Implementing Portfolios
Best Practices and Challenges

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Outline

- Introduction
- What is a Portfolio
- Adult learning principles and Millers Pyramid – competence and performance
- Reflective Practice and Feedback
- what constitutes a Portfolio and Implementation
- Assessment of portfolio
- Challenges of reviewing portfolio
- Summary

Introduction

- Competency-based medical training has brought about a paradigm shift in the delivery of medical education in both undergraduate and postgraduate medical training.

- Emphasis is now on attainment of the learning outcomes, professional performance, and strengthening of the assessment process.

- Portfolio enables the capture and storage of the performance of the trainee upon completion of the training period which helps with decision making on competence

Shrivastava et al. Scope of Portfolio in Medical Training. Current Medical Issues 21(1):p 71-72, Jan–Mar 2023

What is a Portfolio

Portfolio

- Provides evidence of having learnt from that experience
- Describes how learning has happened through those activities
- Records the students' reflections on those tasks

Difference between log-book and Portfolio

Logbook	Portfolio
• Provides evidence of having been through a learning experience	• Provides evidence of having learnt from that experience
• Enlists what all learning activities have been performed	• Describes how learning has happened through those activities
• Records the tasks done leading to competency development	• Records the students' reflections on those tasks

A logbook records a learner's progression, while a portfolio is a collection of evidence that demonstrates a learner's progression and self-reflection:

A major feature which distinguishes portfolios from logbooks is the element of reflection, which promotes metacognitive skills.

Singh et al

Competency and Performance

Competence

- Attribute of the individual
- Measured against standard
- Attained, not developed
- Easily assessed?

Performance

- Sum of the individual's interaction with the environment
- Personal and environmental influences
- Difficult to assess?
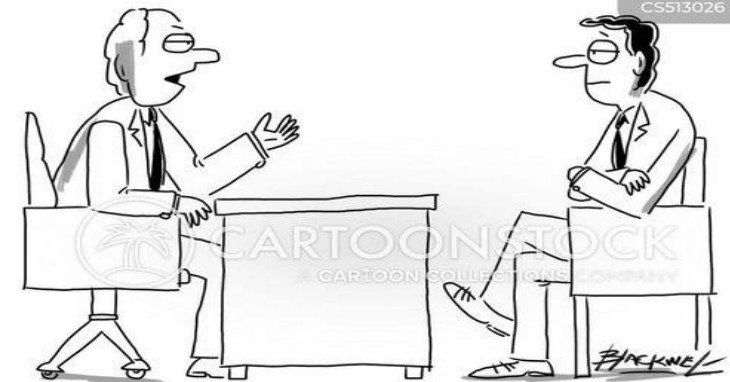
"WHEN YOU SAID YOU'D GIVE 110%...WE DIDN'T REALIZE THAT WAS LIKE MOST PEOPLE'S 50%!"

GMC Good Medical Practice -January 2024

Good medical practice sets out the standards of care and behaviour expected of all medical professionals.

It covers areas that include - this can be mapped against the portfolio domains

- Making the care of patients the first concern

- Providing a good standard of practice and care, and working within competence

- Working in partnership with patients and supporting them to make informed decisions about their care

- Treating colleagues with respect and help to create an environment that is compassionate, supportive and fair

