Quality Assurance Training

University Grants Commission, Dhaka

1

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Workshop Objectives

- provide the theoretical underpinnings that will support QF development in Bangladesh and in particular peer review and accreditation system;

- train a group of senior academics with the skills required for conducting training programs both for colleagues in their own university and/or for QA personnel in other institutions of higher education nationally or regionally in general QA systems and processes; and

- equip participants with the knowledge and expertise on outcome based education including curriculum development, delivery and assessment.

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Workshop Outcomes

At the end of the workshop, participants will:

- demonstrate a deeper understanding of the direction of quality assurance systems and processes in Bangladesh;

- be able to provide expert advice on QA to higher education institutions;

- show clear knowledge and application of outcome based education in curriculum development, delivery and assessment

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Workshop Coverage

- National Qualifications Framework, Bangladesh

- Outcome Based Education – Curriculum Design

- Outcome Based Education – Curriculum Delivery

- Outcome Based Education – Assessment

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

The National Qualifications Framework of Bangladesh: An Overview

- ..\QF\NQF. Stakeholder Presentation. March 2017.pptx

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Exercise 1: The NQF: Moving Forward

- ➥ Are the objectives clear/sufficient?

- ➥ Do we need to expand the scope of the QF?

- ➥ Do the levels identified sufficiently represent the higher education sector in Bangladesh?

- ➥ Are the features provided clear & sufficient?

- ➥ Do you have any thoughts on graduating credits for each level?

- ➥ Do proposed credit value and notional hour seem practical for application in Bangladesh?

The NQFB Stakeholder Feedback Form will be emailed to you for your further comments/response.

Quality Assurance Unit
University Grants Commission
of Bangladesh

Outcome-Based Education: Moving from Zero to a 100

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

"When you awaken, you will feel fresh and relaxed – and only remember outcome-based education

Quality Assurance Unit
University Grants Commission
of Bangladesh

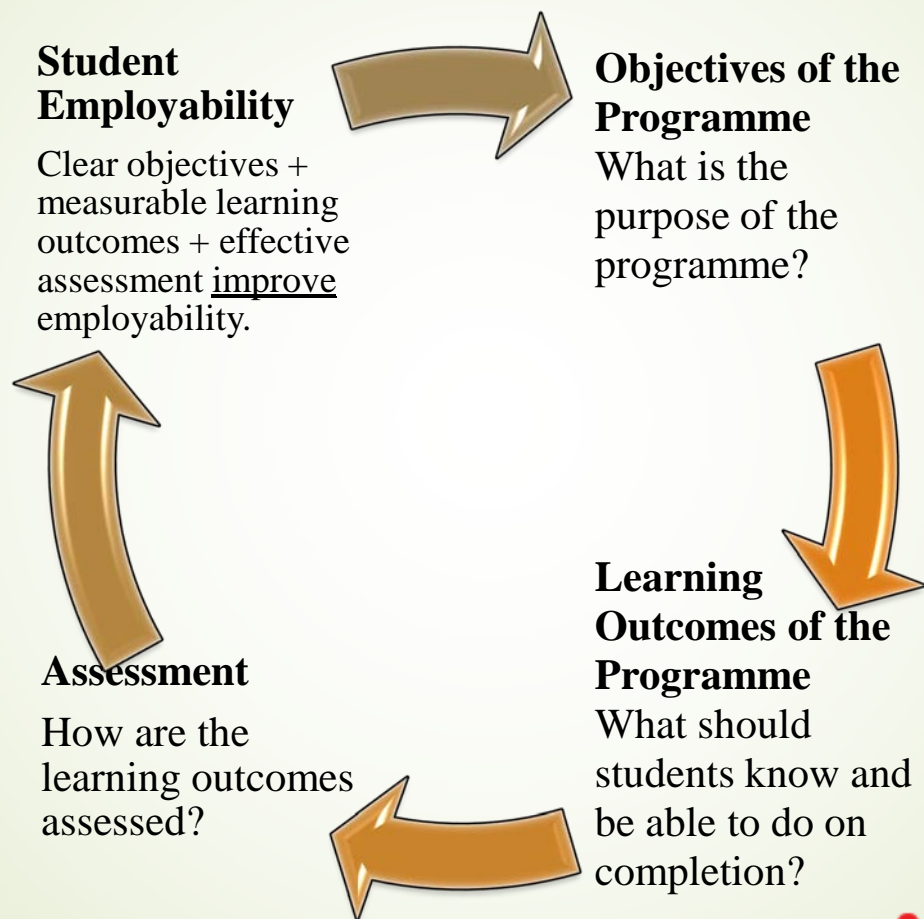বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Outcome-based education?

"Outcome-based education means starting with a clear picture of what is important for students to be able to do, then organising the curriculum, instruction, and assessment to make sure that this learning ultimately happens" (Spady,1994) .

Emphasis is on the learning outcomes (LOs), as opposed to the process in an educational strategy

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Learning Outcomes: In Summary

Student Employability

Clear objectives + measurable learning outcomes + effective assessment _improve_ employability.

Objectives of the Programme
What is the purpose of the programme?

Learning Outcomes of the Programme
What should students know and be able to do on completion?

Assessment
How are the learning outcomes assessed?

CQA/2012

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Why have LOs?

- To provide direction in the planning of a learning activity;

- To focus learner's behaviour that is to be changed;

- To serve as guidelines for content, instruction and assessment;

- To identify specifically what should be learned;

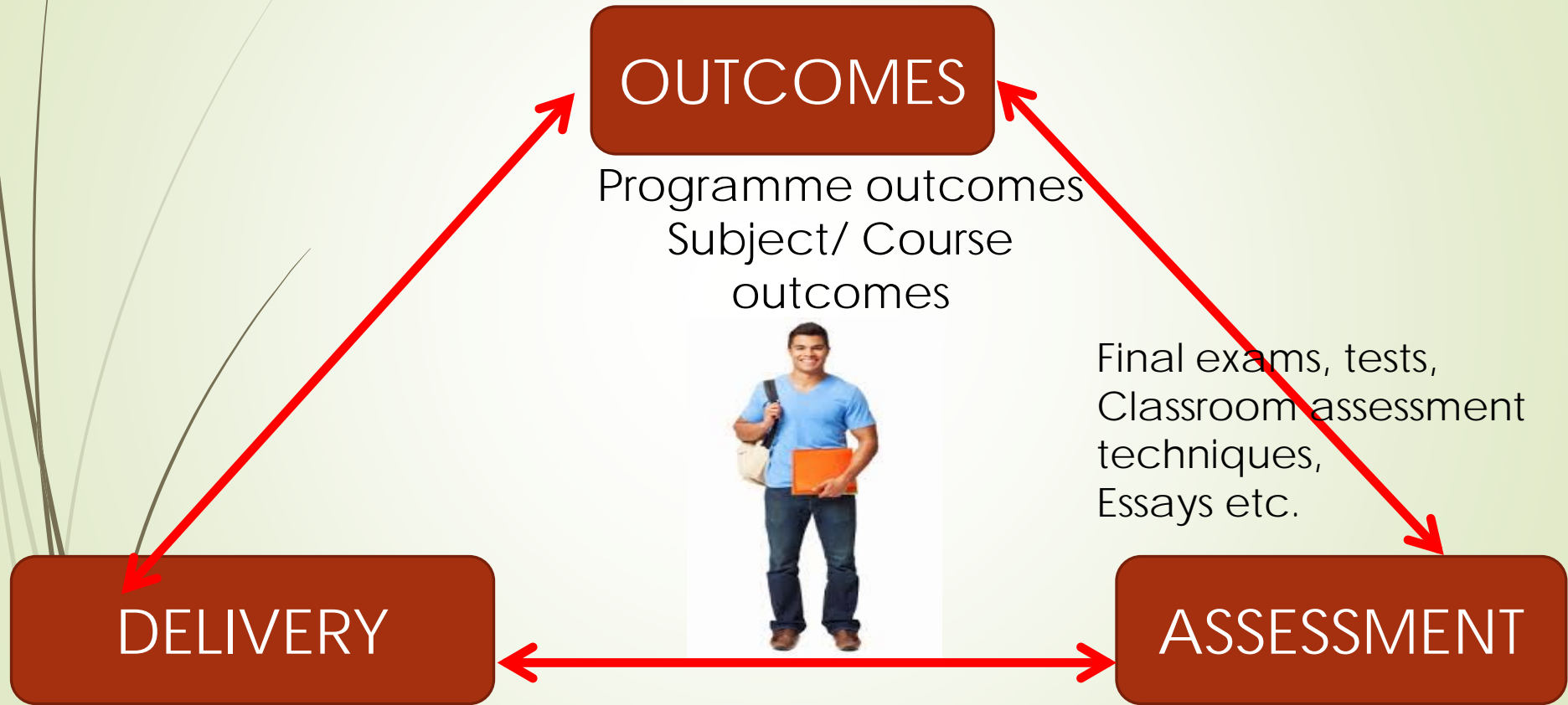- To convey to learners exactly what is to be accomplished.

