

Principles of Assessment

MUADP-5_Level 1 (2025)

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<https://il.mahidol.ac.th>

A B C



[Q1] Identify problems & Discuss



Outline

1. What is Evaluation & Assessment?
2. What, Where, When...
3. Good Assessors' Characteristics
4. Principles of Assessment
5. How can I use ChatGPT/Gemini AI for evaluation?



Learning Outcome

- Be able to
 1. Differentiate Evaluation & Assessment
 2. Explain basic principle of assessment
 3. Apply and design assessment
 4. Be a good & ethical assessor



[Q2]

What is the difference between
evaluation and assessment?



1.1 What is Evaluation?

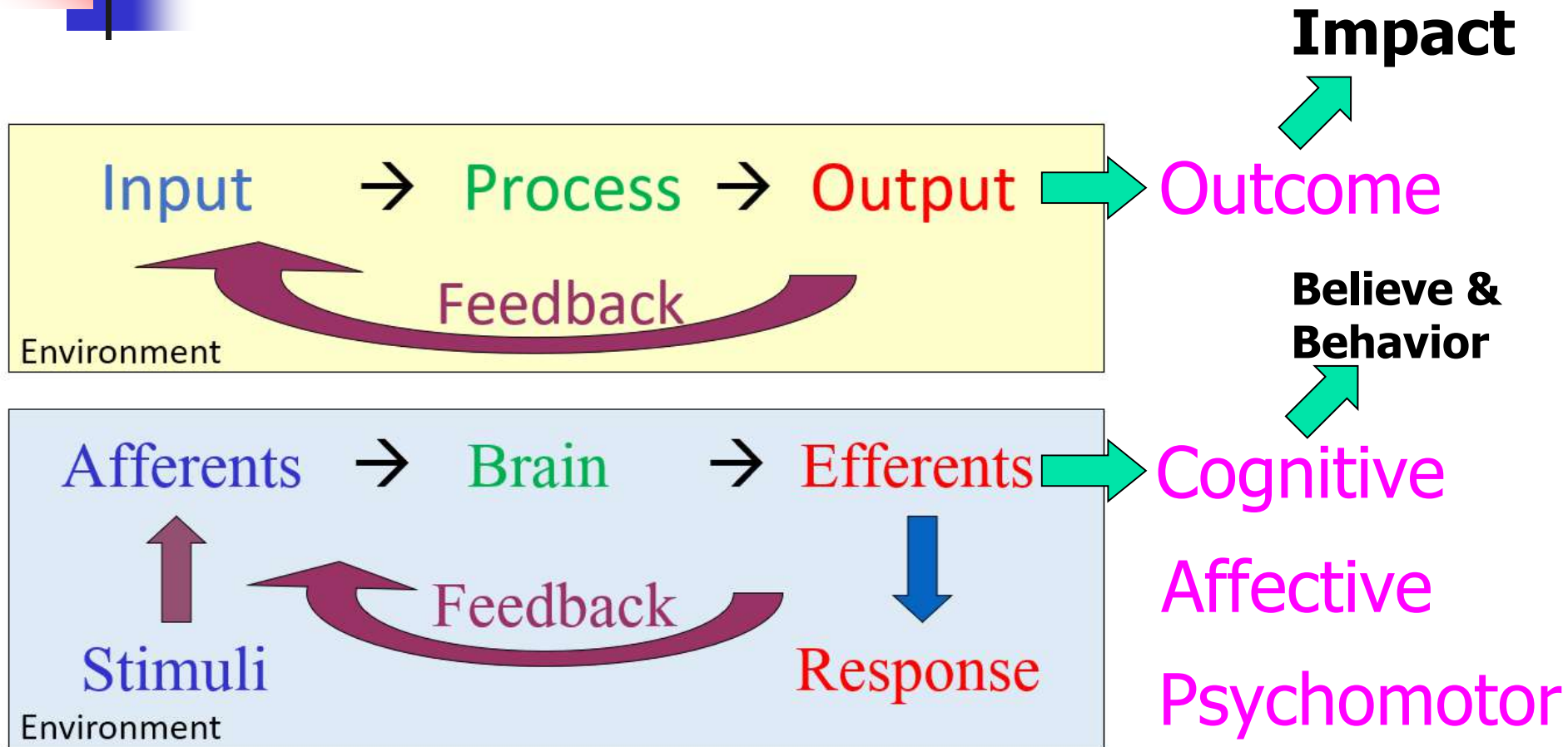
- The process of measurement to **quantify and compare to defined criteria** (A, B, C, D, F; Stars 1-5)
- Evaluate for **making decision**
- Type of Evaluation
 - Objective Eval. – MCQ, T/F, Matching,...
 - Subjective Eval. – Modified Essay Question (MEQ), Oral exam, Practical Exam, ...



