

## Cognition and Learning

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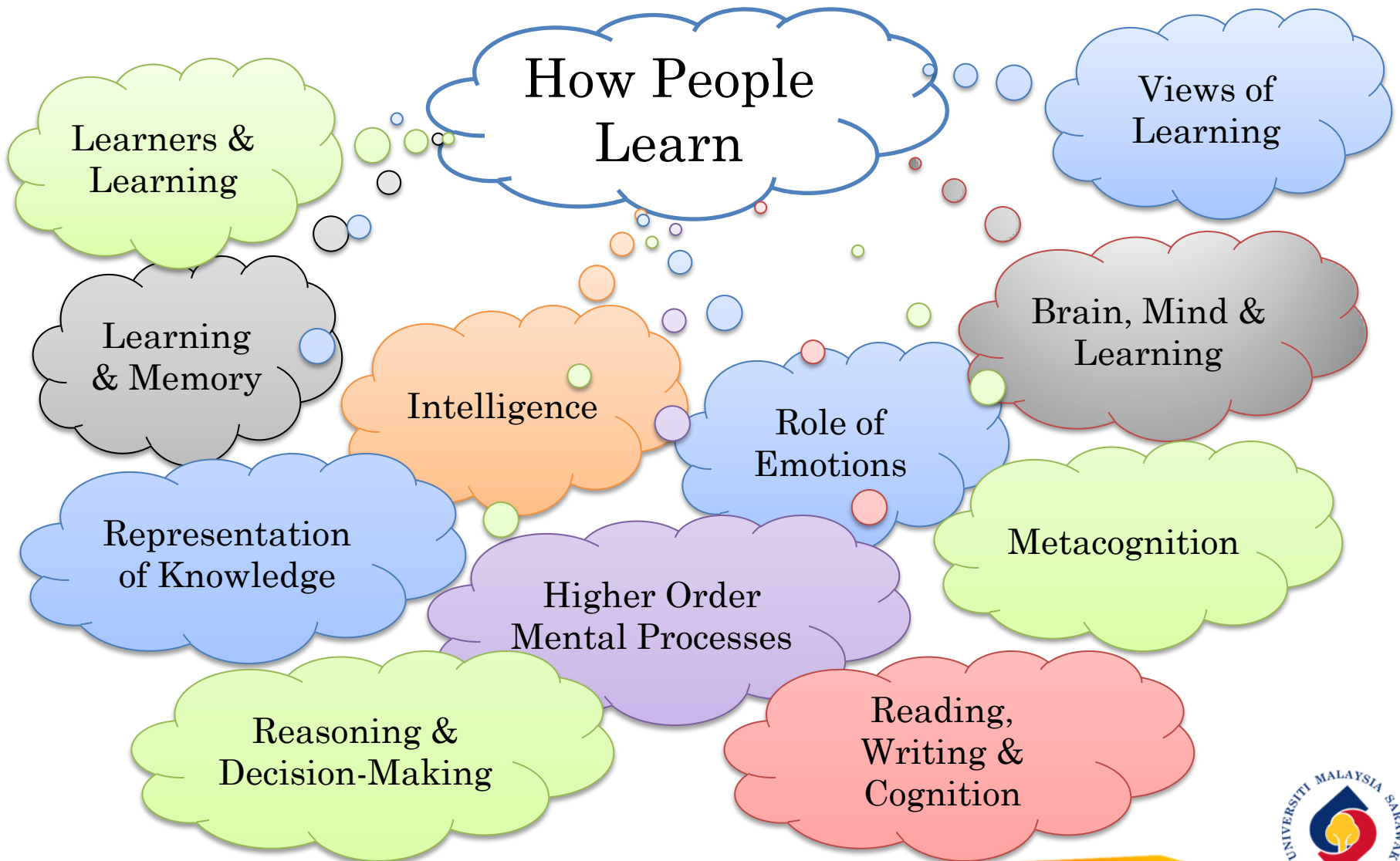