- Acting with honesty and integrity and being open if things go wrong

- Protecting and promoting the health of patients and the public

GMC - Good Medical Practice

- Domain 1: Knowledge, skills and development

- Domain 2: Patients, partnership and communication

- Domain 3: Colleagues, culture and safety

- Domain 4: Trust and professionalism

GMC UK 2016

Bloom's taxonomy of learning domains
(Bloom, 1956)
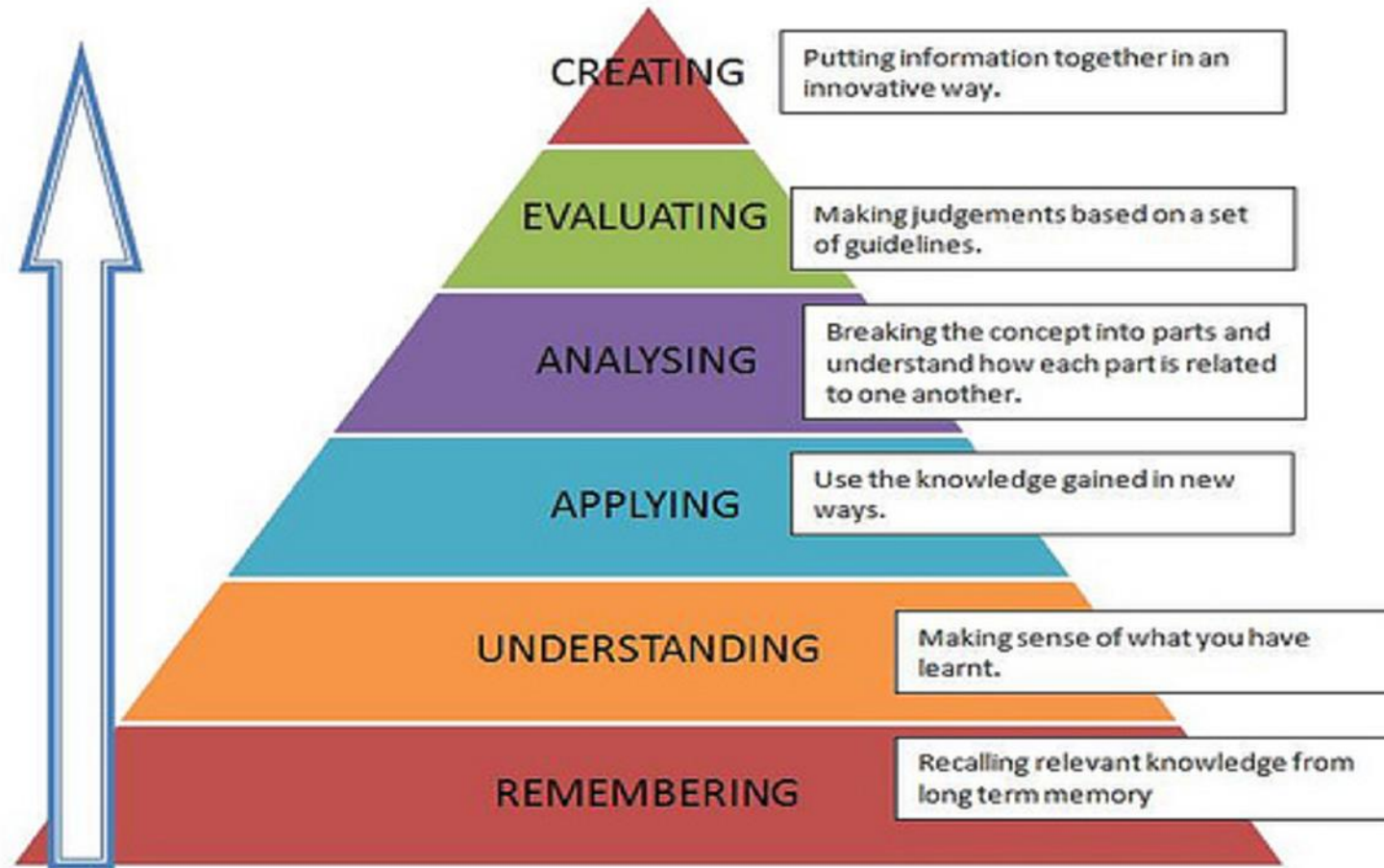
Kolb's learning cycle 1984 – Experiential learning

CONCRETE EXPERIENCE
(doing/having an experience)

REFLECTIVE OBSERVATION
(reviewing/reflecting on the experience)

ABSTRACT CONCEPTUALISATION
(concluding/learning from the experience)