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Characteristics of Good Learning Outcomes

The specific action by the learners must be:

Do-able

Observable

Measurable

Assessable

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Constructive alignment
a principle used for devising teaching and learning activities, and assessment tasks, that directly address the learning outcomes (LOs) (Biggs & Tang, 2011)

OUTCOMES

Programme outcomes
Subject/ Course
outcomes

Final exams, tests,
Classroom assessment
techniques,
Essays etc.

DELIVERY

ASSESSMENT

Lectures, Labs
Problem-based
learning etc.

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

An aligned curriculum

The Intended Learning Outcomes of the Curriculum

The outcomes are for-mulated first. From these the assessment criteria are developed.

The Assessment Regime

Once an appropriate assessment regime has been designed, activi-ties are organised that will teach the student how to meet the assess-ment criteria (and, hence, the outcomes).

Teaching and Learning Activities

What the teacher does and what the students do are aimed at achiev-ing the outcomes by meeting the assessment criteria. This takes advantage of the known tendency of students to learn what they think will be assessed – and is called backwash (Biggs 2003:140).

http://www.ucdoer.ie/index.php/Using_Biggs'_Model_of_Constructive_Alignment_in_Curriculum_Design/Introduction

Quality Assurance Unit
University Grants Commission
of Bangladesh

The OBE approach:
The 3-stage backward design

3. Plan Learning Experiences

2. Determine Acceptable Evidence

1. Identify the Desired Results

A L I G N E D

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Different levels of outcome

PEO – few years after graduation

PO – upon graduation

CO – course outcomes

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

The OBE Approach

What are students able to do UPON GRADUATION?

Set Programme Outcomes (PO)

↓

What are students able to do UPON COMPLETING THE COURSE?
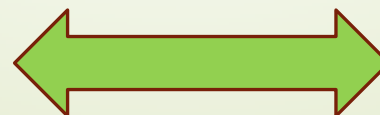
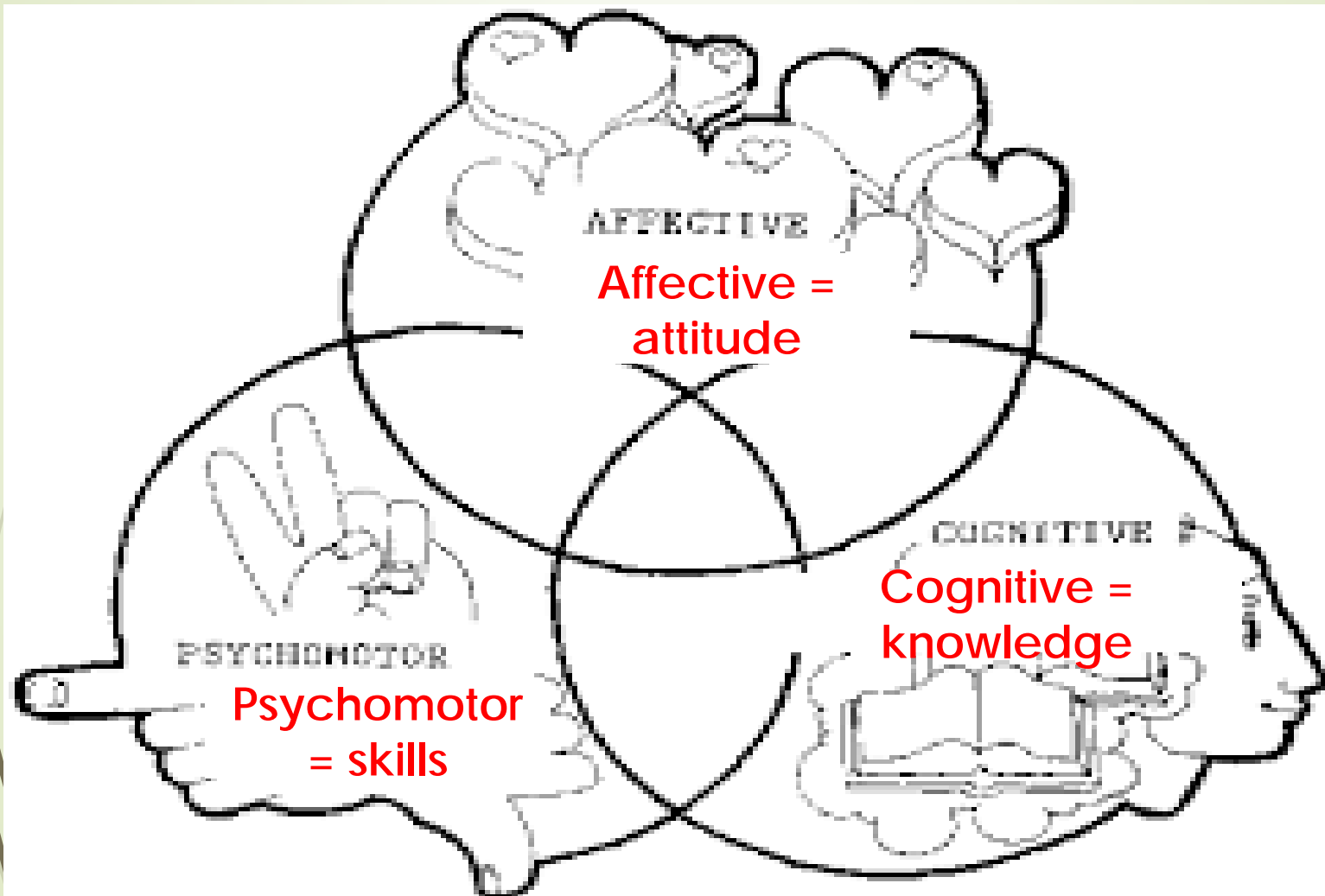Develop Course LO (CLO)

↓

What knowledge?

↓

What generic skills?

↓
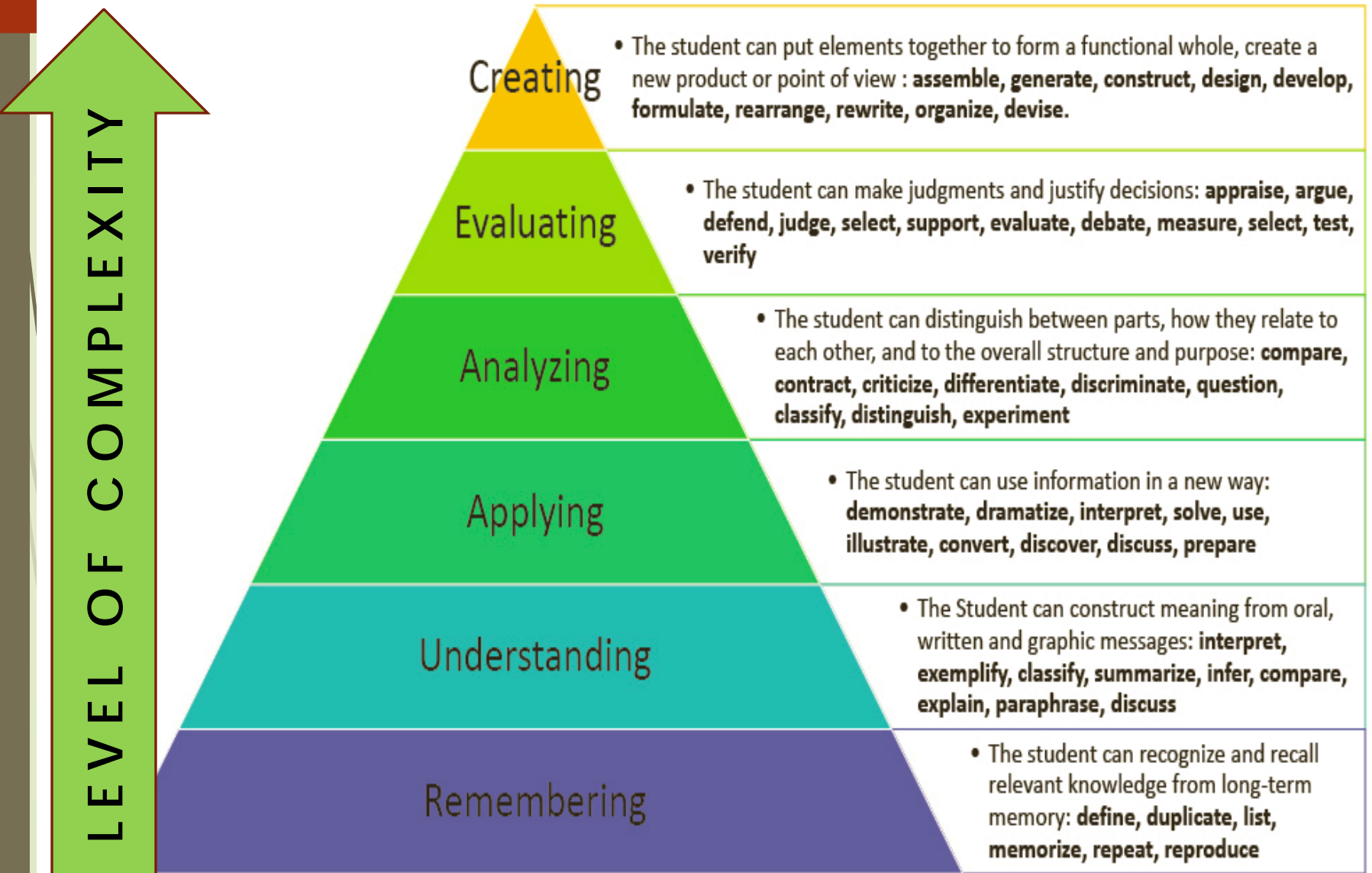
Which taxonomy & level?

