



NATIONAL LEVEL WEBINAR ON 'ASSESSMENT AND ACCREDITATION : REVISED FRAMEWORK

**Criterion II**

# Teaching Learning and Evaluation

**Prof. Dr. Deepak Nanaware**

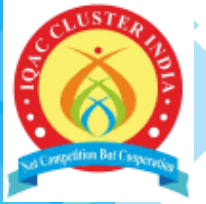
**(MA, MBA,**

**SET, DCMJ and PhD)**

**D. A. V. Velankar College of Commerce,**



# Presentation Outline:



- **Overview and Assessment focus of Criterion II**
- **Distribution of weightages across Key Indicators**
- **Discussion on all KI and matrix**
- **Queries (Question and answers)**

## Criterion II: Teaching Learning and Evaluation



	Affiliated	Autonomous
Total weight age	350	300
Key Indicators	07	07
Total matrix	16	18
Qn	09	11
QI	07	07

## Criterion II: **Assessment focus**

**Focus**



- Diversity of students (gender, social) and admission mechanism
- Writing PO, PSO, CO, communication and its mapping
- Assessing different learning abilities
- Teaching methods practiced
- Use of technology in teaching/ creating resources
- Teacher quality and experience
- Methods and frequency of assessment
- Students' satisfaction level



# Distribution of marks as per key indicator

2.1 Student Enrolment and Profile	40	20
2.2 Catering to Student Diversity	50	30
2.3 Teaching-Learning Process	50	50
2.4 Teacher Profile and Quality	60	50
2.5 Evaluation Process and Reforms	30	50
2.6 Student Performance and Learning Outcomes	60	50
2.7 Student satisfaction Survey	60	50

350

300



## Key Indicator- 2.1 Student Enrolment and Profile (40) (20)

### 2.1.1. Average Enrolment percentage (Average of last five years) (Q<sub>n</sub>M) 20/10

- Programme wise list of admitted students-yearly(certified)
- Student intake approval letter of university
- Additional intake sanction letters
- Record of applications received

Average ?

Sanctioned admission strength in each program vs No. of Application received for each program



Enrollment



## Key Indicator- 2.1 Student Enrolment and Profile (40) (20)

**2.1.2 ( $Q_nM$ ) Average percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy)**

**20/10**

- Programme wise Final admission list
- Category wise admission extract
- Reservation policy letter issued by Govt.

Only those seats filled against the quota should be counted here.

## Key Indicator- 2.2 Catering to Student Diversity (50/30)

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners.

(Q<sub>1</sub>M) 30/15

- ✓ Assessing learning levels
- ✓ Organising special programmes for different level learners

Formative  
assessment





# ✓ Assessing learning levels

.....multiple strategies

- Entry level marks
- Designing Problem sets
- Measuring Knowledge
- Measuring Comprehension
- Measuring Application
- Measuring Evaluation



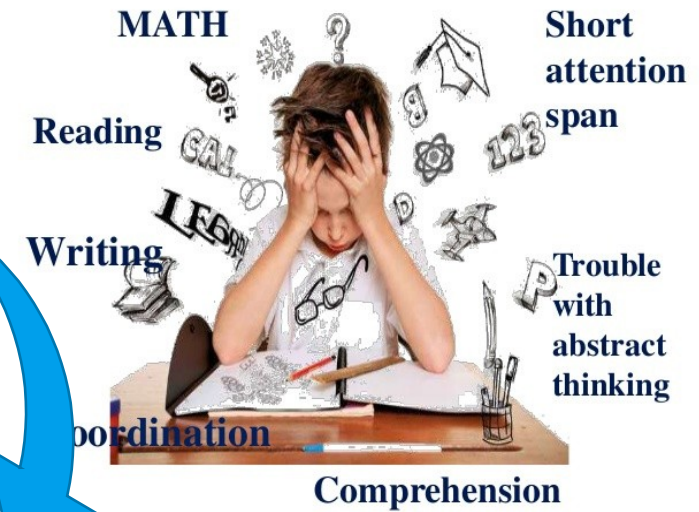
Slow

Moderate /  
Average

Advanced

# Slow Learners

- Short attention and less concentration span
- Slow reaction time.
- Limited self-direction.
- Limited ability to work with abstractions and to generalize
- Slowness for association between words and phrases.
- Habits of learning very slowly and forgetting very quickly.
- Inability to set up and realize standard or workmanship.
- Lack of originality and creativeness.
- Inability to analyze, to do problem solving or think critically.
- Lack of power to use the higher mental processes.



## Compensatory teaching:

- Using methods like pictures, films, videos, live experiences for learning

## Remedial Teaching:

- use of activities, techniques and practices to eliminate weaknesses or deficiencies, a different teacher.