ACTIVE EXPERIMENTATION
(planning/trying out what you have learned)
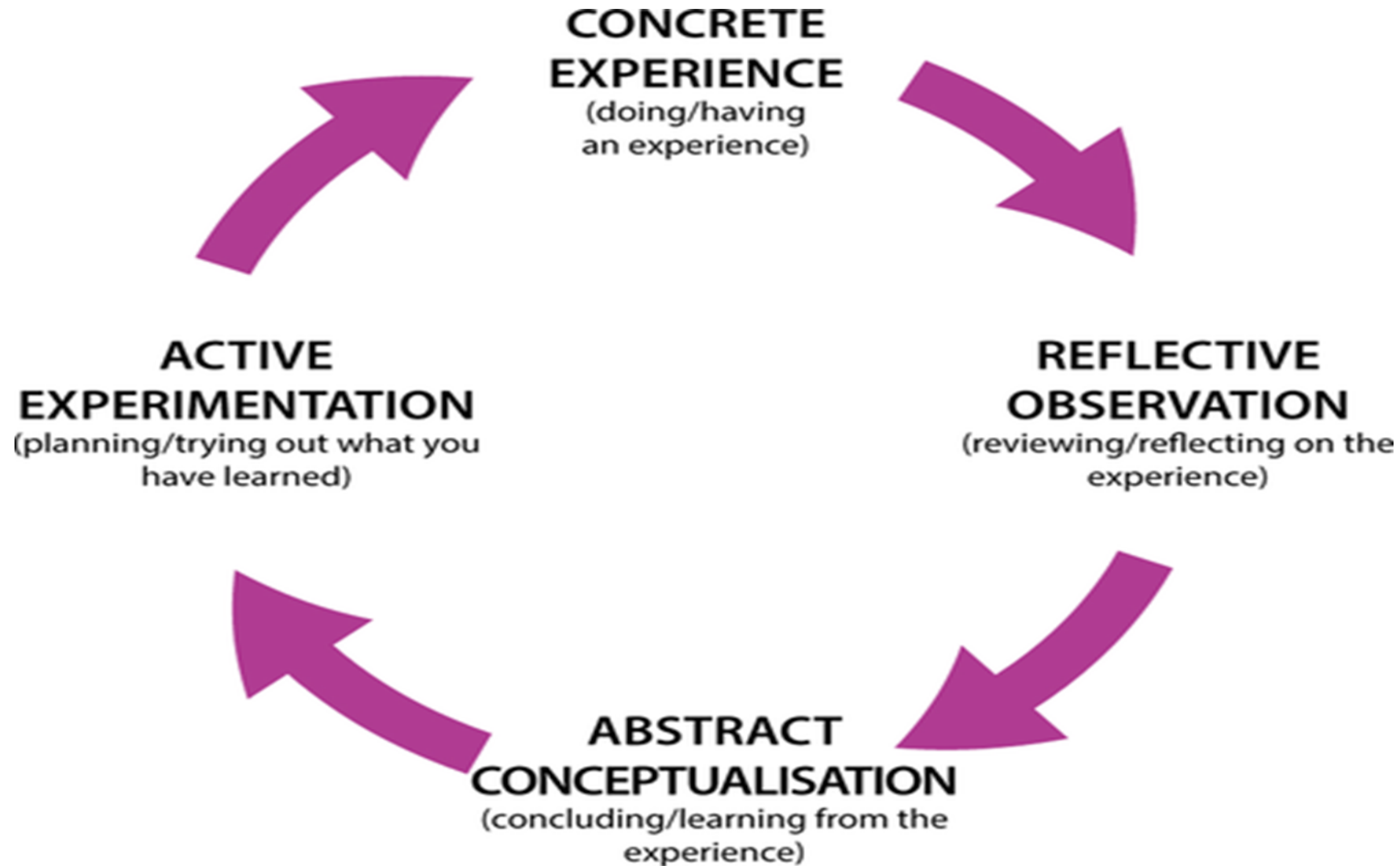
The four stages of learning (attributed to Maslow 1954)

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Unconscious incompetence	Blissful Ignorance or the unknown unknowns Possibly false confidence
Conscious Incompetence	Learner aware of incompetence Mistakes are frequently made in this state
Conscious competence	This stage requires concentration to carry out the tasks effectively
Unconscious competence	Fluent and automatic