↓

Teaching & Learning methods/approaches ↔ Assessment
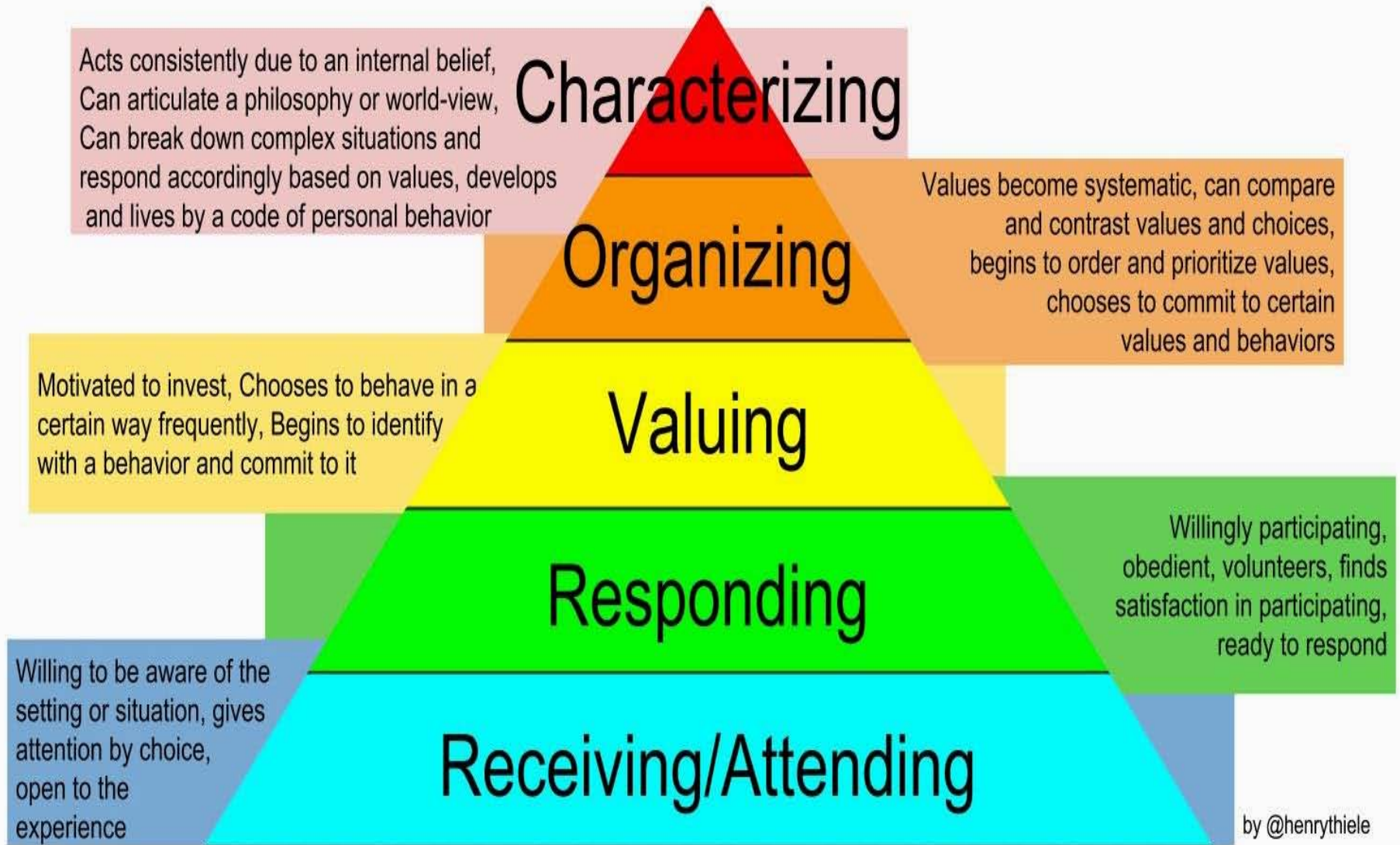
Bloom's Three Domains of Learning

Affective = attitude

Cognitive = knowledge

Psychomotor = skills

Bloom's Taxonomy: Cognitive Domain

LEVEL OF COMPLEXITY

Creating
- The student can put elements together to form a functional whole, create a new product or point of view : **assemble, generate, construct, design, develop, formulate, rearrange, rewrite, organize, devise.**

Evaluating
- The student can make judgments and justify decisions: **appraise, argue, defend, judge, select, support, evaluate, debate, measure, select, test, verify**

Analyzing
- The student can distinguish between parts, how they relate to each other, and to the overall structure and purpose: **compare, contract, criticize, differentiate, discriminate, question, classify, distinguish, experiment**

Applying
- The student can use information in a new way: **demonstrate, dramatize, interpret, solve, use, illustrate, convert, discover, discuss, prepare**

Understanding
- The Student can construct meaning from oral, written and graphic messages: **interpret, exemplify, classify, summarize, infer, compare, explain, paraphrase, discuss**

Remembering
- The student can recognize and recall relevant knowledge from long-term memory: **define, duplicate, list, memorize, repeat, reproduce**