# Advanced learners' traits



Cognitive	Creative	Affective	Behavioral
Keen power of abstraction	Creativeness and inventiveness	Unusual emotional depth and intensity	Spontaneity
Interest in problem-solving and applying concepts	Openness to stimuli, wide interests	Sensitivity or empathy to the feelings of others	Boundless enthusiasm
Voracious and early reader	Intuitiveness	High expectations of self and others, often leading to feelings of frustration	Intensely focused on passions—resists changing activities when engrossed in own interests
Intellectual curiosity Independence in work and study	Independence in attitude and social behavior	Heightened self-awareness, accompanied by feelings of being different	Highly energetic—needs little sleep or down time Impulsive, eager and spirited
Power of critical thinking , Persistent, goal-directed behavior	Aesthetic and moral commitment to self-selected work	Idealism and sense of justice	Constantly questions



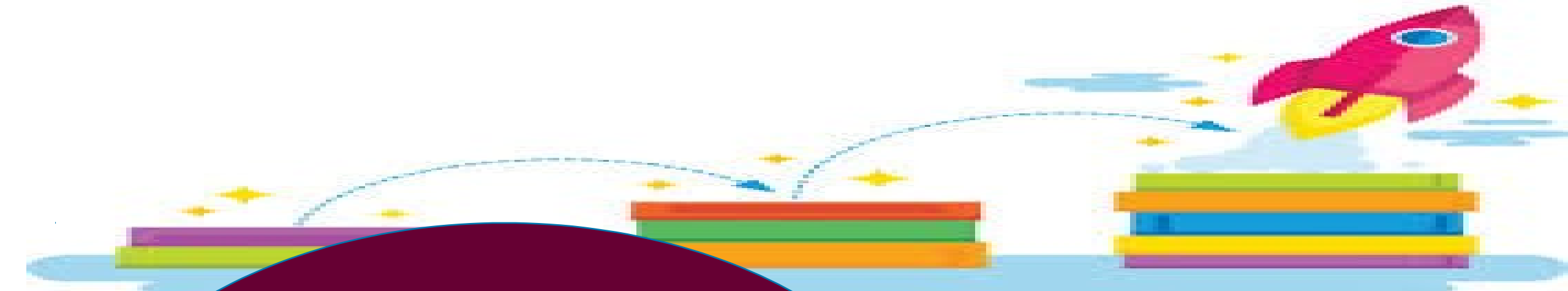
shutterstock.com • 305213709

Cognitive



Affective





Role of a teacher  
while dealing with  
advanced learners

- **Allowing Choice**
- **Integration of Technology**
- **Working Together**
- **Accommodating Pace**
- **Determining Prior Knowledge**
- **Teaching Creatively**
- **Independent Learning Projects**
- **Encouraging Self-assessment**

## Key Indicator- 2.2 Catering to Student Diversity (50/30)

### 2.2.2 Student - Full time teacher ratio(latest completed academic year) (Q<sub>n</sub>M) 20/15

Total number of Students enrolled in the Institution  
Total number of full time teachers in the Institution

#### Information of only full time teachers:

A teacher employed at least 90 per cent of the normal or statutory number of hours of work for a full-time teacher over a complete academic year is classified as a full-time teacher.

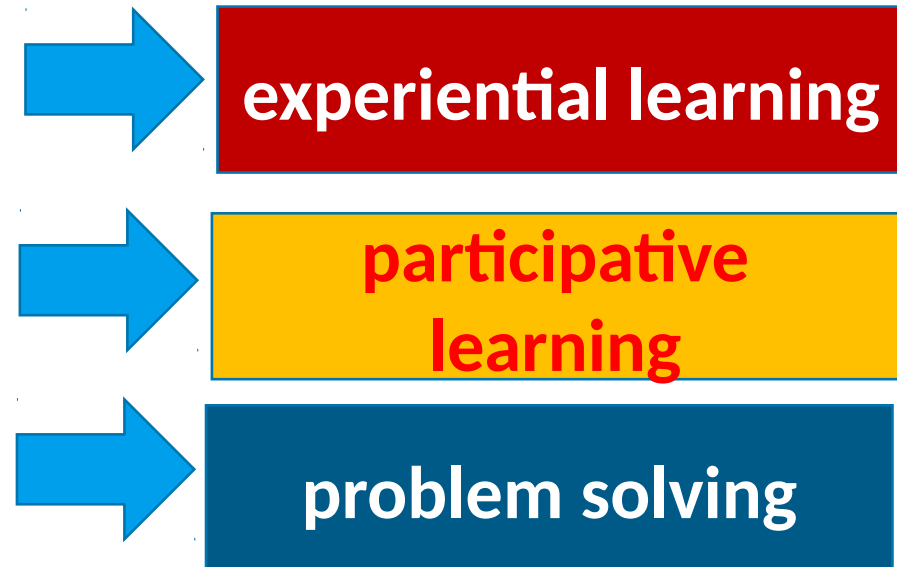
part-time / Ad-hoc / visiting faculty



## Key Indicator- 2.3. Teaching- Learning Process (50/50)

2.3.1 (Q<sub>1</sub>M) Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences **20/15**