MILLER'S PRISM OF CLINICAL COMPETENCE (aka Miller's Pyramid)

it is only in the "does" triangle that the doctor truly performs

Expert

Novice

professional authenticity

behaviour

cognition

KNOWLEDGE

SKILLS

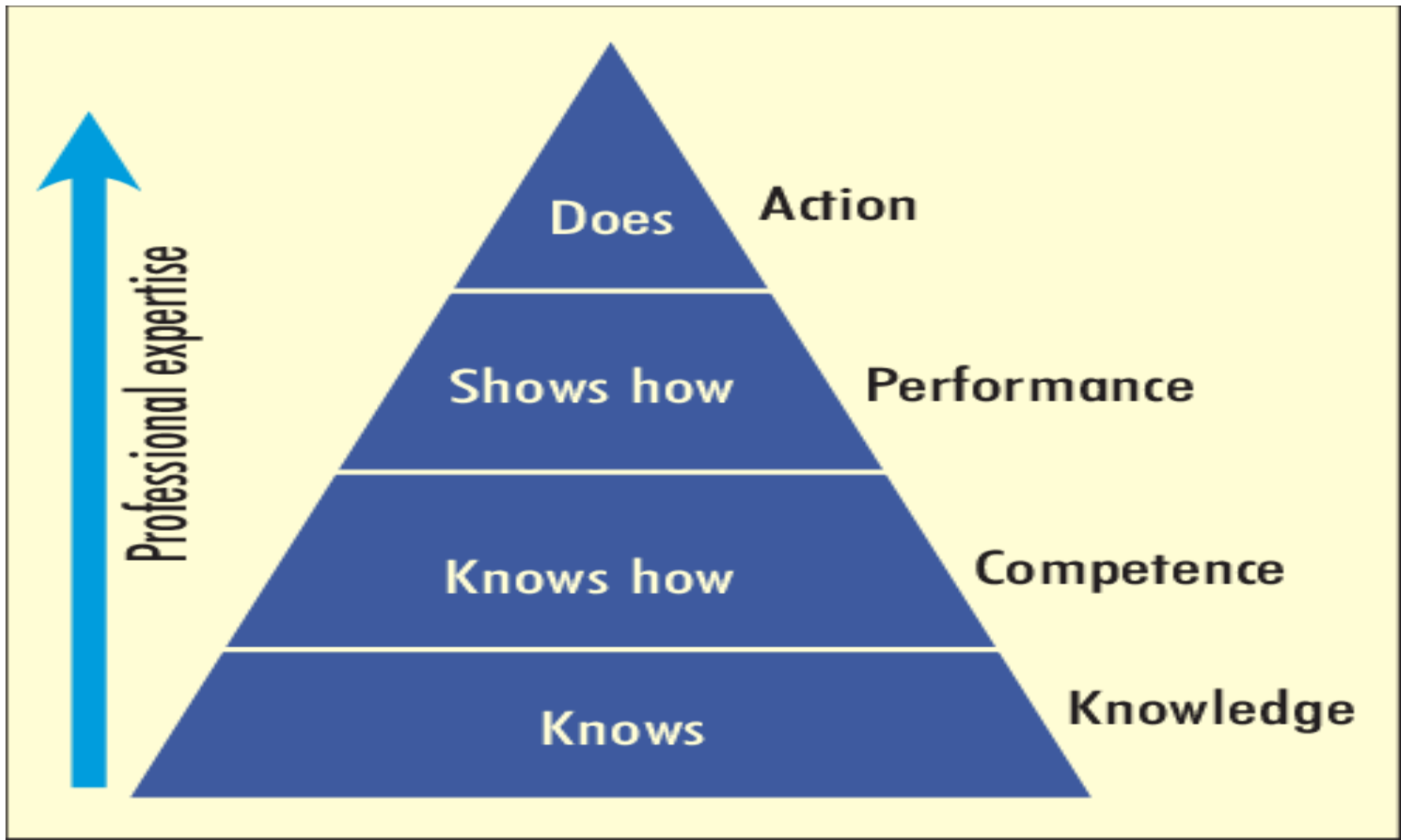ATTITUDES

Performance Integrated Into Practice
eg through direct observation, workplace based assessment