Bloom's Taxonomy: Affective Domain
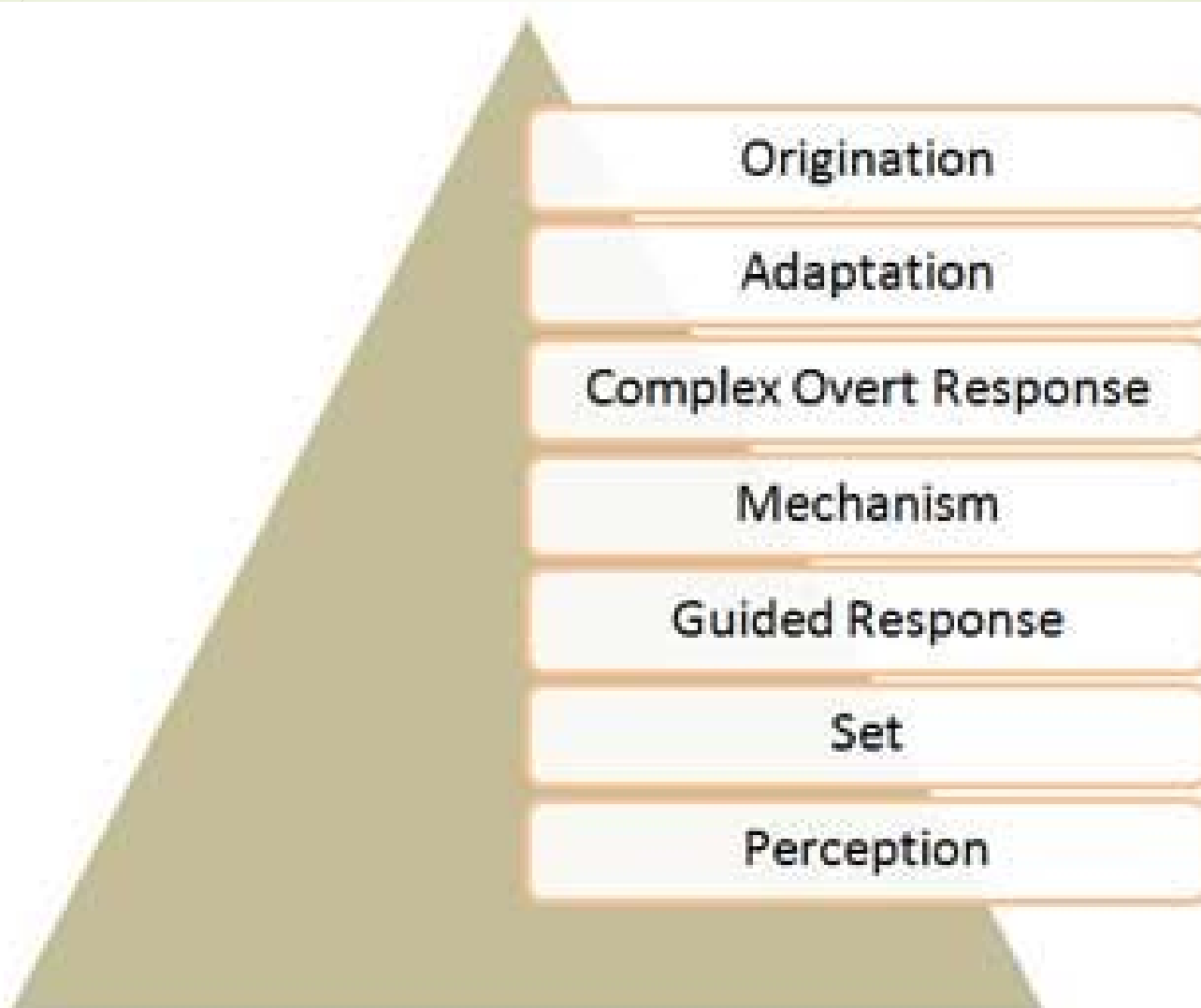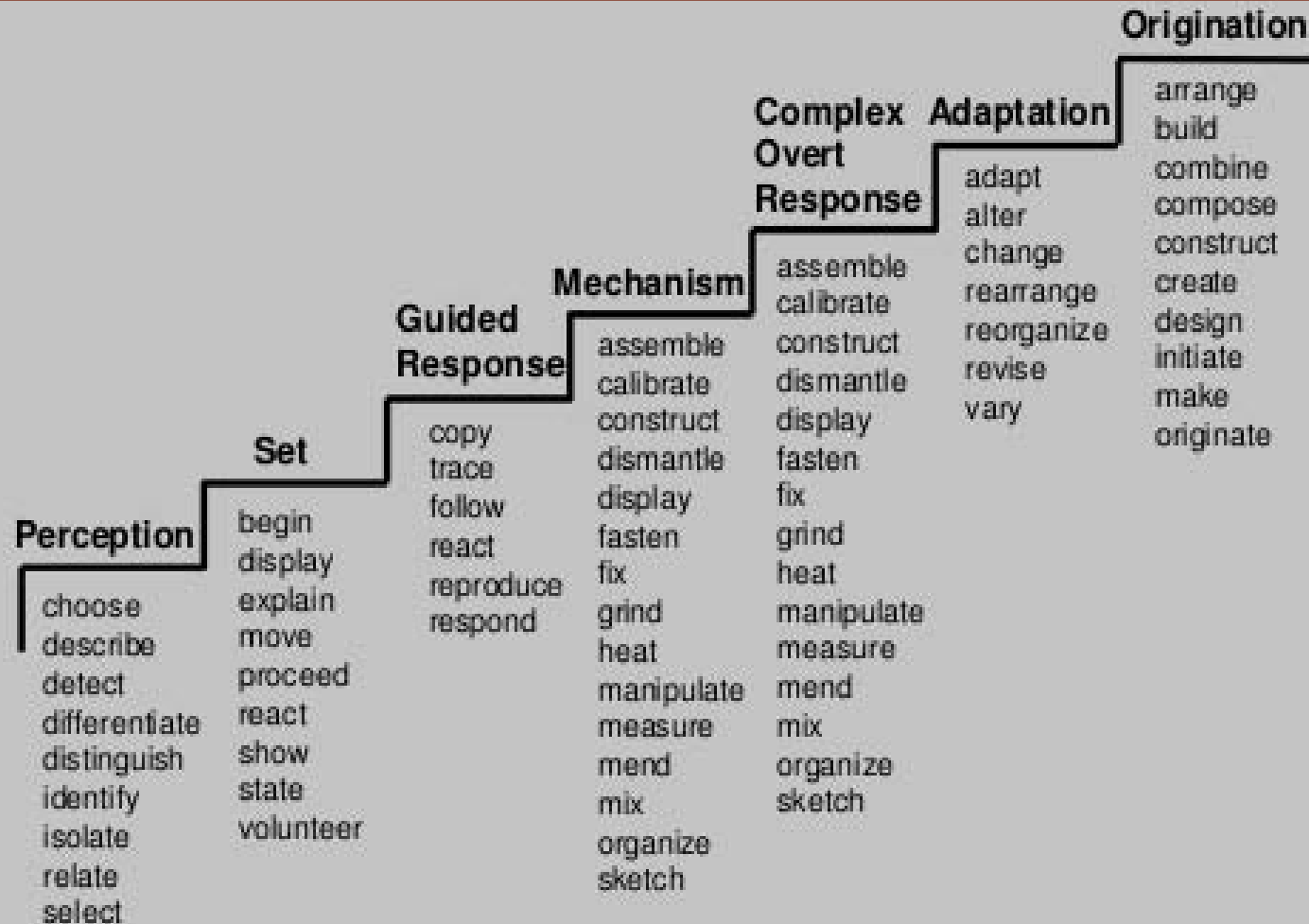
Bloom's Taxonomy
Affective Domain

Affective Domain	Instructional Behavioral Term
1. Receiving	Asks, chooses, describes, follows, gives, holds, locates, points to, relies, uses
2. Responding	Answers, assists, complies, conforms, greets, performs, practices, presents, recites, reports
3. Valuing	Completes, explains, initiates, invites, joins, justifies, proposes, shares, studies
4. Organization	Adheres, alters, arranges, defends, generalizes, integrates, orders, prepares, relates
5. Characterization	Acts, discriminates, displays, influences, modifies, proposes, qualifies, questions, revises, serves, solves, verifies

Bloom's Taxonomy: Psychomotor Domain

Origination

Adaptation

Complex Overt Response

Mechanism

Guided Response

Set

Perception

Unit
on

Origination
arrange
build
combine
compose
construct
create
design
initiate
make
originate

Adaptation
adapt
alter
change
rearrange
reorganize
revise
vary

Complex Overt Response
assemble
calibrate
construct
dismantle
display
fasten
fix
grind
heat
manipulate
measure
mend
mix
organize
sketch

Mechanism
assemble
calibrate
construct
dismantle
display
fasten
fix
grind
heat
manipulate
measure
mend
mix
organize
sketch

Guided Response
copy
trace
follow
react
reproduce
respond

Set
begin
display
explain
move
proceed
react
show
state
volunteer

Perception
choose
describe
detect
differentiate
distinguish
identify
isolate
relate
select