**Different teaching methods**





# Experiential learning:

Learning through experience

Learning through reflections on doing

It is individual learning process



role play



- Field work
- On job training
- Role play
- Industrial visits
- Mock parliament
- Socio economic surveys
- Research





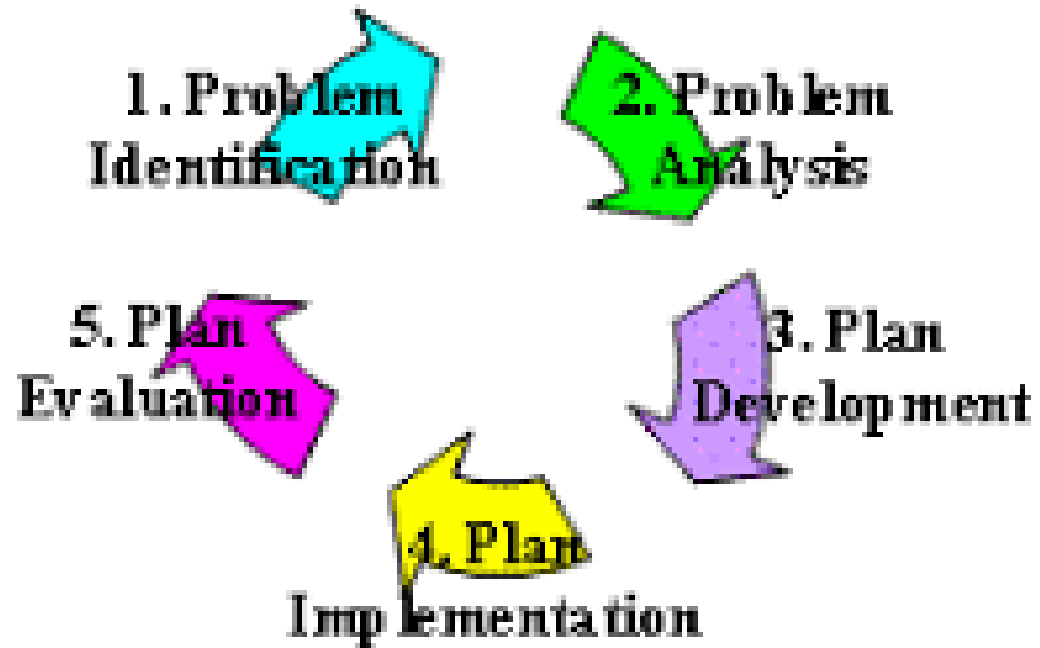
# Participative learning

peer teaching, active learning, group work, co-operative and collaborative learning