DOES

Demonstration of Learning
eg via simulations, OSCEs

SHOWS

Interpretation/Application
eg through case presentations, essays, extended matching type MCQs

KNOWS HOW

Fact Gathering
eg traditional true/false MCQs

KNOWS

Based on work by Miller GE, The Assessment of Clinical Skills/Competence/Performance; Acad. Med. 1990; 65(9); 63-67
Adapted by Drs. R. Mehay & R. Burns, UK (Jan 2009)

Effective feedback cycle

Evaluate performance improvement → Discover issues → Self-discovery / Assisted-discovery → Analyse causes and consequences → Create options and solutions → Commit to action → Evaluate performance improvement
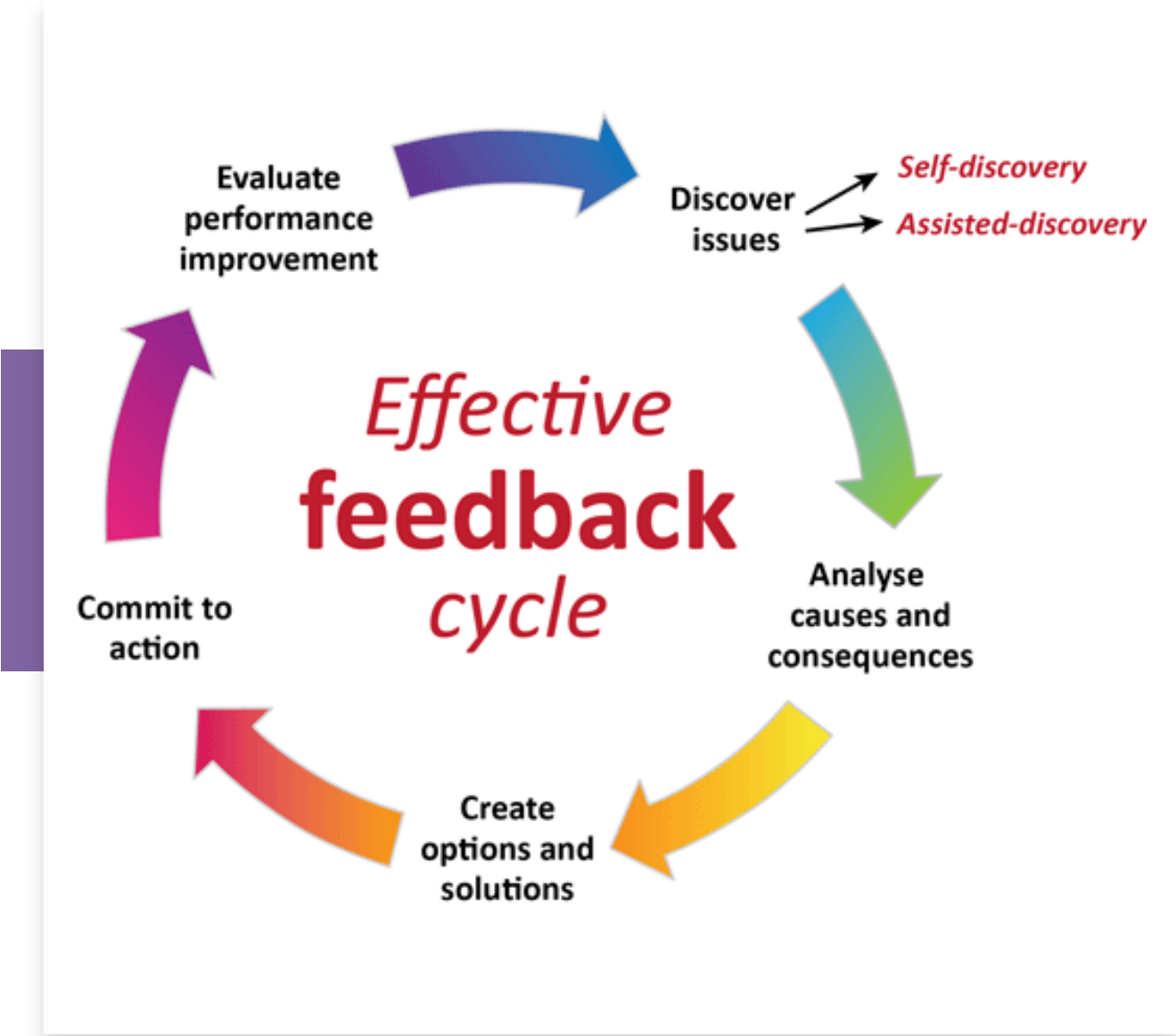
Judy McKimm 2013