16

http://www.slideshare.net/guoqiangcui/cui-measurable-objectives-57049463

PROGRAMME X: Mapping the COs with the POs

PO

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9

COURSES

Course 1	Course 2	Course 3	Course 4	Course 5

CO

CO1	CO2	CO3	CO4	CO5

cover cognitive, affective and psychomotor domains at varying levels

Harshita/UniMAP/BAUdec16

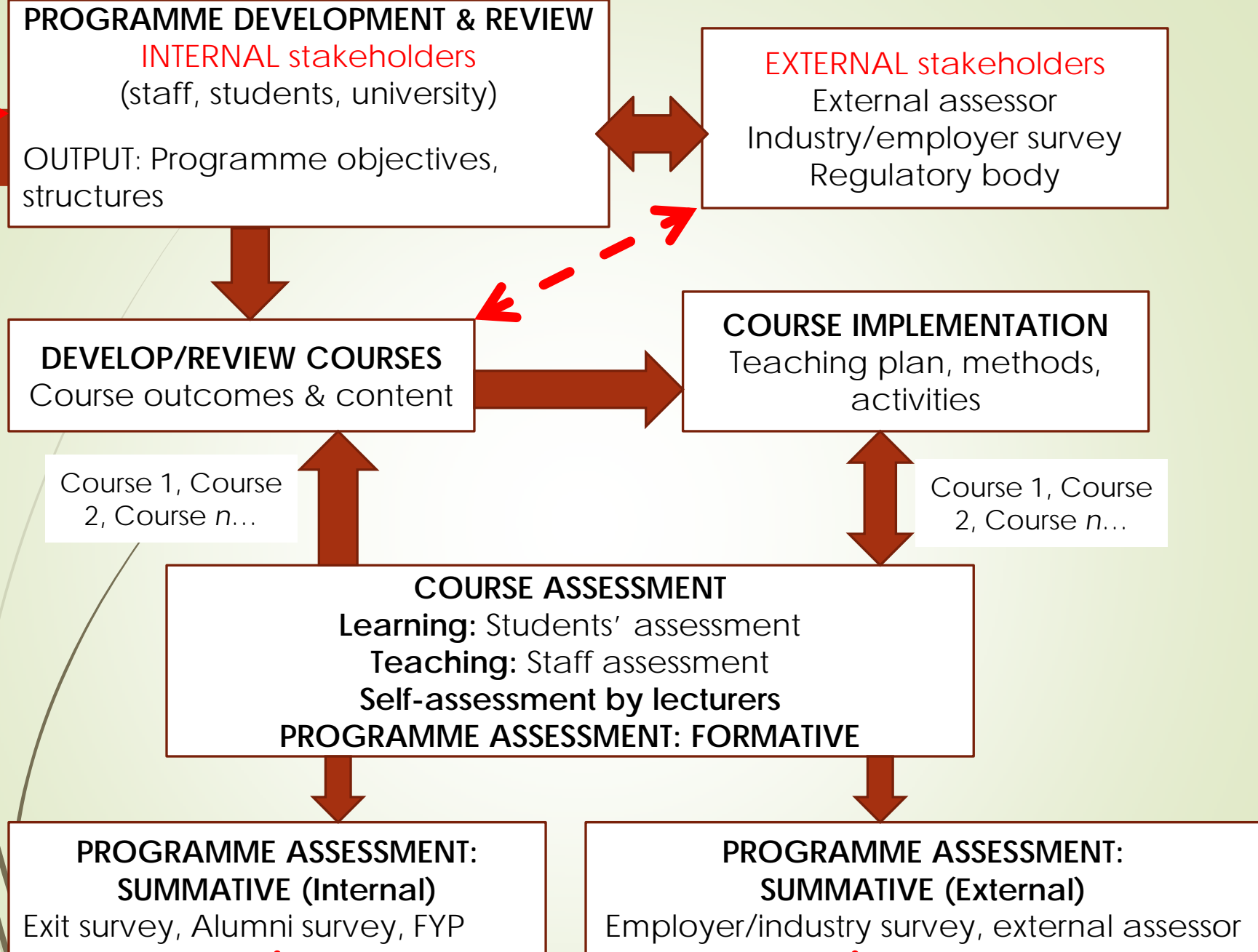**Quality Assurance Unit**
University Grants Commission
of Bangladesh

Important questions to ask

- What do you want the students to have or able to do (LOs)?

- How can you best help the students achieve it/them?

- How will you know that they have achieved it/them?

- How do you close the loop?

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

TO START, you will need to establish:

- Mission and vision
- Programme Educational Objectives
- Programme Outcomes
- Matrix of courses with programme outcomes (Curriculum map)
- Outcome-based teaching and learning delivery system
- Programme assessment and evaluation process
- Continuous quality improvement programme

Quality Assurance Unit
University Grants Commission
of Bangladesh

PROGRAMME DEVELOPMENT & REVIEW
INTERNAL stakeholders
(staff, students, university)

OUTPUT: Programme objectives, structures

EXTERNAL stakeholders
External assessor
Industry/employer survey
Regulatory body

DEVELOP/REVIEW COURSES
Course outcomes & content

COURSE IMPLEMENTATION
Teaching plan, methods, activities

Course 1, Course 2, Course *n*…

Course 1, Course 2, Course *n*…

COURSE ASSESSMENT
Learning: Students' assessment
Teaching: Staff assessment
Self-assessment by lecturers
PROGRAMME ASSESSMENT: FORMATIVE

PROGRAMME ASSESSMENT: SUMMATIVE (Internal)
Exit survey, Alumni survey, FYP

PROGRAMME ASSESSMENT: SUMMATIVE (External)
Employer/industry survey, external assessor

University Grants Commission of Bangladesh
বাংলাদেশ বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Support!different situations by specific tools

Delivery

1. develop soft skills and core skills within all curriculum

2. 'translate' LO's into learning experiences

3. develop learner centredness

4. make institutional based learning outcomes as the foundations

5. develop learning outcomes utilising <u>intellectual quality</u>, relevance (or connectedness), <u>socially supportive</u> classroom environment and <u>recognition of difference</u>

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Approaches to OBE

- In the OBTL approach, given the more specific nature of its learning outcomes, it would be necessary to develop a range of teaching and learning activities that are aimed at achieving these particular outcomes.

- The question to ask:

NOT 'What do I want to "cover" in my lecture?',

BUT 'What teaching/learning activities do I need to conduct in order for the students to achieve the learning outcomes I intend?'

Planning to Achieve Learning Outcomes. Aug 2009.Roz.

Quality Assurance Unit
University Grants Commission
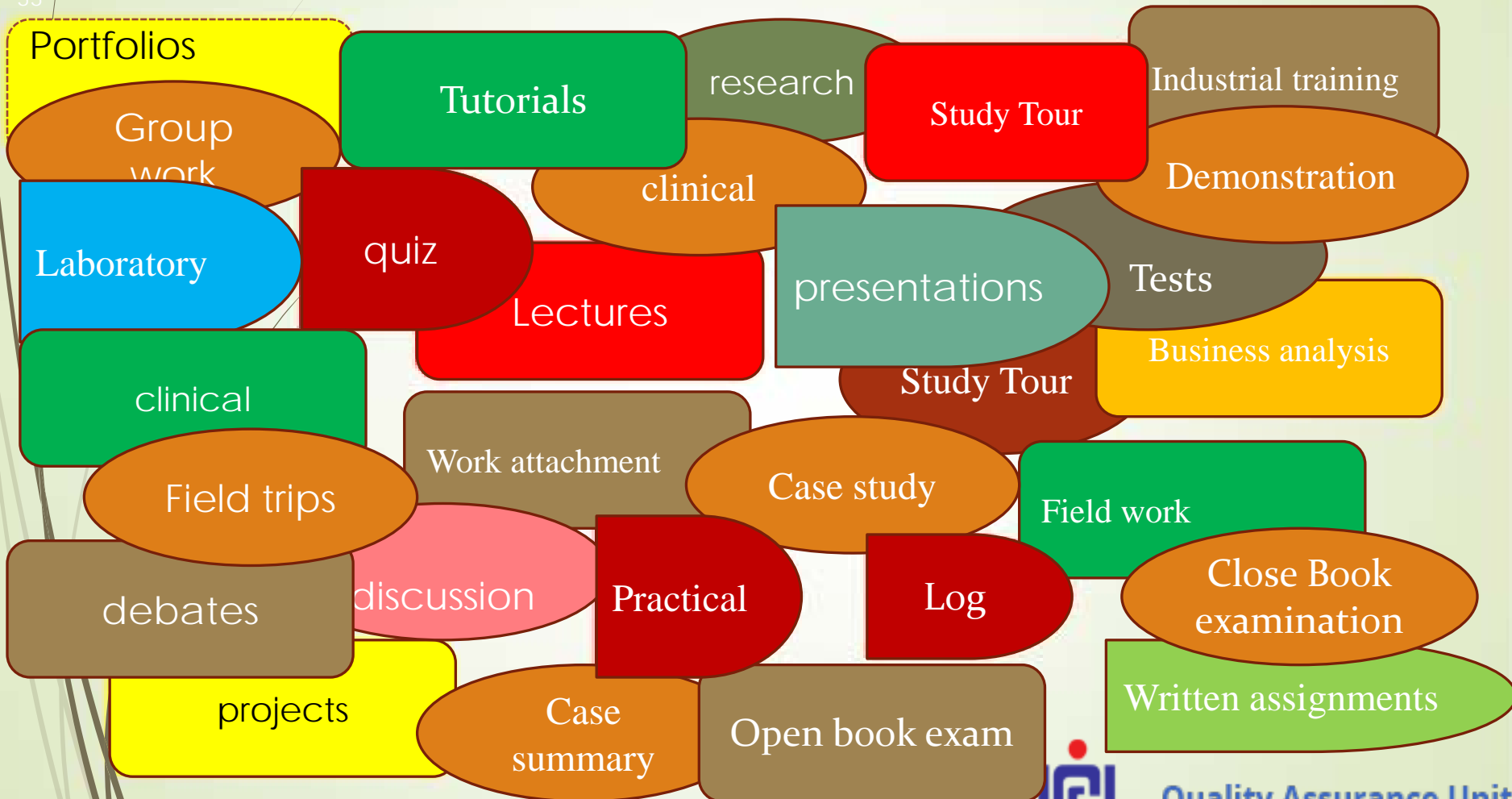of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Approaches to OBE

- Plan lessons around developing student's skills or understandings rather than covering a content area

- Require students to demonstrate what he/she knows and can do

- Provide opportunities for the student to demonstrate Outcomes

Planning to Achieve Learning Outcomes. Aug 2009.Roz.