1.2 What is Assessment?

- The process of documenting, usually in **measurable terms, KSA**, and beliefs
- **Identify strength & weakness for further quality development**
- **Purpose:** to promote student learning and development
- Evaluation method defines learning method

System Concept





Education Concept

1. Objective: Learning Outcome → CPA
2. Learning process: Teaching & Learning
3. Evaluation: **Formative, Summative**

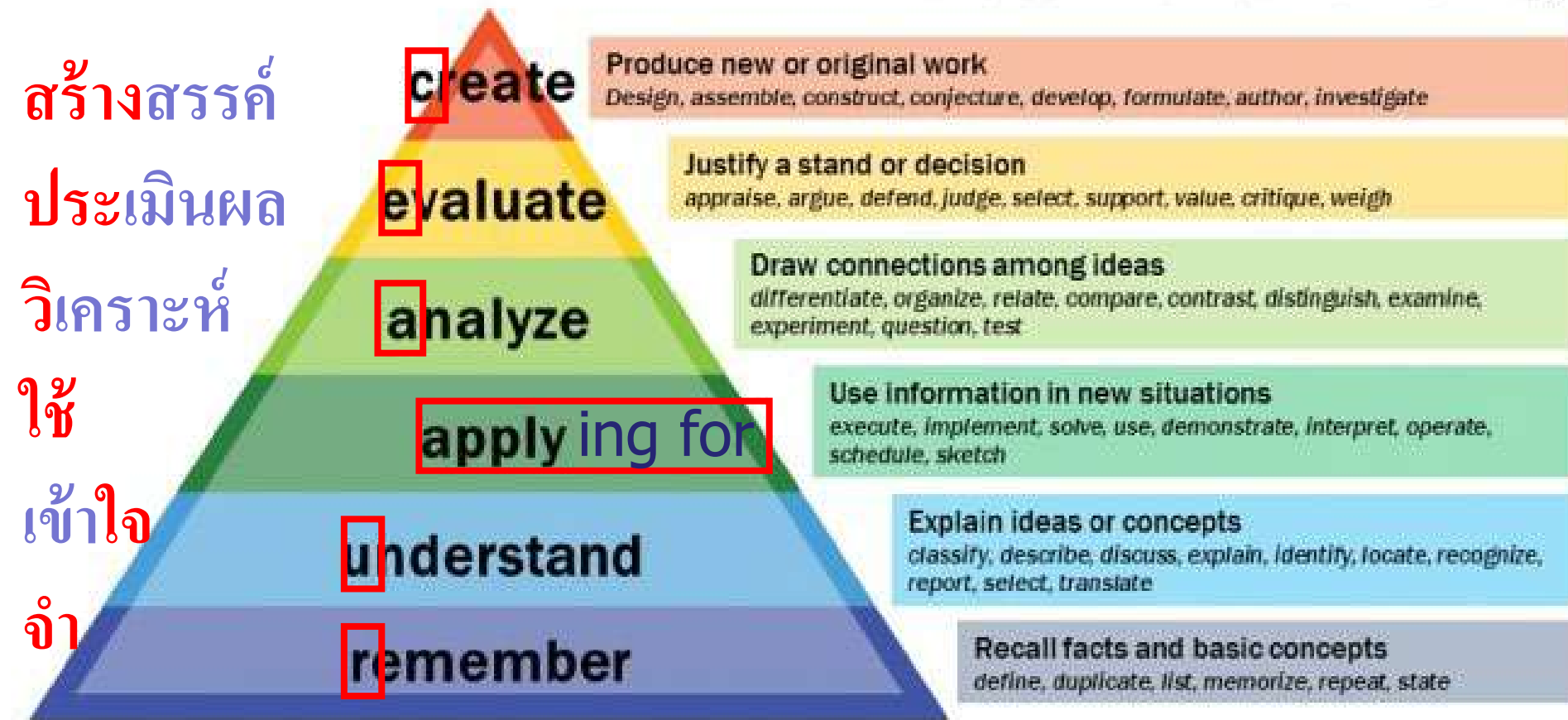
Revised Bloom's Taxonomy: 3 Domains

1. Cognitive Domain (Knowledge) : Head
2. Psychomotor Domain (Skill) : Hand
3. Affective Domain (Attitude) : Heart



Cognitive Domain

Bloom's Taxonomy





2.1 What outcomes to assess?

- **K**nowledge: **MCQ** → **Item Analysis**,
Modified Essay Question (MEQ),
Oral exam
- **S**kill: **Rubric** (Rating Scale), OSCE
(Objective Structure Clinical Examination)
- **A**ttitude: Observation



2.2 When to assess?

1. Formative evaluation
 - During a class,
 - In-between a course
2. Summative evaluation
 - After a class
 - At the end of a course



2.3 Where to assess?

1. Social Context: Bedside, field work
2. Physical Context
3. Virtual Context
 - Role of ICT on Education
 - Online exam in a dedicated place
 - How to identify identity?



