intrinsic part of everyone’s job, every day, in all parts of the system.’

Batalden, P., and Davidoff, F. (2007) What is ‘quality improvement’ and how can it transform healthcare? *Quality and safety in healthcare* 16 (1) 2-3

Future Hospital Journal 2016 Vol 3, No 3: 191–4

# Does quality improvement improve quality?

Authors: Mary Dixon-Woods[A] and Graham P Martin[B]

ABSTRACT

**Although quality improvement (QI) is frequently advocated as a way of addressing the problems with healthcare, evidence of its effectiveness has remained very mixed. The reasons for this are varied but the growing literature highlights particular challenges. Fidelity in the application of QI methods is often variable. QI work is often pursued through time-limited, small-scale projects, led by professionals who may lack the expertise, power or resources to instigate the changes required. There is insufficient attention to rigorous evaluation of improvement and to sharing the lessons of successes and failures. Too many QI interventions are seen as 'magic bullets' that will produce improvement in any situation, regardless of context. Too much improvement work is undertaken in isolation at a local level, failing to pool resources and develop collective solutions, and introducing new hazards in the process. This article considers these challenges and proposes four key ways in which QI might itself be improved.**

**KEYWORDS:** evaluation, healthcare organisation, hospitals, patient safety, quality improvement, research design/methods

## Introduction

The quality and safety of healthcare worldwide remain problematic. Many of the basic operational systems and routines of work required to care for patients are not fit for purpose. Few

US studies suggest that nurses deal with an average of 8.4 work system failures per 8-hour shift, and they are continually interrupted.[5,6] The need for staff to learn and re-learn, associated with the variability in fundamental processes, is significant. Much professional time is consumed unproductively in learning anew how to undertake tasks as basic as ordering tests, knowing whether equipment has been cleaned, or how things are arranged in the resuscitation trolley in each setting. Personnel may also make errors as they move from place to place, either because they have not yet learned the new procedures or they apply previous learning to new but different contexts, sometimes with tragic outcomes.[7]

## The problems with quality improvement

Healthcare has increasingly been encouraged to use quality improvement (QI) techniques to tackle these operational defects (clearly, healthcare faces many other challenges but they may require different approaches). Capacity to improve quality is clearly critical to healthcare organisations; every organisation needs to be able to detect its operational (and other) problems and solve them using structured methods. For many problems (although far from all), that may mean using methods adapted from other industries, such as Lean and Six Sigma, or approaches developed within healthcare, such as the Institute for Healthcare Improvement's Model for Improvement. This widely used model combines measurement – using statistical process control,

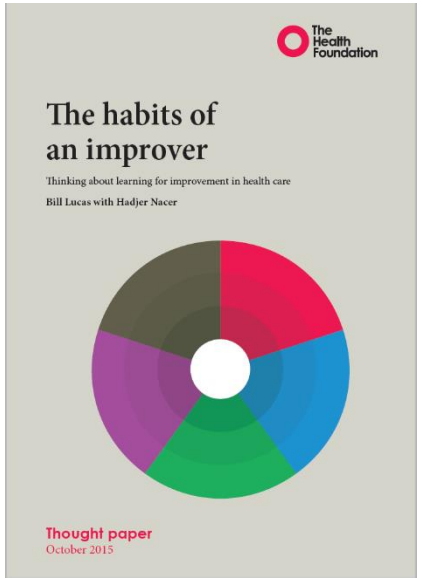
# Why is changing habits hard?

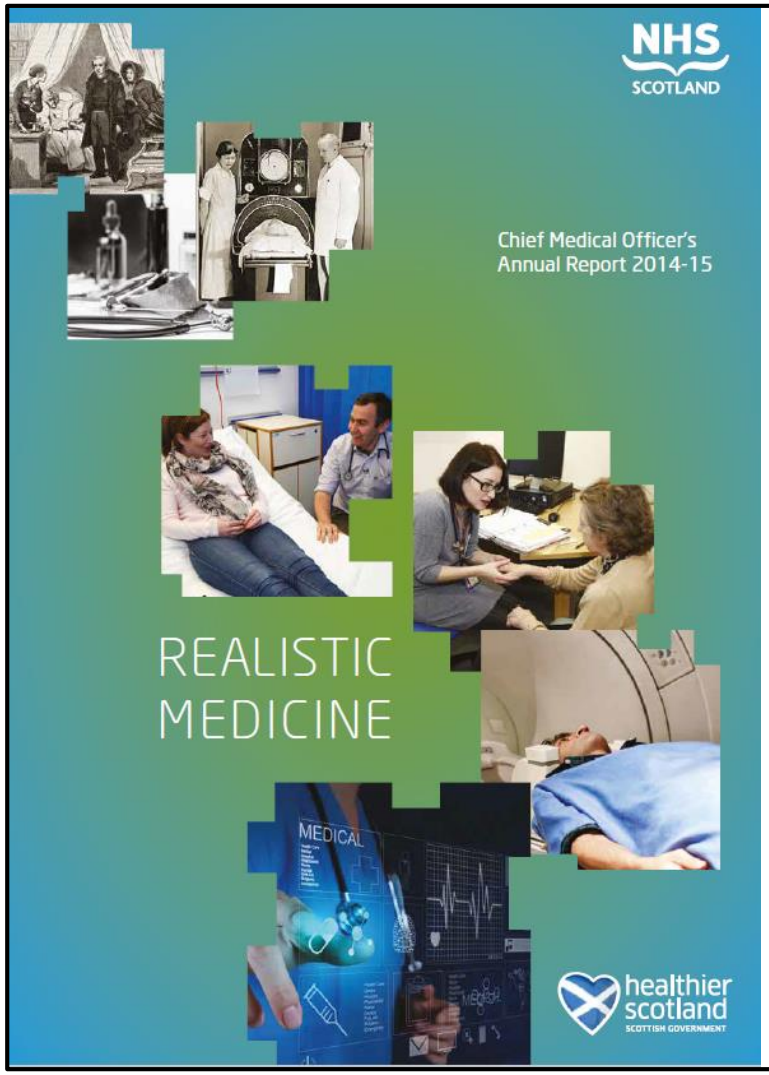
# Gleicher's Formula

$$D \times V \times F > R$$

# Why now?

- ❑ Growth of interest in science of improvement
- ❑ Expansion of ‘courses’ in ‘QI’
- ❑ Growing interest from Medical Royal Colleges
- ❑ Q community
- ❑ Lack of buy-in from health and social care
- ❑ Groups like AHSNs and CLAHRCs
- ❑ Support from Scottish CMO
- ❑ QI Division, Ireland, Aqua, 1000 Lives
- ❑ Growing international interest








## Doctors and the Management of Clinical Risk

Managing risk in healthcare is a universal challenge for doctors and other professionals. Doctors tread a difficult path, with the expectation that they will make robust decisions balanced against criticisms of being overly paternalistic.