Approaches to feedback

- The sandwich approach

- Pendleton's Approach

- The Agenda –led approach

- The Set-Go Approach

Novice to Expert: Feedback plays many roles

Learner Stage	Role of Feedback
Unconsciously incompetent	Help learners identify weaknesses and plan for improvement.
Conscious incompetence	Help learners identify and refine needed skills and knowledge.
Consciously competent	Provide encouragement and opportunities for reflection to integrate skills.
Unconsciously competent	Build on strengths and identify areas for continued growth.

Modeled after table 1 from Qureshi 2017

Reflective Practice

- Reflection is the thought process where individuals consider their experiences to gain insights about their whole practice.

- Reflection supports individuals to continually improve the way they work or the quality of care they give to people.

Examples of reflective practice include

- Keeping a journal or diary to record thoughts and reflections after significant events or experiences.

- Engaging in self-assessment to identify strengths and areas for improvement in professional or personal contexts.

Graham Gibbs Reflective cycle 1988

Figure 1: Gibbs' reflective cycle

Contents of portfolio and Implementation

- WPBA

- MSF, log book

- Self reflection

- Exams – Primary, Part 1 and Part 2

- Audits, Quality improvement projects, publications

- Teaching/Management/Leadership

- Trainers reports

Methods of work-based assessment

- Mini-Clinical Evaluation Exercise (Mini-CEX)
- Case Based Discussion - CBD
- Directly Observed Procedural Skills –DOPS
- 360 degrees - Multisource feedback

What are we assessing?