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Approaches to OBE

► Aim to <u>change the students</u> rather than simply have them learn

► Help students to demonstrate a skill or understanding (OUTCOME) which is <u>meaningful and relevant to their present and future life</u>

► Encourage the <u>"transfer"</u> of Outcome skills developed, to other contexts

Quality Assurance Unit
University Grants Commission
of Bangladesh
বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Types of Learning Activities

Portfolios

Group work

Tutorials

research

Study Tour

Industrial training

clinical

Demonstration

Laboratory

quiz

Lectures

presentations

Tests

Business analysis

Study Tour

clinical

Work attachment

Case study

Field work

Field trips

discussion

Practical

Log

Close Book examination

debates

projects

Case summary

Open book exam

Written assignments

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

LET'S REFLECT...

In my class:

1. Do I include learning experiences involving Decision Making, Problem Solving, Interpreting (Higher Order Thinking Skills) in my teaching?

2. Do I provide ample time for students to develop an Outcome?

3. Do I move beyond academic learning and include 'Relevance'?

4. Do I provide a range of "avenues" to develop an Outcome?

5. Do I promote "inclusivity" and recognition of achievement?

6. Do I sometimes take a "back seat" in the learning process?

7. Do I always remain 'in control' of the class?

8. Do I develop a skill or concept sequentially?

9. Do I provide opportunities for independence and inter-dependence?

10. How do I rate myself as a teacher/learning facilitator?

https://www.surveymonkey.net/summary/AtoQvajFNmzC0MOXG7G oi8fGN_2B3CFyUkON4U4pbZcqbLYzANGJwL4Cko5hKluymO

Planning to Achieve Learning Outcomes. Aug 2009.Roz.

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

"Do not try to satisfy your vanity by teaching a great many things. Awaken people's curiosity. It is enough to open minds; do not overload them. Put there a spark. If there is some good inflammable stuff, it will catch fire."

Annatole France

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Outcome Based Education: Assessing, not Conforming?

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Think about these:

- What is assessment?

- Why is assessment important?

- What kind of assessment/evaluation is done at your institution?

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন
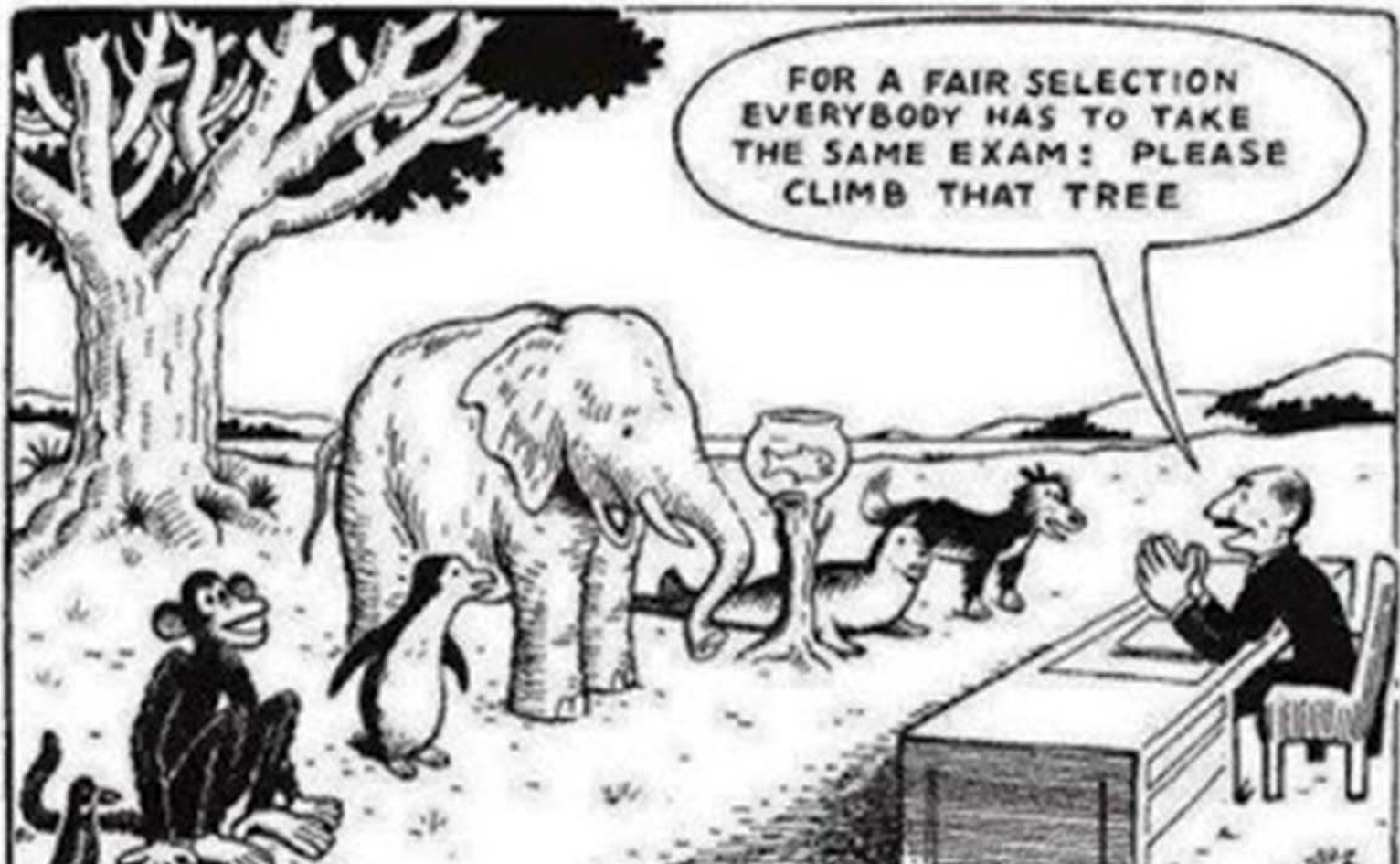
"If you want to change student learning then change the methods of assessment"
Chuckett & Sutherland, 2000

WHAT DOES SCHOOL REALLY TEACH CHILDREN?

1. TRUTH COMES FROM AUTHORITY

2. INTELLIGENCE IS THE ABILITY TO REMEMBER AND REPEAT

3. ACCURATE MEMORY AND REPETITION ARE REWARDED

4. NON-COMPLIANCE IS PUNISHED

5. CONFORM: INTELLECTUALLY AND SOCIALLY

WWW.FACEBOOK.COM/THETRUTHBOOTH

BUT…

assessment defines for the students what is important, what counts, how they will spend their time and how they will see themselves as learners.

Quality Assurance Unit
University Grants Commission
of Bangladesh

What is the function of assessment in OBE?