There is risk associated with every clinical decision, whether it is to do something, or do nothing. Beyond risk factors identified by statistical analysis there is no substitute for clinical experience. An early sign in burn out of doctors is their reduced ability to tolerate the anxiety of making risky decisions.

Good risk management is also dependent on communication of risk with other services.

## Changing our Practice to Support Improvement

Scotland's medical staff, working with all our colleagues in health and social care, continue to be at the forefront of the wide range of improvements in the safety, effectiveness and quality of care and treatment within our National Health Service.

Improvements in the quality of care are often dependent upon having the right conditions in place – positive relationships with colleagues, a learning culture and an understanding of tried and tested ways of implementing change in complex systems.


**From Lucas, B & Nacer, H. (2015). The habits of an improver. Thinking about learning for improvement in healthcare. London: The Health Foundation. P.8.**

We should be focusing completely and relentlessly on what matters most to the people who look to us for care, support and treatment.

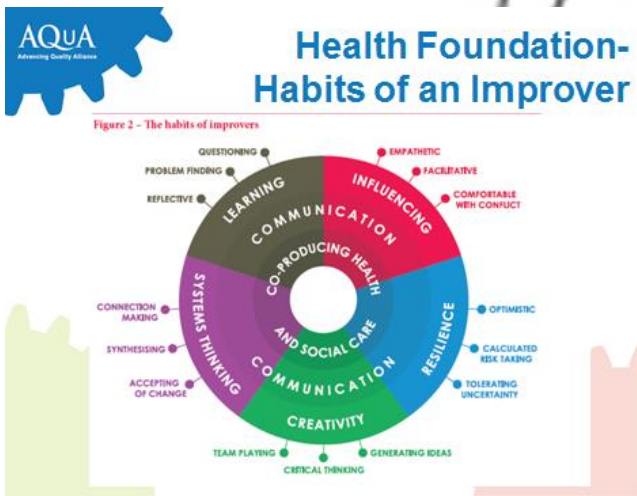
## Translation of Medical Research into Routine Clinical Practice

The translation of research findings into clinical practice has transformed healthcare. It is a cornerstone of modern evidence-based medicine and of an advanced healthcare system. However, the route to translation can be challenging: high costs, scarce funds, shortages in key research infrastructure, capacity or capabilities, slow and incomplete recruitment to trials are amongst the potential barriers to the progress of translational research studies. Medical research and development can follow ill-defined and circuitous paths before being taken up into improved patient care.

# Reflection time

**What do you think?**

- Of the model?
- Is it useful?
- Does it help you understand yourself and others in relation to QI?



At the heart of the Framework for Improving Quality is developing a culture of person-centred care. Person-centred care and practice views the people using health and social care and support services as equal partners in planning, developing and monitoring care to make sure it meets their needs. This means putting people and their families at the centre of decisions, working alongside professionals to get the best outcome.

Everyday thousands of health service staff live the values of **care, compassion, trust and learning**. The Values in Action is a behaviour and cultural change initiative which aims to bring about real sustainable cultural change. The Values in Action has translated the values into nine behaviours that reflect three dimensions: the individual, work and patient dimension.

## 7. Development assessment tool

Using the embedded development assessment tool, follow the scale below to assess your learning and development needs and tick as appropriate against the knowledge and skills listed within your driver and level:

| **Confident: I feel confident about my knowledge and skills in this area** |
|---|
| Consider: |
| • I understand and know the knowledge and skill |
| • I can give an example of when I successfully applied the knowledge and skill |

| **Some development: I require some development in my knowledge and skills in this area** |
|---|
| Consider: |
| • A knowledge and skill that needs strengthening |

| **A lot of development: I require a lot of development in my knowledge and skills in this area** |
|---|
| Consider: |
| • I don't understand or know the knowledge and skill |
| • I can't give an example of when I successfully applied the knowledge and skill |

At the end of each section there is a space called **"Areas I require development in"**. Use this space to note actions that may be included within an action plan or personal development plan. Identify HSE or external resources, education and training courses that best meets your development needs and use the hyperlinks provided for the improvement knowledge and skills to guide you. Please visit www.qualityimprovement.ie for more information.

### Tips

- ✓ Before starting your assessment, you may find it helpful to discuss the list of knowledge and skills with your manager, clinical team lead or colleague
- ✓ Some of the knowledge and skills listed are subjective, be honest with yourself when thinking about your role and your learning and development needs and rate them realistically
- ✓ Keep in mind that while you may feel confident in a particular knowledge and skill, can you give an example of when you successfully applied the knowledge and skill?

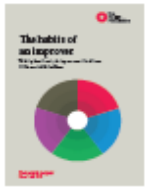




- ✓ Remember that not all drivers, levels and knowledge and skills listed will be applicable – This will depend on your current role
- ✓ Use the development columns to prioritise development actions

## 8. Habits of an improver

We encourage you to express what you value and how those values motivate you to continuously strive for improvement. As you go on your learning and development journey in improvement, we can share, based on academic research, the common habits of effective improvers which you can use as a guideline as you embark on your journey and discovery of what values and behaviours are important to you.