2.4 How to evaluate/assess?

1. Objective evaluation
2. Subjective evaluation
3. Practical evaluation
4. Observation



3. Good Assessors' Characteristics

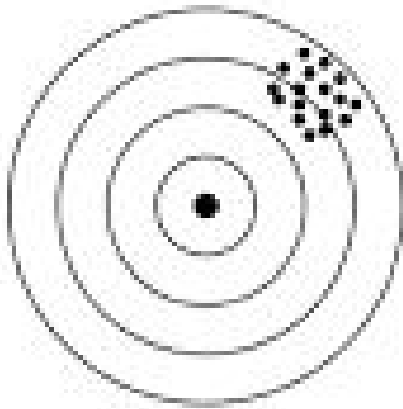
- Subject Matter Expert
- Assessment Knowledge
- Communication Skills
- Great attitude



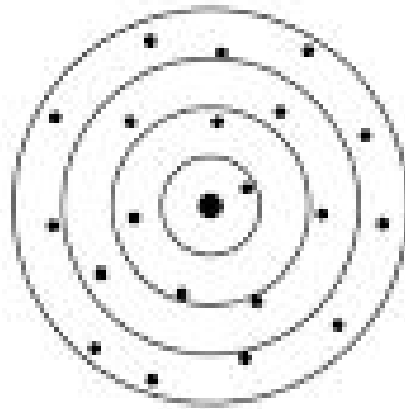
[Q3] Validity & Reliability



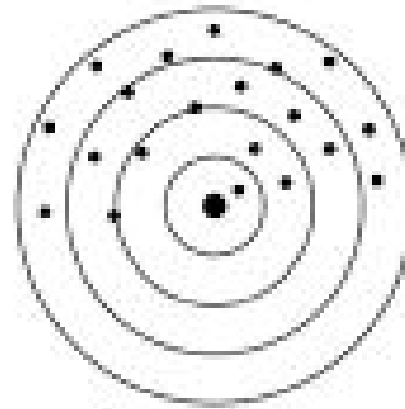
Which one(s) is **Valid**?



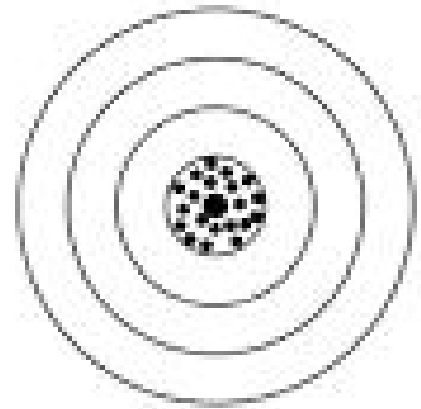
A



B

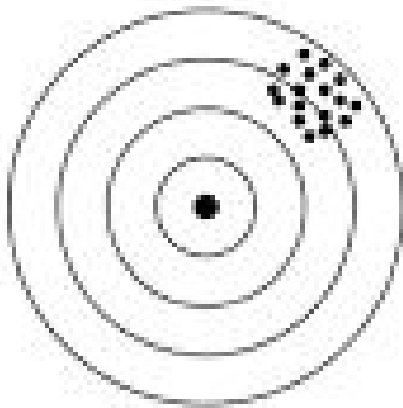


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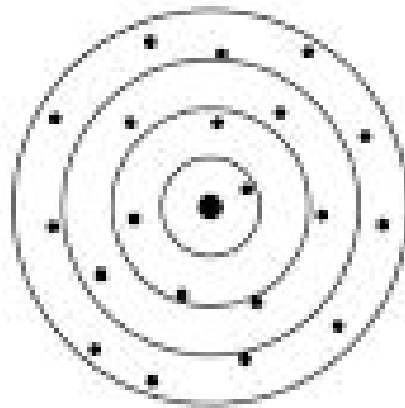


D

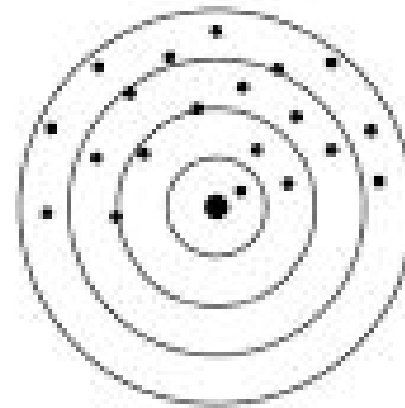
Which one(s) is **Reliable**?