# Topic 1

# Introduction



# Cognition & Learning: The Focus

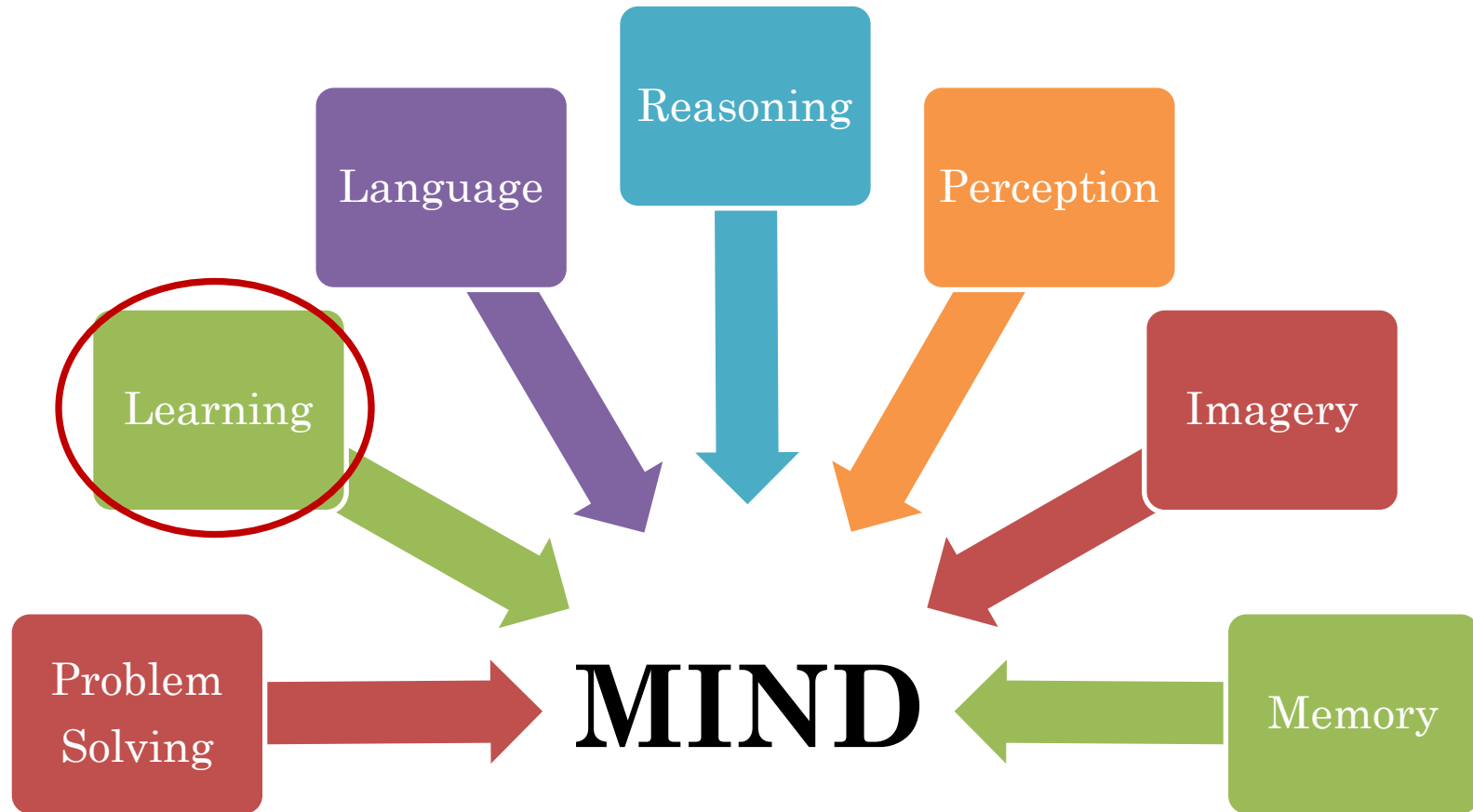


# Cognition

- Thought process or mental process that enable us “to know what we know”.
- What we know or the knowledge we have is actually based on the input or information that we acquire from our senses & surrounding.
- To make sense of the input or information, our brain needs to process it and this involves a reorganization of our mental structure.
- Knowledge of what we know (from what we have acquired) will help us function better in lives.



# Cognitive Processes?



# Learning...as defined in Literature (Schuell, 1986, cited in Schunk, 2000)

- An enduring **change** in behavior, or in the capacity to behave in a given fashion, which results from practice or other forms of experience
  - change in behavior, or in the ***capacity to behave***
  - enduring change
  - occurs through practice or other forms of experience

CHANGE?



behavior of learner
capacity to behave



# Learning...as defined in Literature (Mayer, 2001)

- A relatively permanent change in a learner's knowledge or behavior that is a result of the learner's experience
  - Learning = *Relatively* permanent
  - Learning = *a result of experience*
  - Learning = change in *behavior or knowledge*

CHANGE?