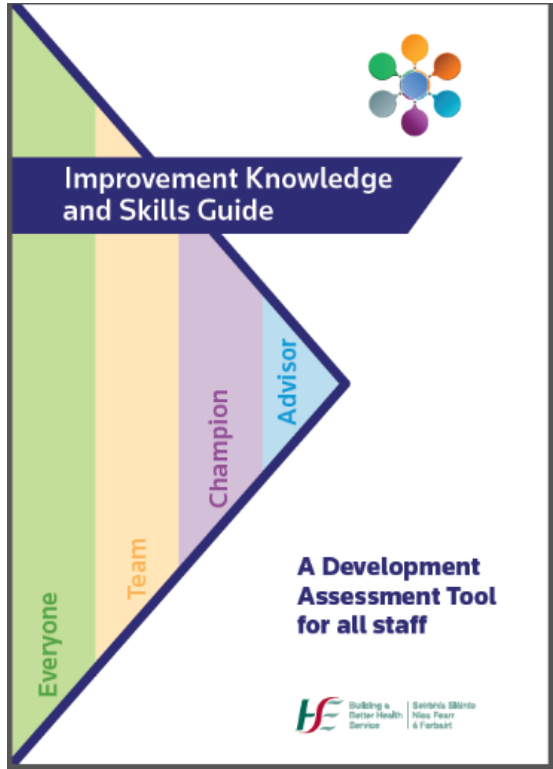


Research by Bill Lucas and colleagues, published by the Health Foundation as The Habits of an Improver is increasingly being used as a way of framing improvement activity at an individual, team and organisational level. The habits of an improver model offers a way of viewing the field of improvement from the perspective of staff that deliver and co-produce care and services on the ground. The choice of the word 'habit' is deliberate. Knowing something or even being skilled at doing something does not by itself lead to improvement. It is only when people habitually use their knowledge and skills in the real-world context of providing care and services that behaviours develop.

Figure 3 describes 15 habits which improvers repeatedly demonstrate. These habits complement the knowledge and skills which healthcare workers need to have in relation to undertaking improvement.


Figure 3: Habits of an Improver





If:
- we clearly articulate the range of habits which improvers need to have, and
- the knowledge and skills which will help them improve care

Then:
- we can more precisely specify the learning required, and
- the kinds of methods which are most likely to be helpful, and
- when the best times for this learning to take place are

So that:
- learning to build improvement capability becomes more widespread, and
- more staff want to change their practices, and
- more staff want to and have time and support to undertake learning

So that:
- the NHS embraces an ethic of learning, and
- the experiences of all patients and service-users are improved, and
- considerable value is created for all those who create, deliver and use and co-produce NHS services.

[The idea of habits]

‘Intelligence is the habit of persistently trying to understand things and make them function better. Intelligence is working to figure things out, varying strategies until a workable solution is found… One’s intelligence is the sum of one’s habits of mind.’

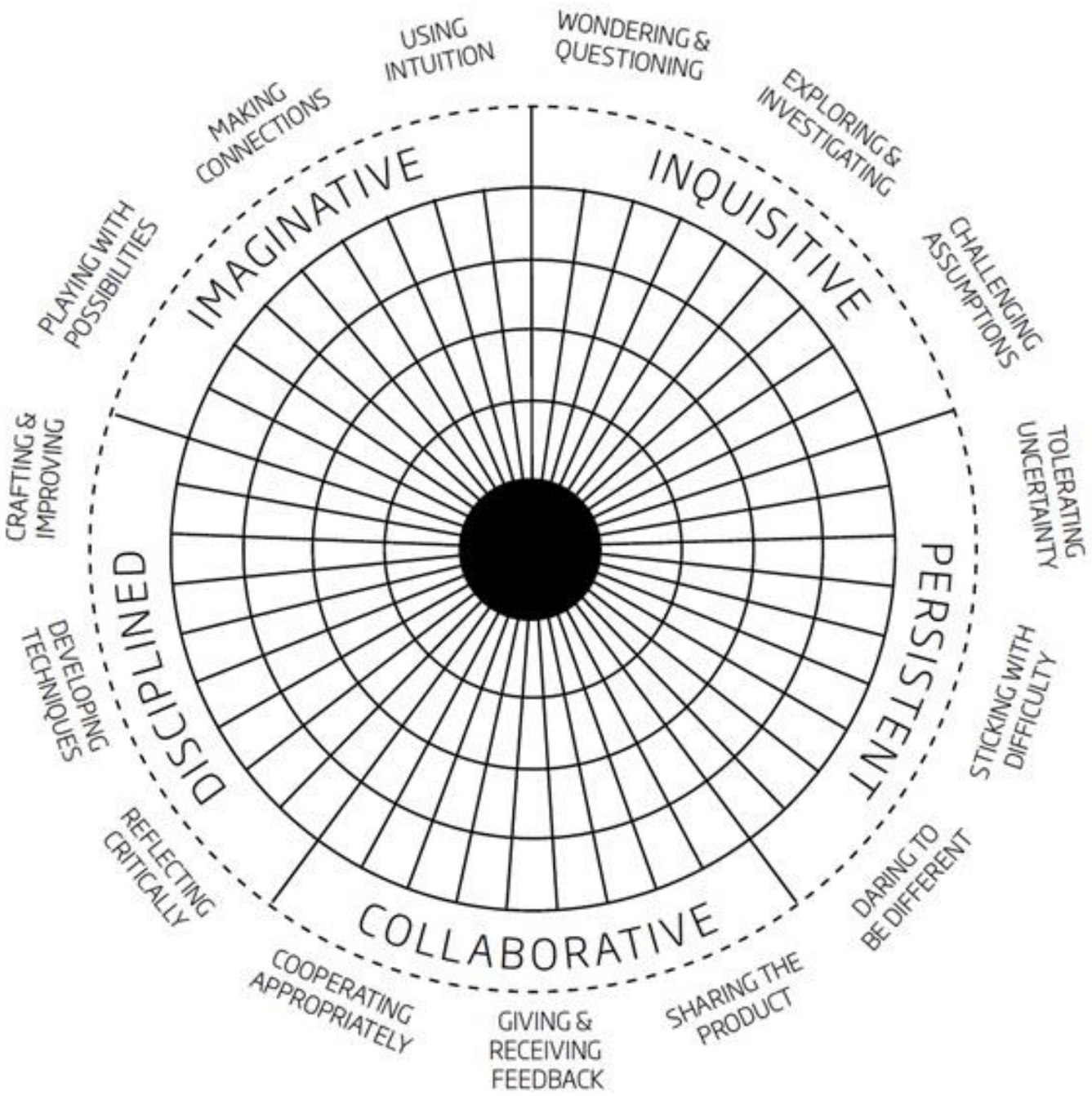
Resnick, L. (1999). Making America Smarter. Education Week Century Series. 18(40), 38-40