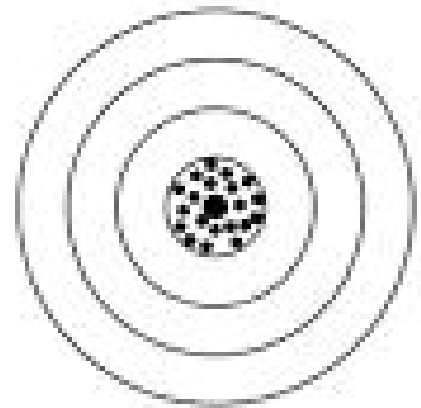
A



B



C



D

Validity & Reliability



by Experiment-Resources.com

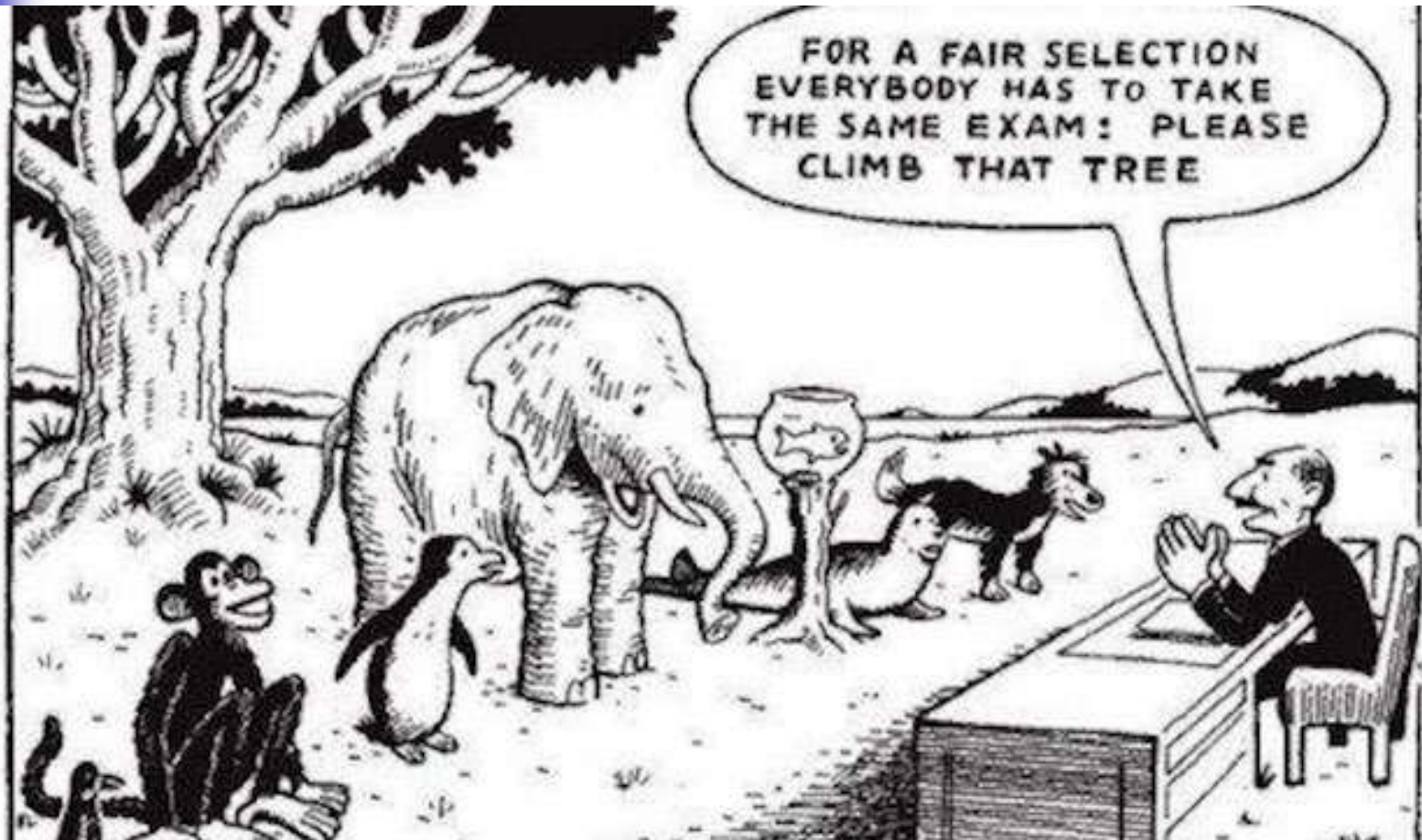
<https://explorable.com/images/validity-and-reliability.jpg>



