# Health Professionals' Inventory of Learning Styles (H-PILS)

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## **Objectives**

Upon completion of this session, you will be able to:

- a) Discuss the role of self-reflection in CPD
- b) Apply learning styles theory to facilitate selfreflection
- c) Use the H-PILS to support CPD

#### I. Self reflection in CPD

- CPD cycle begins with self-reflection
- Essential skill to support identification of learning needs
- Essential propensity to facilitate on-going learning
- Rarely taught or evaluated in a formal way
- Not necessarily a natural process for many

### What is self-reflection?

- Purposeful and directed examination of one's own behaviours, thoughts, and beliefs using a variety of different sources of evidence and criteria
- Analytical, continuous process
- Frequently aimed at quality improvement or process refinement

# Why is self-reflection important?

- Throughout school, we can rely upon external standards and assessments to direct our development
- Professional work is complex, individual, and highly contextual: external standards may be difficult to find or apply
- In the absence of continuous self-reflection, complacency develops

#### Self reflection and self assessment

- Require on-going discipline and structure
- Require honesty and openness
- Documentation
- "We don't know what we don't know": need to triangulate and solicit information from a variety of sources, but integrate this information ourselves

#### How good are we at it?

- Accuracy of self-reflection and self-assessment varies widely
- Over-estimation of self common in those with lowest abilities
- Under-estimation of self common in those with highest abilities

#### Self reflection

- A knowledge base
- A skill set
- A propensity

# II. Role of Learning Styles Theory in Self Reflection

How do we learn?

- Behavioural approaches emphasize rewards and punishments
- Cognitive approaches emphasize supremacy of thought and reason
- Developmental approaches emphasize importance of age, stage, and time
- Psychoanalytic approaches help make the unconscious conscious

# **Learning Styles Theory**

• Piaget: children are born different

• Eysenk: the biological basis of learning

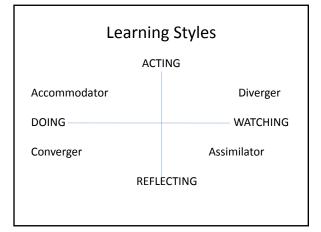
• Kolb: learning styles

# Learning and Memory

- Working memory
- Short-term memory
- Long-term memory
- Deep learning
- Superficial learning

#### How do we learn?

- Intersection of two interdependent processes:
- How we take in information from the outside world
- What we do with that information once we've taken it all in



#### **Divergers**

- "Let's just all get along together, okay?"
- Value harmony and relationships over objective outcomes of success
- May not necessarily grasp details or timelines
- Are acutely sensitive to environment and negative feedback
- Enjoy working with others for the purpose of building relationships – this is how learning really occurs

#### **Assimilators**

- "Lack of planning on your part is no reason for an emergency on my part"
- Organized, detailed oriented, learn by reading and lectures: "model" students
- Require rehearsal time, advanced notice, structure and organization
- May confuse others' confidence for competence
- Usually hardest on themselves

#### Convergers

- "Relax everyone, I'm here to help"
- Tend to be decisive, leader-oriented, competitive individuals
- Less concerned with details, more with outcomes
- Less concerned with personal feelings than with success
- May confuse their own confidence with competence

#### Accommodators

- "Are we there yet?"
- Value efficiency, sometimes at the price of effectiveness
- Require or want little direction or feedback
- Not burdened by need for perfection or detail
- Like to get things done
- Grow impatient with the abstract and the theoretical
- Dislike excessive feedback, talking, or unnecessary interaction

#### III. H-PILS

- Health Professionals' Inventory of Learning Styles
- Tool developed to assist health professionals identify their own learning style to help facilitate self-reflection
- Initially developed for pharmacists, now used in a variety of different heath professions and interprofessional settings

#### Using the HPILS

- Self-reflection may not come easily or naturally to everyone
- CPD requires individuals to assume personal responsibility for self-identification of learning needs and gaps
- Getting started can be difficult because we don't know what we don't know
- Understanding ourselves as learners is a critical first step in understanding our own learning needs

#### Using the HPILS

- HPILS provides us with insight into who we are as learners: what motivates us, frustrates us, inspires us, and disengages us
- Understanding and articulating these factors can help direct the type of learning that may be most motivating and meaningful for us
- As an increasing array of CE resources become available, understanding what may be most beneficial is critical

#### Limitations of the HPILS

- Inventory approach produces acceptable reliability and validity, but not able to "diagnose" learning styles
- Learning style is not like blood type: it is more fluid and flexible
- Still, may be useful in prompting reflection and dialogue about our own assumptions about learning as teachers, students, and practitioners

#### IV. Using HPILS in CPD

- Goal is to facilitate self-reflection
- While HPILS does not address content/knowledge domain learning needs and gaps, it can be useful in identifying learning process needs

#### How to use HPILS

- To initiate dialogue, discussion, and reflection on the process of learning
- To provide a vocabulary for discussing learning needs
- To provide a skill set for self-reflecting on learning

#### How NOT to use HPILS

- To stereotype and pigeon-hole people
- To make statements/claims or assumptions regarding an individual's abilities or suitability for a position/role
- To engineer relationships between people of the same learning style

# Presenting the HPILS

- A tool for self reflection
- Particularly useful for preceptors/mentors and students, to help understand when things work well – and not so well
- A vehicle for understanding differences in approaches to learning, work, life, etc.
- A fun and interactive way of thinking about and discussing learning

# V. Applications of HPILS

- Student/preceptor relationships
- Workplaces
- Interprofessional settings
- CPD

# Summary

- Self-reflection is integral to the CPD process
- HPILS may provide a vehicle for discussing and reflecting upon one's own processes for learning
- By providing a vocabulary to describe learning processes, HPILS can be part of a toolkit for CPD providers, educators, and others interested in personal and professional development

#### **About HPILS**

 HPILS was developed by Zubin Austin at the Faculty of Pharmacy, University of Toronto.
 HPILS may be used by educators, with permission of the developer, at zubin.austin@utoronto.ca