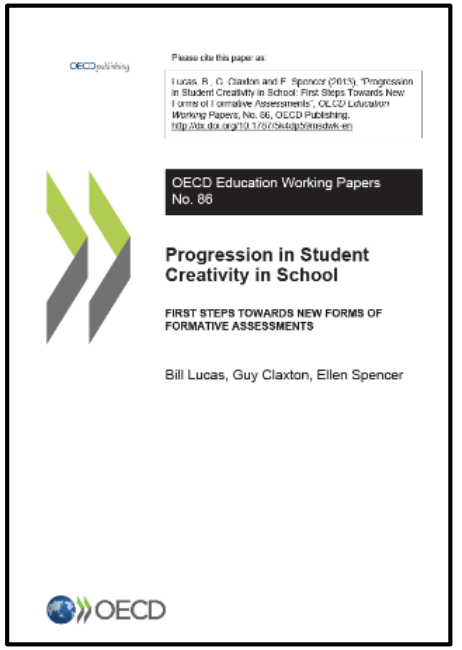
Scientific Habits of Mind

*like*

Open-mindedness, Scepticism, Rationality,
Objectivity, Curiosity,
Mistrust of arguments from authority,
Suspension of belief…

Çalik, M. & Coll, R. (2012) Investigating Socioscientific Issues via Scientific Habits of Mind: Development and validation of the Scientific Habits of Mind Survey.
*International Journal of Science Education* 34(12), 1909-1930.