4. Principles of Assessment

1. Validity
2. Reliability
3. Fairness
4. Flexibility
5. Feasibility: Place, Time, Person
6. Up-to-date
7. Item Analysis → Quality, Purpose

“Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.” - Albert Einstein

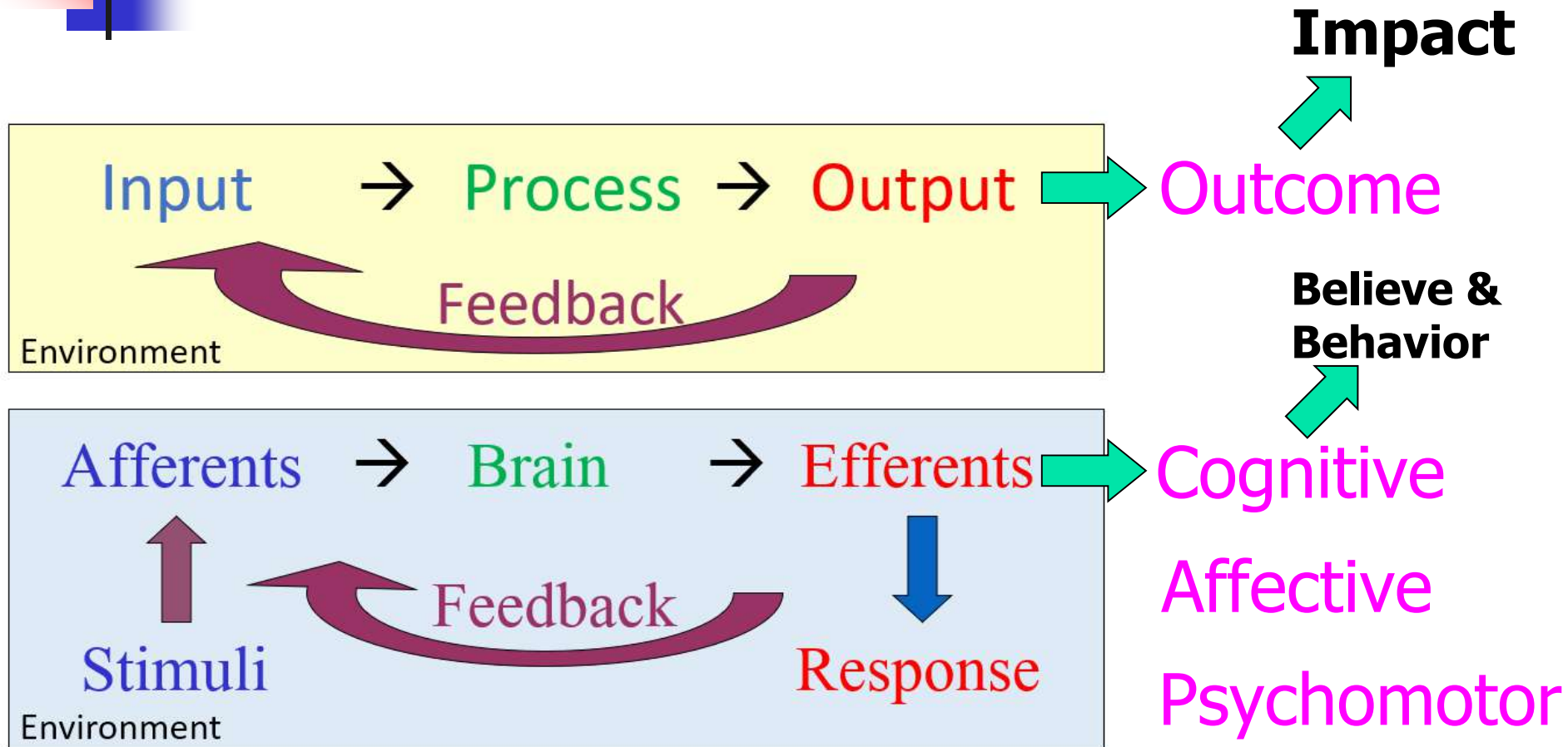




5. ChatGPT / Google Gemini AI

- How can I use ChatGPT & Gemini for evaluation?

Principles of Assessment





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