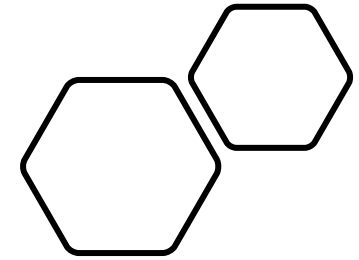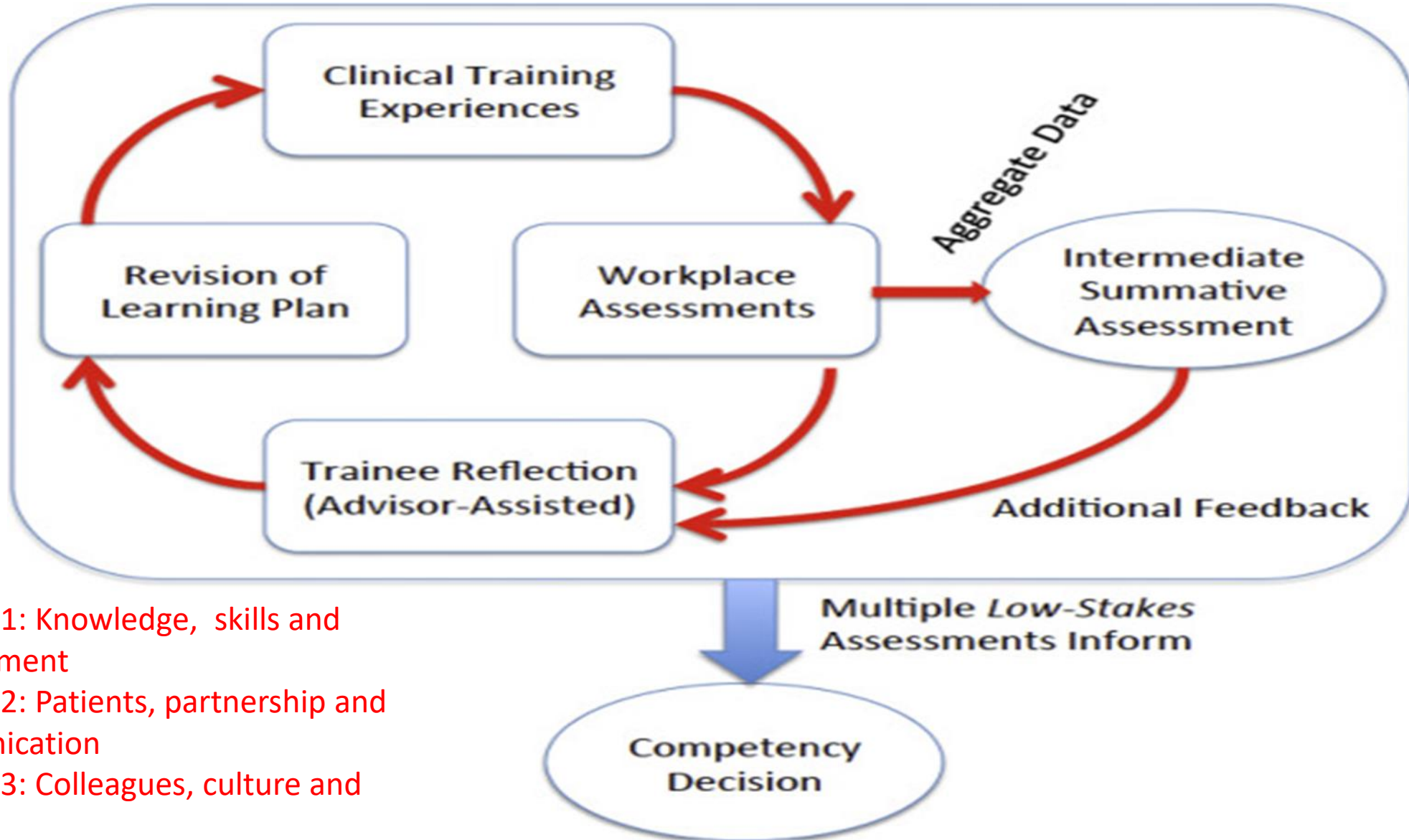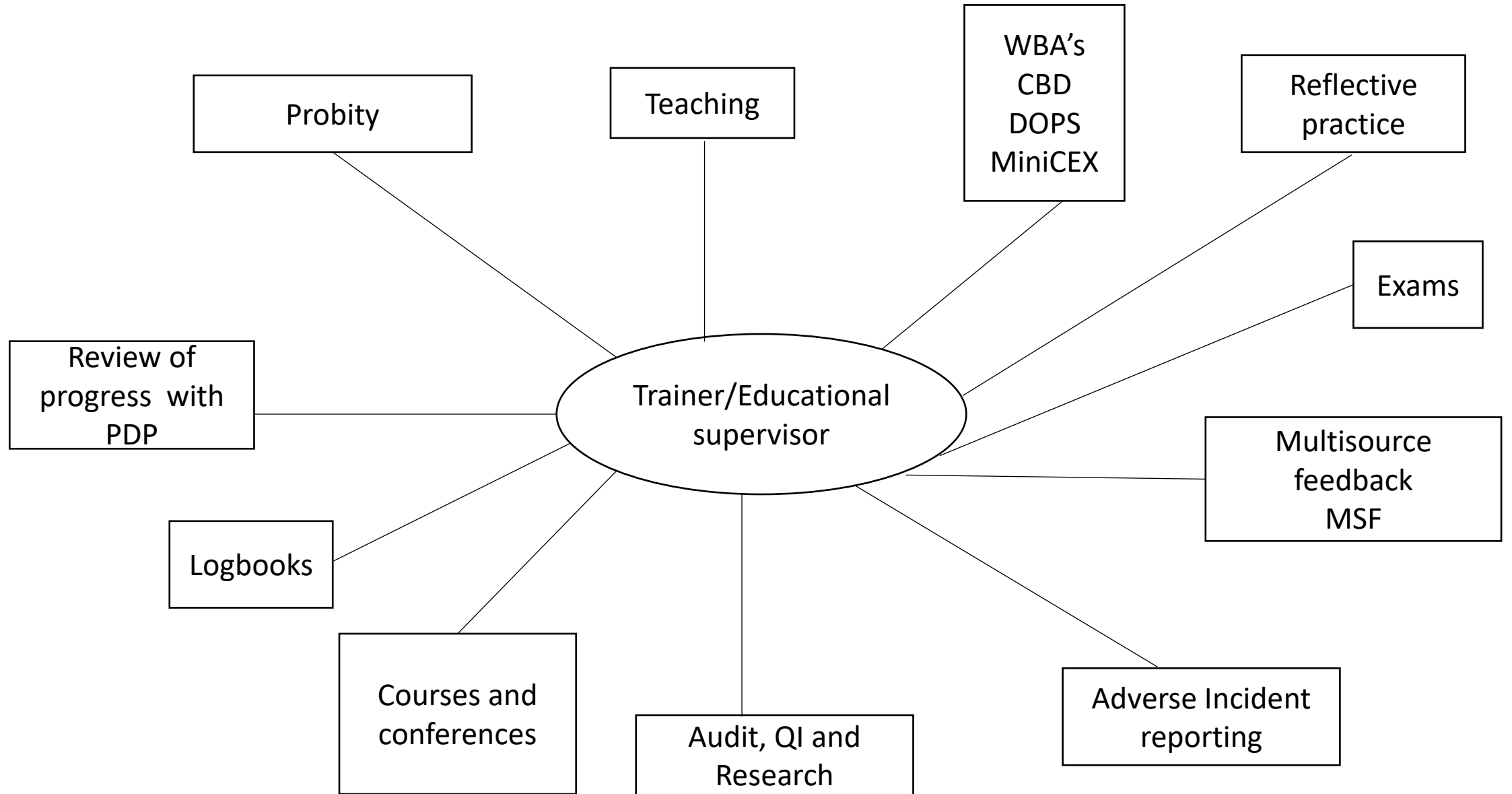|			
Communication skills / patient-centredness	Physical examination	Procedural skills	Problem solving / Clinical reasoning
Data interpretation	Decision making –management, investigations	Attitudes, professionalism	Incident reporting
	Handling ethical and legal scenarios		

Domain 1: Knowledge, skills and development
Domain 2: Patients, partnership and communication
Domain 3: Colleagues, culture and safety
Domain 4: Trust and professionalism

Najum S Qureshi TOG 2017

Implementation of Portfolio driven training

Probity

Teaching

WBA's
CBD
DOPS
MiniCEX

Reflective
practice

Exams

Review of
progress with
PDP

Trainer/Educational
supervisor

Multisource
feedback
MSF

Logbooks

Courses and
conferences

Audit, QI and
Research

Adverse Incident
reporting

Challenges in reviewing Portfolio

- Poor ability of learners to reflect

- Influence of emotional reaction to feedback

- Lack of metacognitive capacity (reflective thinking and learning)

- When skills are not mapped to good medical Practice

- Poor staff development in areas of assessment

Summary

- Portfolio enables the capture and storage of the performance of the trainee upon completion of the training period which helps with decision making on competence

- Portfolio if mapped to good medical practice ensures patient safety in specialist training

- Portfolio driven training is in line with educational theories – bloom's taxonomy of learning, Kolb's learning circle, social constructivism and constructive alignment

- It embeds the culture of feedback in the training ensuring continuous improvement

- It encourages reflective learning to improve the quality of care to patients as specialists

Any Questions