USING INTUITION
WONDERING & QUESTIONING
EXPLORING & INVESTIGATING
CHALLENGING ASSUMPTIONS
TOLERATING UNCERTAINTY
STICKING WITH DIFFICULTY
DARING TO BE DIFFERENT
SHARING THE PRODUCT
GIVING & RECEIVING FEEDBACK
COOPERATING APPROPRIATELY
REFLECTING CRITICALLY
DEVELOPING TECHNIQUES
CRAFTING & IMPROVING
PLAYING WITH POSSIBILITIES
MAKING CONNECTIONS
IMAGINATIVE
INQUISITIVE
PERSISTENT
COLLABORATIVE
DISCIPLINED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FIRST STEPS TOWARDS NEW FORMS OF FORMATIVE ASSESSMENTS
Bill Lucas, Guy Claxton, Ellen Spencer
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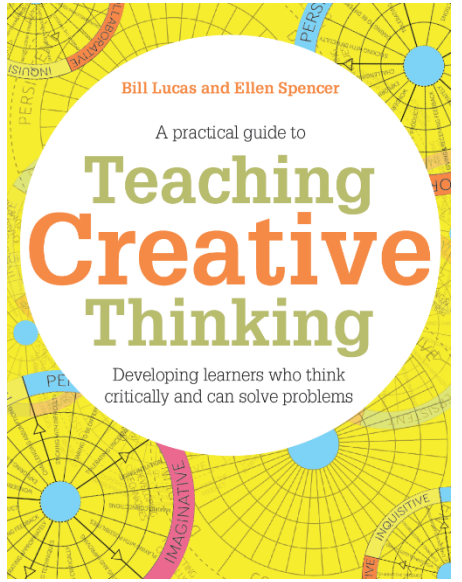
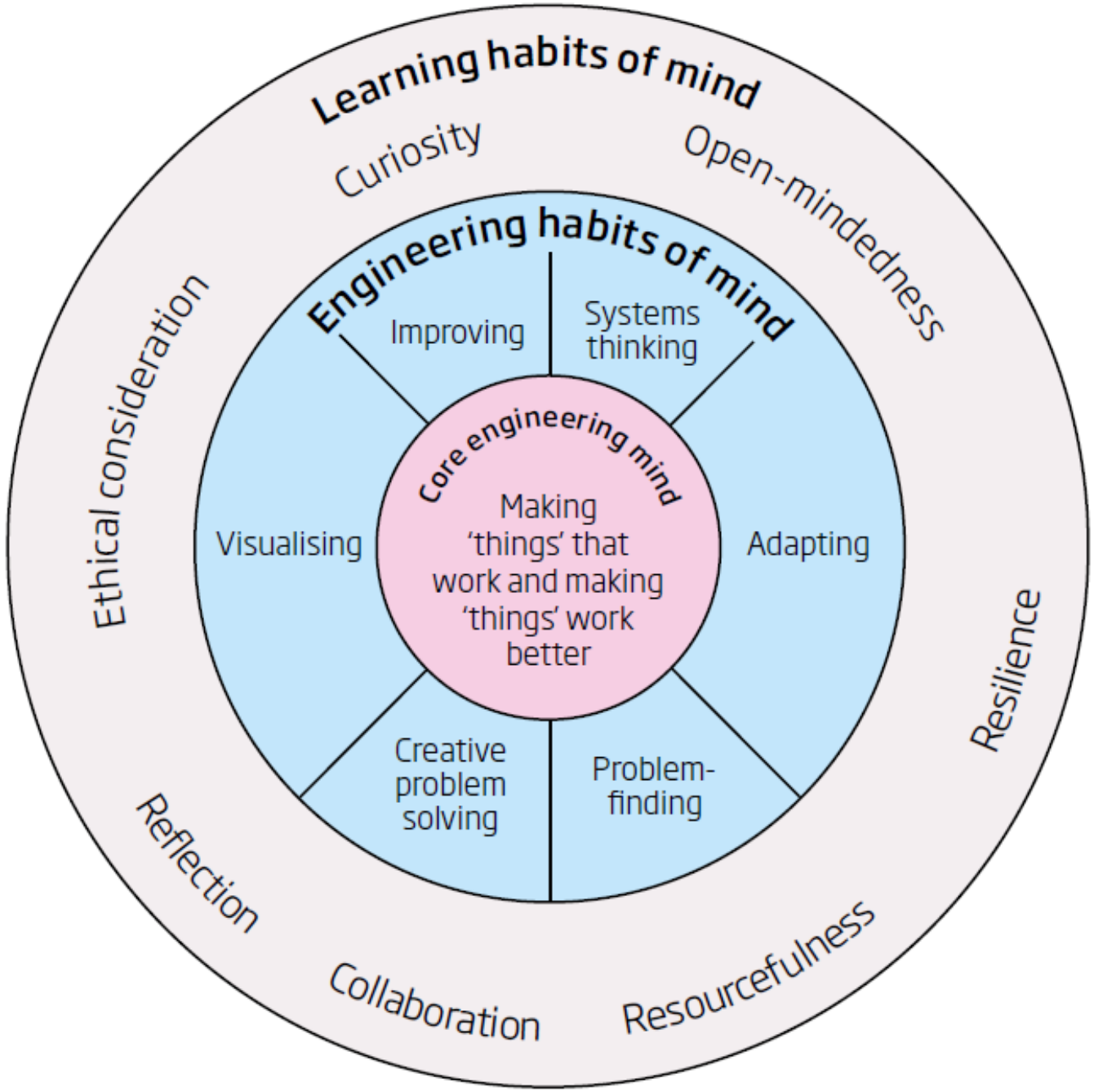
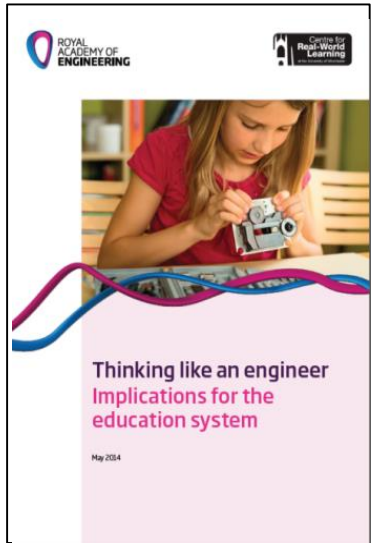
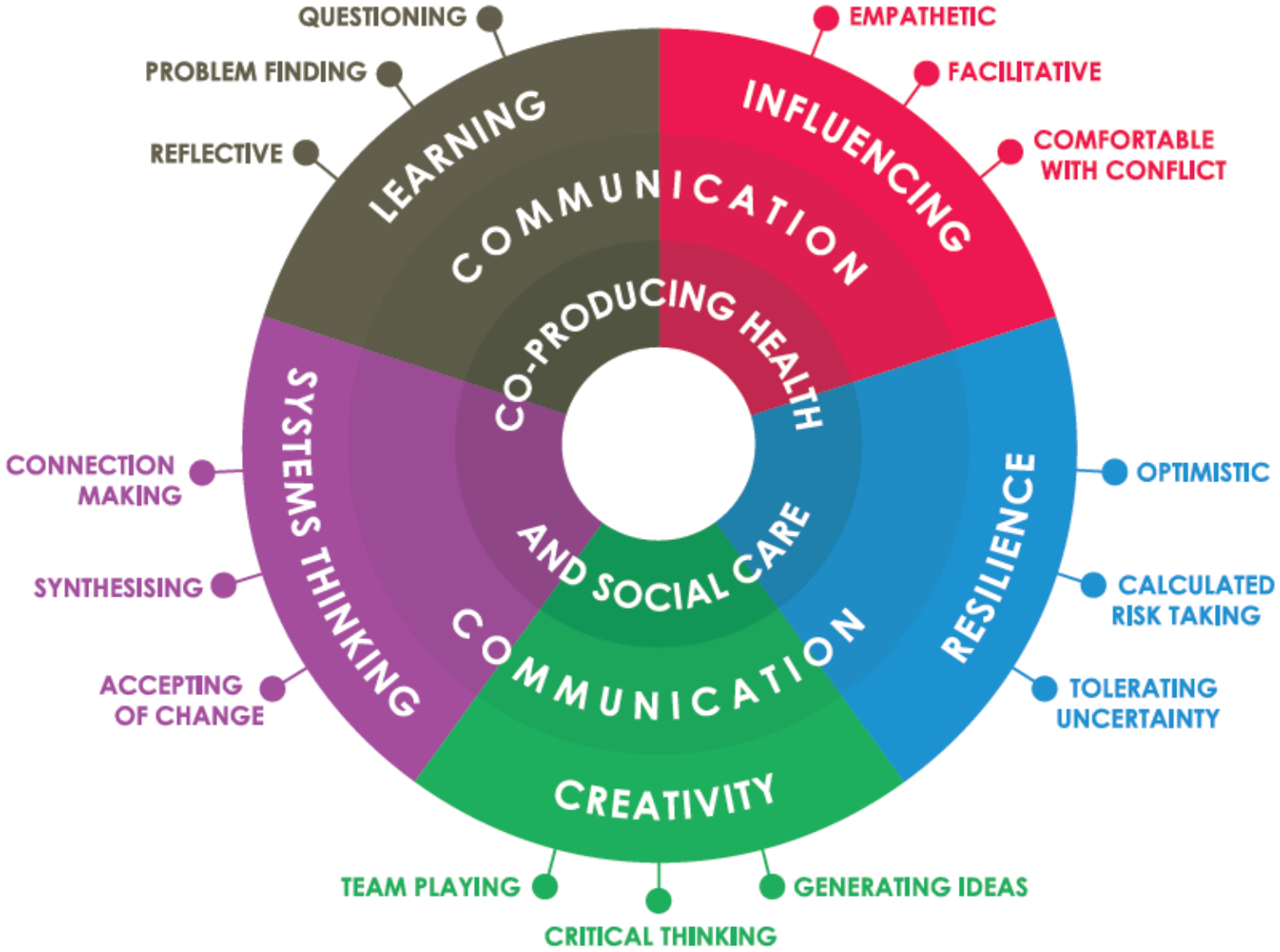
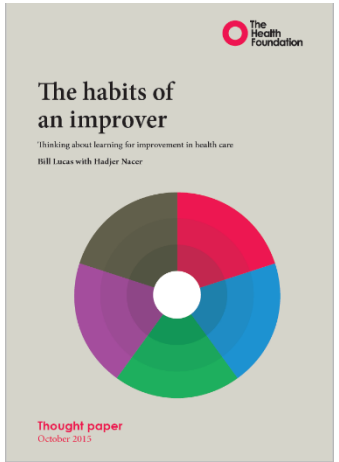

Bill Lucas and Ellen Spencer
A practical guide to
Teaching Creative Thinking
Developing learners who think critically and can solve problems


Learning habits of mind
Curiosity
Open-mindedness
Ethical consideration
Resilience
Reflection
Collaboration
Resourcefulness
Engineering habits of mind
Improving
Systems thinking
Visualising
Adapting
Creative problem solving
Problem-finding
Core engineering mind
Making 'things' that work and making 'things' work better


ROYAL ACADEMY OF ENGINEERING
Centre for Real-World Learning
Thinking like an engineer
Implications for the education system
May 2014

# The Habits of an Improver



Might a Habits of Mind perspective help us to:

1. Think more about the desired outcomes of learning?
2. Avoid simply adding more ‘stuff’ into the curriculum?
3. Provide a framework for formative conversations between curriculum developers and learners, academics and those in health and social care?
4. Act as spur for debate about how people actually think and act when they are improving services?
5. Help make improvement normal rather than a ‘project’ or a ‘tool’?