"Old" vs "New" Assessment Approaches

OLD	NEW
Students as passive learners	
Exam-driven	
Rote learning	
Syllabus is content-based and broken down into subjects	
Teachers are responsible for learning	
Content placed into rigid time-frames	

Quality Assurance Unit
University Grants Commission
of Bangladesh

Alignment of Tasks to Outcomes

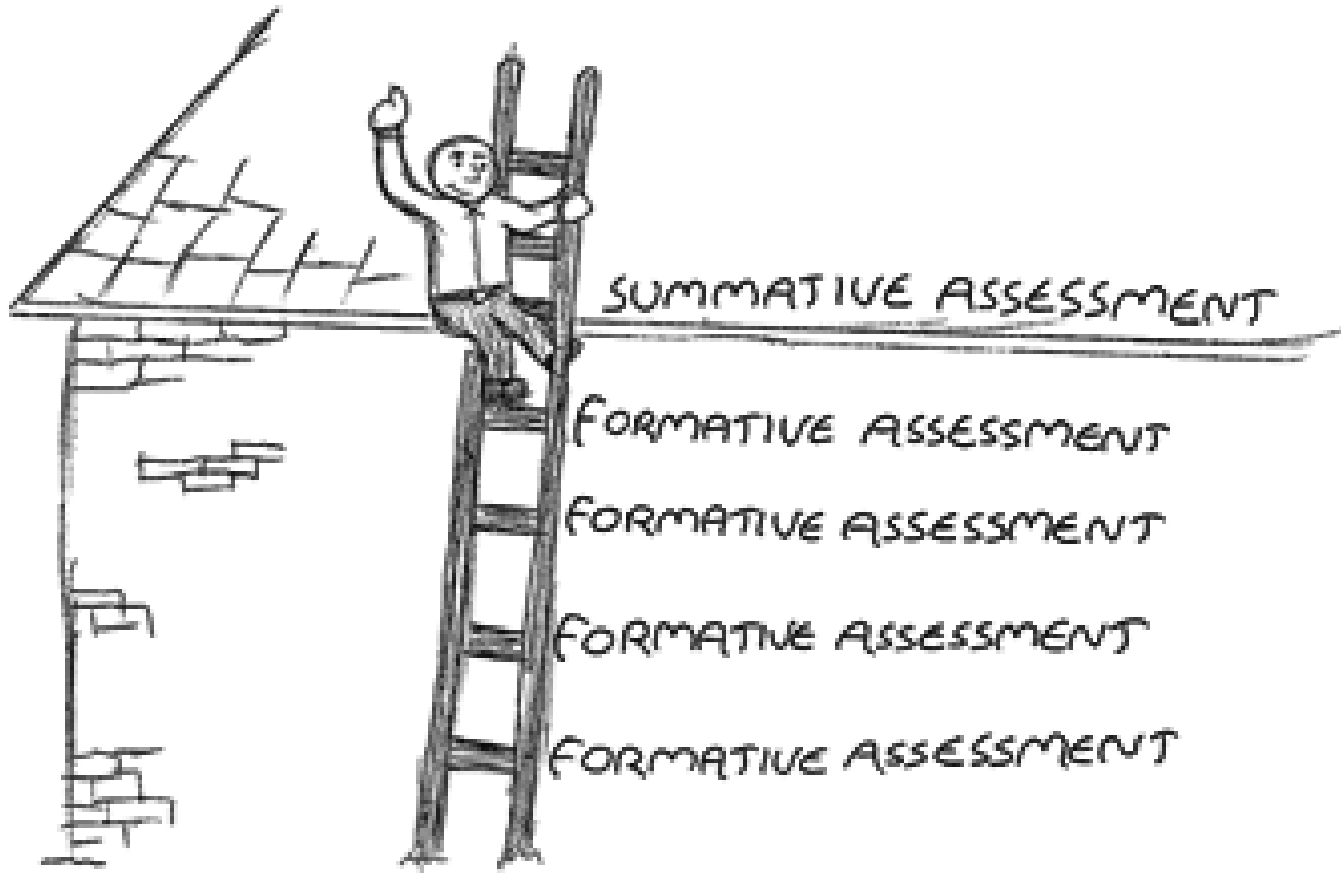In OBE, it is vital that you align the tasks (or the measures of assessment) to the intended outcomes.

WHY?

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Types of assessment

SUMMATIVE ASSESSMENT

FORMATIVE ASSESSMENT

FORMATIVE ASSESSMENT

FORMATIVE ASSESSMENT

FORMATIVE ASSESSMENT

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Types of assessment

Assessment OF learning

Assessment FOR learning

Summative Assessment

Usually given at the end of instruction to assess mastery of learning objectives.

Types:
Exams
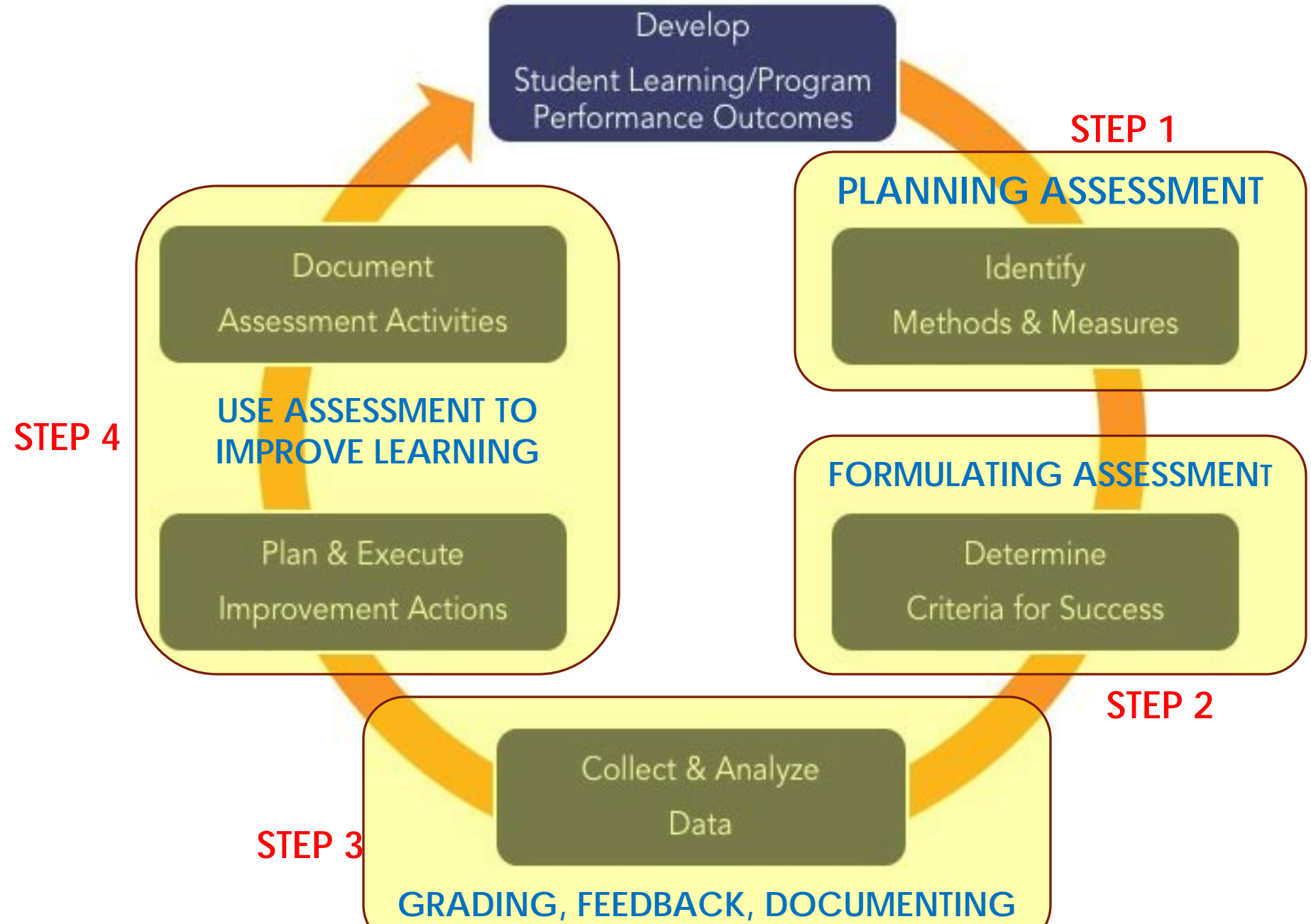Presentations
Creation of a product
Portfolio
Group project

Formative Assessment

Given frequently throughout the course to evaluate progress.

*Feedback must be given to be effective.