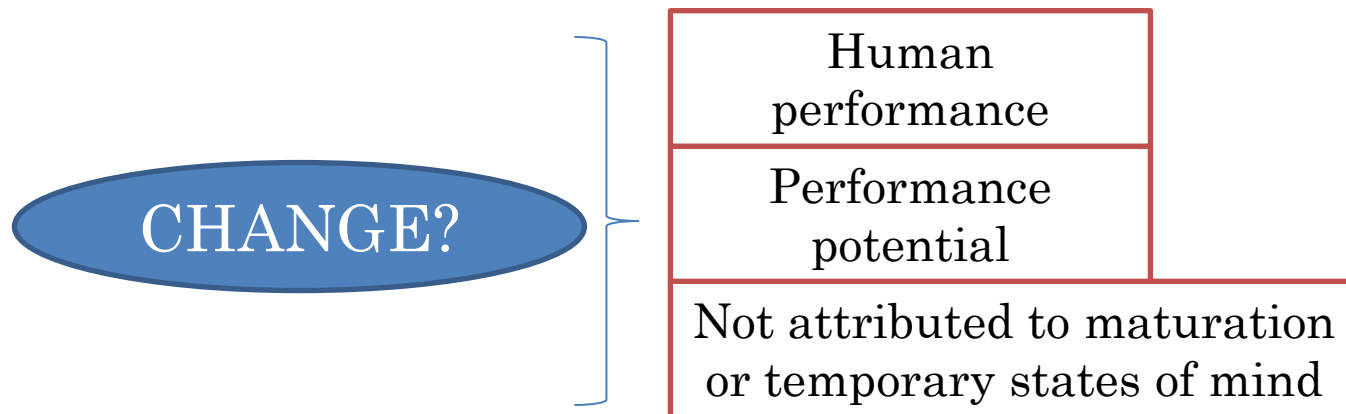
behavior of learner

content & structure  
of knowledge in  
memory



# Learning...as defined in Literature (Driscoll, 2005)

- A persisting change in human performance or performance potential as a result of the learner's experience and interaction with the world.





# More from Driscoll (2005) on Learning

- A **life long** activity, occurs **intentionally** in formal instructional settings & **incidentally** through experience.
- A **complex** affair – sometimes requires **great effort** & sometimes proceeds with **relative ease**.
- Process of learning much less obvious but results of learning often observable in human performance.



# Cognitive Conceptions of Learning (Schuell, 1986)

- An **active**, **constructive**, and **goal oriented process** that is dependent on mental activities of the learner
  - Role of metacognitive processes
  - Active selection of stimuli
  - Attempt by learners to organize material
  - Generation/construction of appropriate responses & use of various learning strategies

Thinking about  
one's own  
thinking

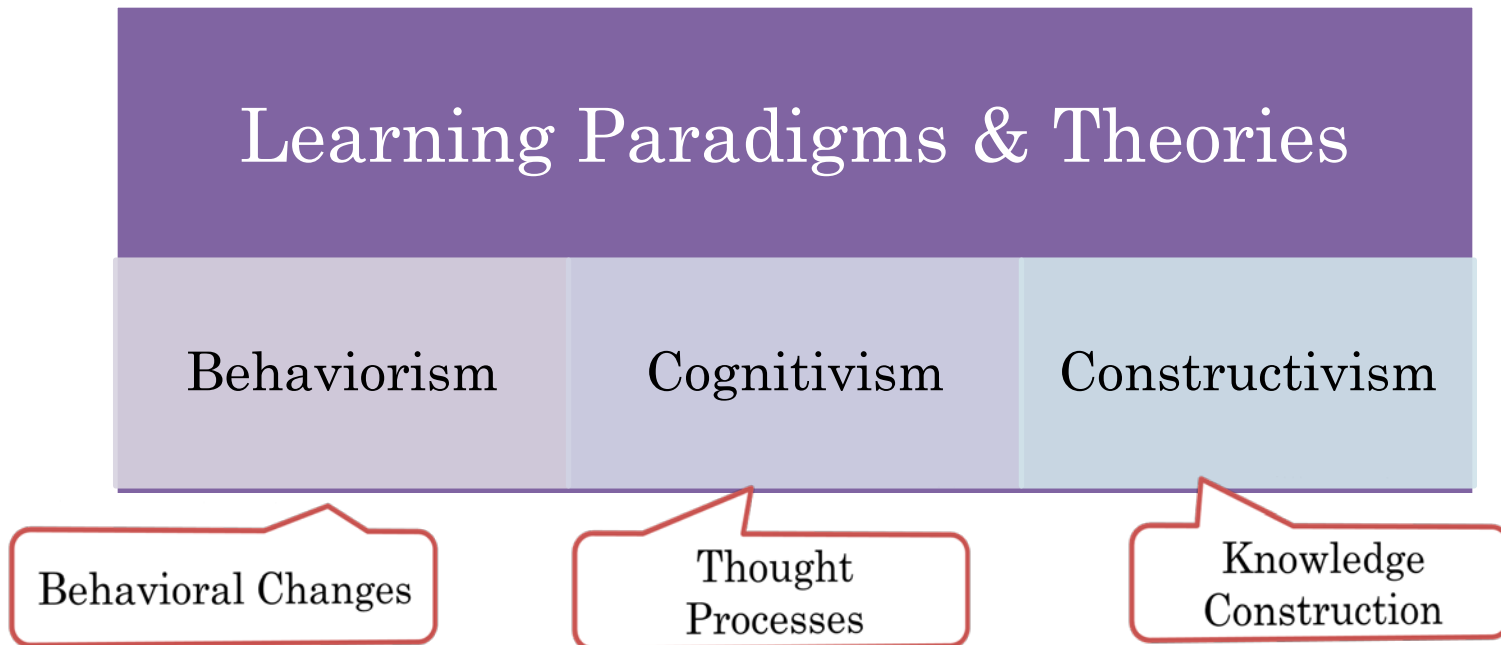
CHANGE?

Knowledge



# Theory of LEARNING

- How do People Learn?



# Cognition and Learning

- Its about understanding the mental processes involved in enabling human learn and by understanding these processes we are able to better facilitate the process of learning.