[The idea of signature pedagogies]

# The challenge of converting knowledge and/or skill/competence into Habits of Mind/Dispositions

Aristotle's idea of φρόνησις – phronesis (practical wisdom and situational awareness)

David Perkins and 'sensitivity to occasion'

Perkins, D., Jay E., and Tishman, S. (1993) Beyond abilities: a dispositional theory of thinking. *Merrill-Palmer Quarterly* 39:1 1-21

# Our current learning methods are not up to the job

‘To the extent that quality and safety are addressed at all, they are taught using pedagogies with a narrow focus on content transmission, didactic sessions that are spatially and temporally distant from clinical work, and quality and safety projects segregated from the provision of actual patient care…’

Cooke, M. Ironside, P. and Ogrinc, G. (2011) Mainstreaming quality and safety: a reformulation of quality and safety education for health professions students. *BMJ Quality and Safety* 1:i79-82

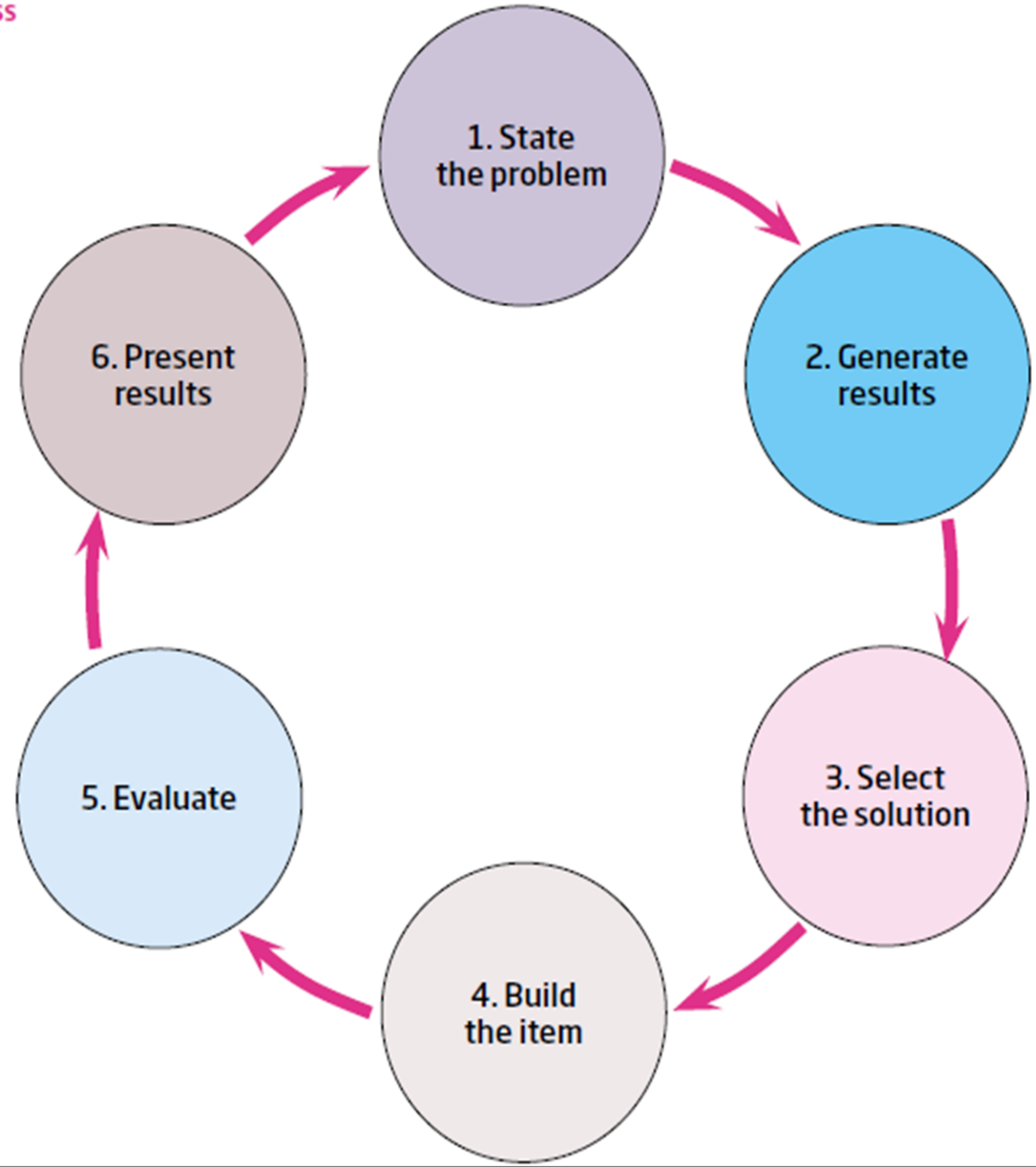
# The idea of ‘signature pedagogy’

*What might it be for improving healthcare services?*

Shulman. L. (2005) Signature pedagogies in the professions. *Daedelus*, 134, 52-59