Types:
Learning logs/HW/activities
Discussions
Reflection
Group presentation
Practice quizzes

INSTRUCTIONAL and ASSESSMENT STAGES

Step 1: Planning the Assessment

- Planning should be based on the LOs

- Distribution of marks should be based on the mapping between PO and Course LOs (which should have been done at the beginning of the course)

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Example

No	Assessment Item	%	Full mark	CO 1	CO 2	CO 3	CO 4	CO 5
				PO1	PO2	PO6	PO 8	PO11
1	Asssmnt 1	5	10	/				
2	Asssmnt 2	5	100		/			
3	Asssmnt 3	15	50			/		
4	Asssmnt 4	20	100				/	
5	Asssmnt 5	25	25		/			
6	Asssmnt 6	30	50					/
	TOTAL	100		5	30	15	20	30

NOTE: / represents mapping (assuming that 1 CO is mapped to 1 PO and 1 assessment item is mapped to 1 CO)

Quality Assurance Unit
University Grants Commission of Bangladesh
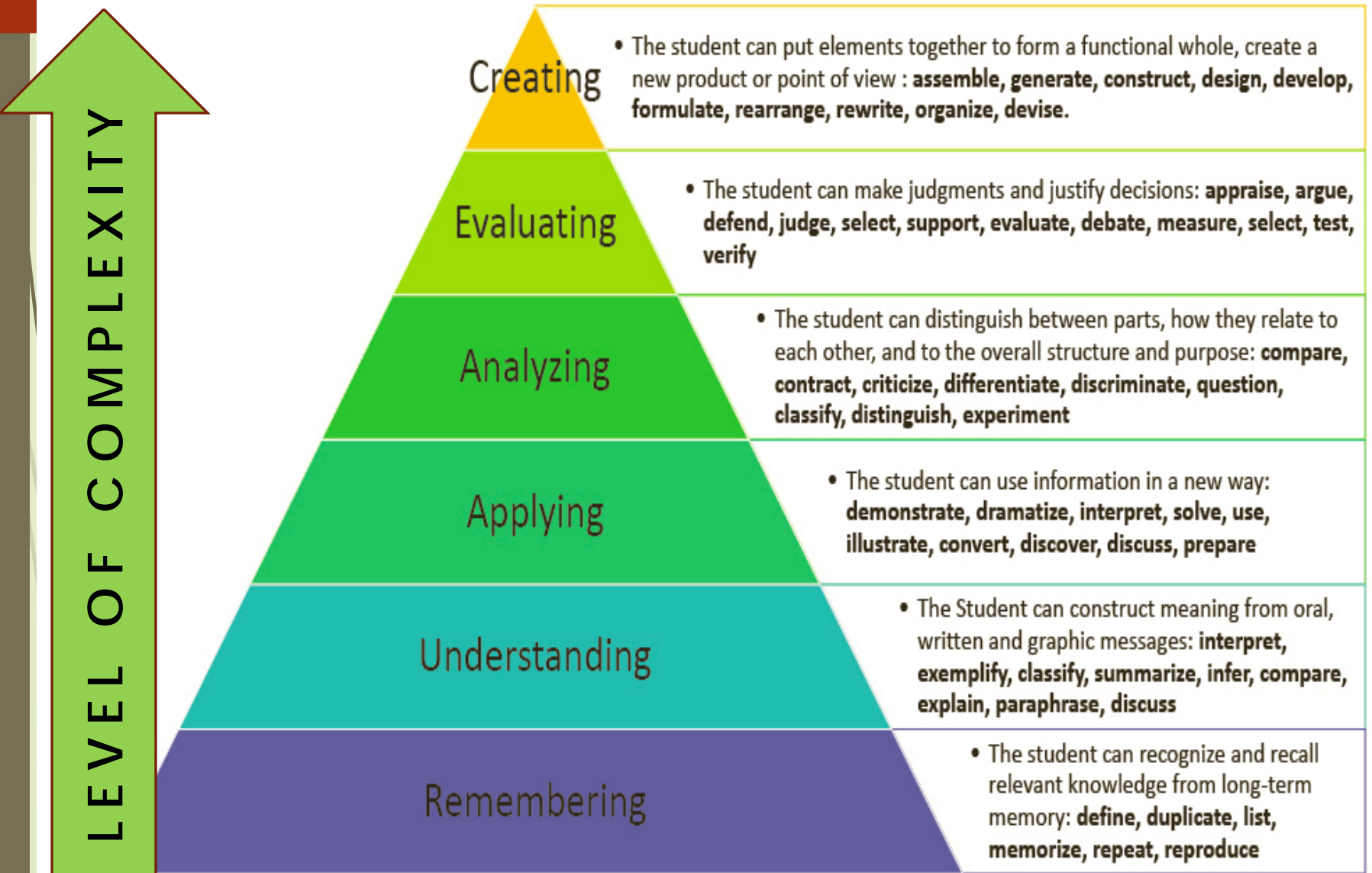বাংলাদেশ বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Step 2: Formulating the Assessment

The questions asked in an assessment should be aligned to your COs and are based on Bloom's taxonomy:

e.g. List FIVE reasons why Bangladesh's textile industry is thriving.

What is the cognitive level of this question?

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Bloom's Taxonomy: Cognitive Domain

LEVEL OF COMPLEXITY

Creating
- The student can put elements together to form a functional whole, create a new product or point of view : **assemble, generate, construct, design, develop, formulate, rearrange, rewrite, organize, devise.**

Evaluating
- The student can make judgments and justify decisions: **appraise, argue, defend, judge, select, support, evaluate, debate, measure, select, test, verify**

Analyzing
- The student can distinguish between parts, how they relate to each other, and to the overall structure and purpose: **compare, contract, criticize, differentiate, discriminate, question, classify, distinguish, experiment**

Applying
- The student can use information in a new way: **demonstrate, dramatize, interpret, solve, use, illustrate, convert, discover, discuss, prepare**

Understanding
- The Student can construct meaning from oral, written and graphic messages: **interpret, exemplify, classify, summarize, infer, compare, explain, paraphrase, discuss**

Remembering
- The student can recognize and recall relevant knowledge from long-term memory: **define, duplicate, list, memorize, repeat, reproduce**

What levels in the cognitive domain are these questions?

➡ Discuss ways in which the public transportation system can be revamped?

➡ Discuss the importance of "constructive alignment".

➡ Convert an existing course syllabus into an OBE course syllabus, justifying the steps and actions you need to take along the way.

NOTE: Do not just rely on the verbs to decide the CLO, but also the process the student will take to answer your questions.

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Step 3: Grading, feedback, documenting

- In a content-based system, the aim is to gather the total marks and grades (the ultimate!).

- In OBE, the marks/grades will be further used to gauge the CO and PO achievement of the course in general, and of the individual student.

- Detail calculation needs to be done in order to determine this.

Quality Assurance Unit
University Grants Commission
of Bangladesh

How do you grade? SAMPLE OF A RUBRIC

Description	Score
Demonstrates complete understanding of the problem. All requirements of task are included in response.	5
Demonstrates considerable understanding of the problem. All requirements of task are included	4
Demonstrates partial understanding of the problem. Most requirements of task are included.	3
Demonstrates little understanding of the problem. Many requirements of task are missing	2
Demonstrates no understanding of the problem	1
No response/task not attempted	0

Making sense of the numbers: The analysis

Overall CO analysis

COURSE XXX	CO1	CO3	CO4	CO5
CO mark distribution	5	15	20	30
CO student achievement	58.5	76.0	35.8	84.5

All COs that were planned to be addressed in this course have been assessed with appropriate degree of emphasis.

The achievement for each of the C0s is shown accordingly.

Question: If the criteria for success is determined at 70%, what do these marks tell us about the CO achievement?

Step 4: Improve learning based on assessment outcomes

- Plan and execute improvement actions

- What do you do when your class performs poorly in quiz/test/practical work, etc?

  - ❑ Adjust the scores upward?
  - ❑ Adjust the difficulty level of the next assessment?
  - ❑ Give advice on study strategies?
  - ❑ Provide more practice problems, review, etc?
  - ❑ Spend more time on the materials in the future?
  - ❑ Change your teaching materials or approach?

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

TASK

- Choose a possible CO from your subject.

- Form an essay-type question to assess the achievement of this CO.

- Create a rubric to assess the cognitive component for this essay question, which carries a total score of 10.

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন

Conclusion

- Bangladesh higher education sector is moving away from a teacher-centered to a student-centered model.

- Teachers are knowledge facilitators and knowledge is obtained through primary and secondary courses (at best I am a secondary source!)

- This new models requires a rethink on the way we delivery and assess.

- Unless we initiate the change, we will fail to prepare students adequately for 21st century challenges

Quality Assurance Unit
University Grants Commission
of Bangladesh

বাংলাদেশ
বিশ্ববিদ্যালয় মঞ্জুরী কমিশন