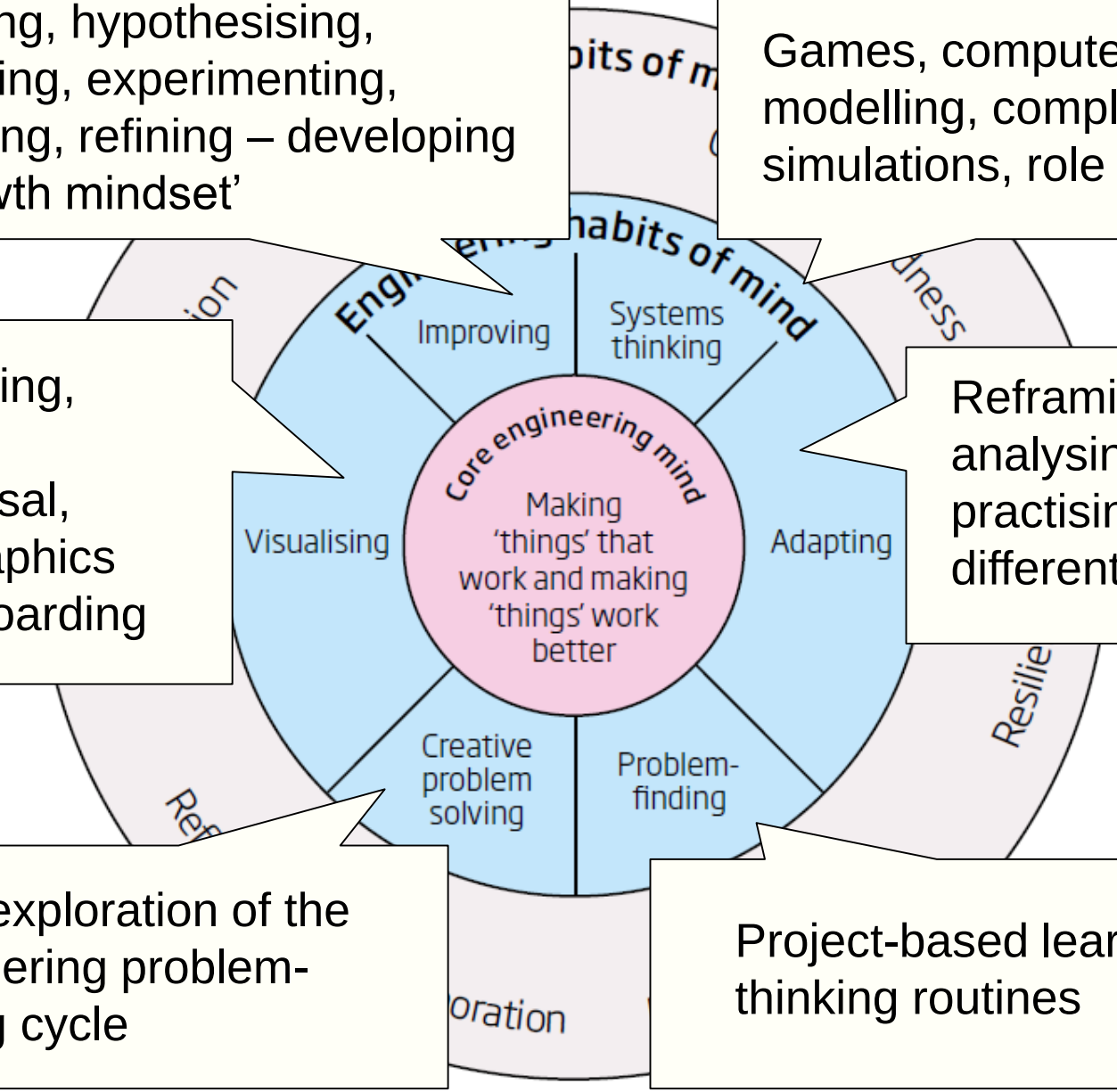
Figure 13 - The engineering design process

Source - NASA[143]



Planning, hypothesising, analysing, experimenting, reflecting, refining – developing a ‘growth mindset’

Games, computer modelling, complex simulations, role playing




Modelling, mental rehearsal, infographics storyboarding

Reframing, analysing, practising in different contexts

Deep exploration of the engineering problem-solving cycle

Project-based learning, thinking routines

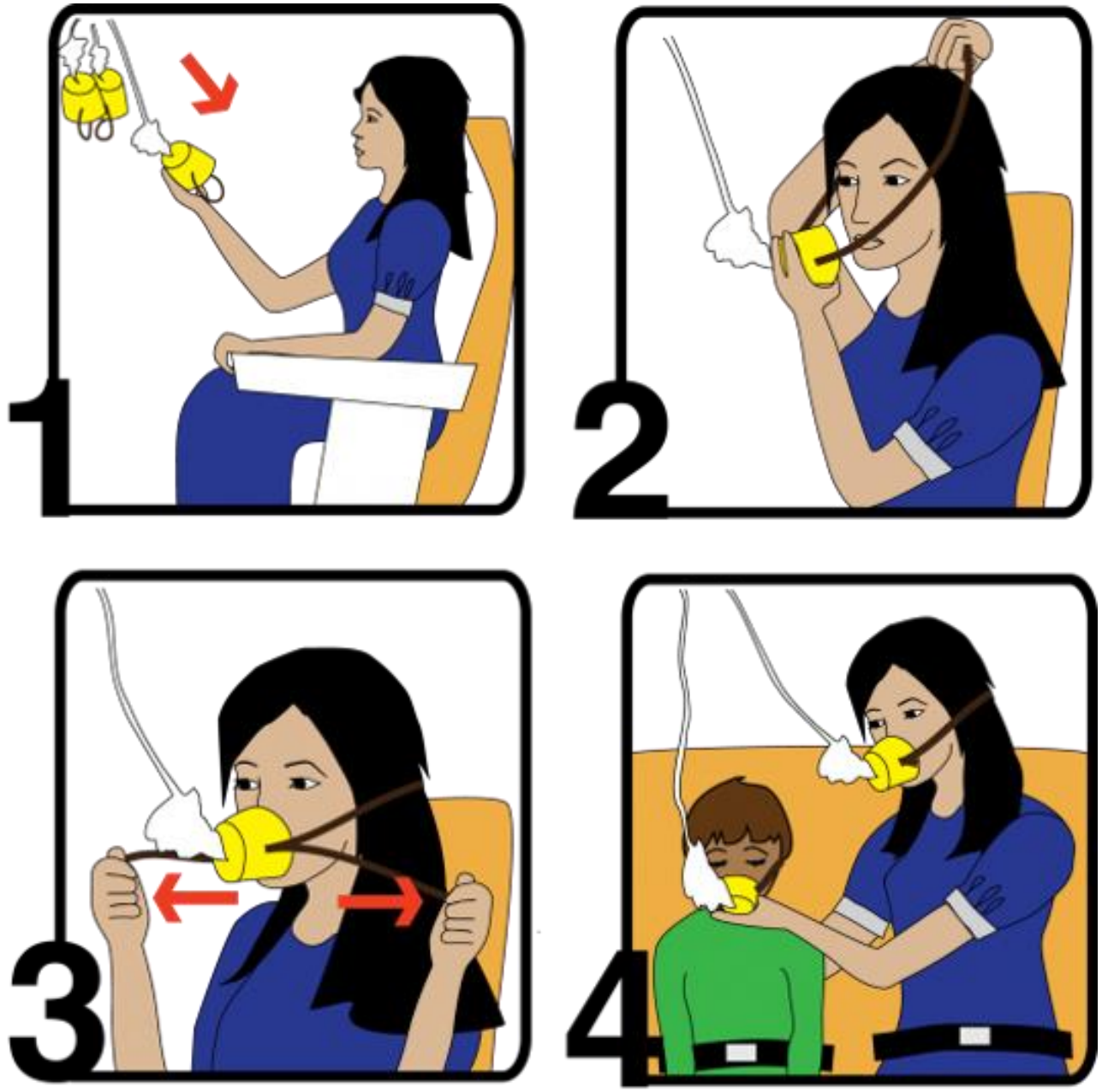

ACT
PLAN
STUDY
DO

# What are the signature learning methods for developing improvement capability?

1. Sustained opportunities to critically observe and be part of heath and social care contexts
2. Coached projects/assignments
3. Peer learning and group critique
4. Mentoring
5. Enquiry-led processes such as action research...

How best to determine the balance of theory and practice?

Which knowledge domains/systems and skill areas?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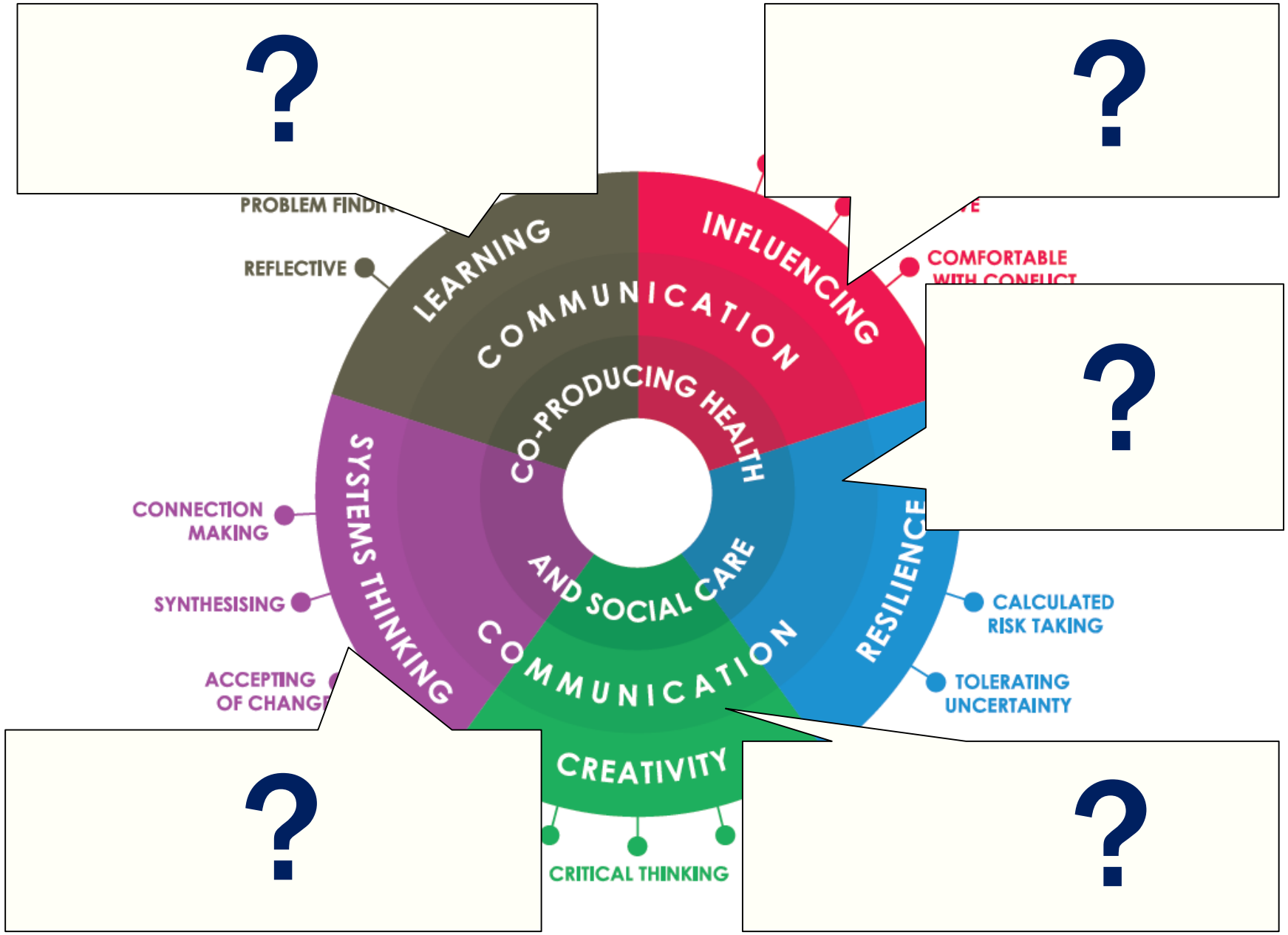
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CALCULATED RISK TAKING
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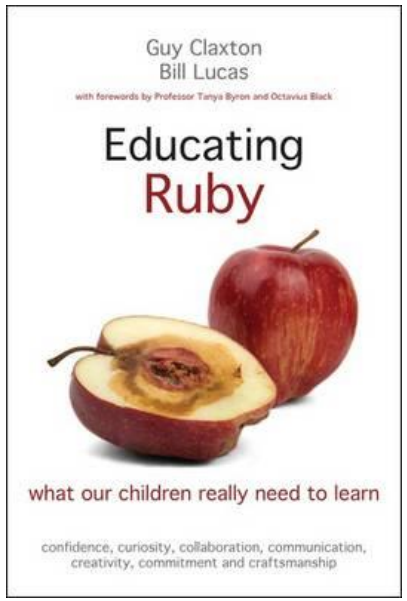
CREATIVITY
CRITICAL THINKING

# Desirable capabilities – 7Cs

Craftsmanship

Confidence

Commitment




Curiosity

Creativity

Collaboration

Communication

Web E-mail Twitter

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