# Problem solving method

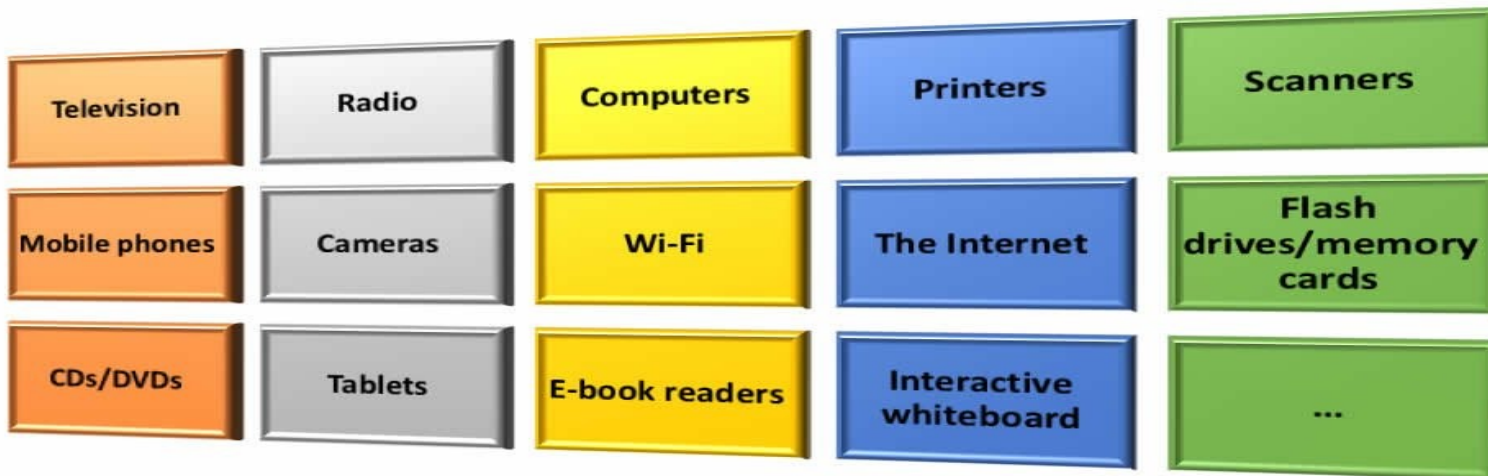
## Steps of Problem-Solving



## Key Indicator- 2.3. Teaching- Learning Process (50/50)

2.3.2 (Q<sub>1</sub>M) Teachers use ICT enabled tools (including online resources) for effective teaching-learning process.

15/15



LMS, moodle, you tube  
Google classroom  
Internet supported learning, virtual laboratory, inflibnet  
OERS  
Blogs, etc.

Provide link for webpage describing the ICT enabled tools for effective teaching-learning process.



## Key Indicator- 2.3. Teaching- Learning Process (50/50)

2.3.3 ( $Q_nM$ ) Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year ) **15/10**

- Circular pertaining the details of mentor and their allotted mentees
- Approved Mentor list as announced by the HEI
- Allotment order of mentor to mentee
- Record of issues raised and resolved in the mentor

Mentoring is a system of semi-structured guidance whereby one person shares their knowledge, skills and experience to assist others to progress in their own lives and careers.



## Key Indicator- 2.3. Teaching- Learning Process (50)

### 2.3.4 (Q<sub>1</sub>M) Preparation and adherence of Academic Calendar and Teaching plans by the institution **10**

- Academic Calendar and Teaching plans
- Its implementation, strategy for implementation
- If activity is missed, how it has been compensated
- Case study

**Metric Only  
for  
Autonomous  
institutions**



## Key Indicator- 2.4 Teacher Profile and Quality (60/50)

2.4.1 ( $Q_nM$ ) Average percentage of full time teachers against sanctioned posts during the last five years **20/15**

- Sanctioned post of full time teacher (including Management sanctioned posts)
- Full time teachers on roll authenticated list
- Appointment letters and PAN card



## Key Indicator- 2.4 Teacher Profile and Quality (60/50)

2.4.2 ( $Q_nM$ ) Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count) **20/20**

- Number of full-time teachers with PhD year-wise irrespective year of award of degree
- Copies of Ph.D. certificate



## Key Indicator- 2.4 Teacher Profile and Quality (60/50)

2.4.3 ( $Q_nM$ ) Average teaching experience of full time teachers in **the same institution** (Data for the latest completed academic year in number of years)

20

- Experience certificate/ appointment order of faculty
- List of Teachers including their PAN, designation, dept and experience details





**2.5.1 (Q<sub>1</sub>M)** Mechanism of internal assessment is transparent and robust in terms of frequency and mode

15

Two aspects: transparent and robust (strong and healthy)

- ✓ Planning of examination in Academic calendar
- ✓ Modes of internal assessments: Summative and formative
- ✓ Actual internal assessment implementation and its record explaining transparency and robustness
- ✓ Institutional policy



## Key Indicator- 2.5. Evaluation Process and Reforms (30/50)

**2.5.1 QnM** Average number of days from the date of last semester-end/ year- end examination till the declaration of results during the last five years **20**

- Semester wise/ year wise
- Last date of the last semester-end/ year- end examination
- Date of declaration of results of semester-end/ year- end examination
- Number of days taken for declaration of results
- Average number of days for declaration of results during last five years.

Autonomous



## Key Indicator- 2.5. Evaluation Process and Reforms (30/50)

2.5.2 (Q<sub>1</sub>M) Mechanism to deal with internal/external examination related grievances is transparent, time-bound and efficient **15**

1. University/Institutional examination grievance Redressal policy
2. Communication of policy to stakeholders
3. Setting and practicing procedural matters ---- documentation
4. Corrective and preventative measures

Affiliated



## Key Indicator- 2.5. Evaluation Process and Reforms (30/50)

**2.5.2 (QnM) Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years 15**

1. University/Institutional examination grievance Redressal policy
2. Communication of policy to stakeholders
3. Handling system defined
4. No of complaints/grievances about evaluation
5. Total number of students appeared in exam
6. Additional info: Sample complaints and institutional procedure

Autonomous



## Key Indicator- 2.5. Evaluation Process and Reforms (30/50)

**2.5.3 (QIM) IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution 15**

- Examination procedures/policy
- Processes integrating IT
- Continuous internal assessment system
- Additional info: link to website/ info in pdf



## LET'S UNDERSTAND THE LEARNING OUTCOMES AND THEIR ROLE IN CRITERIA 2

**Ms Kalpana Chavan**

IQAC Coordinator

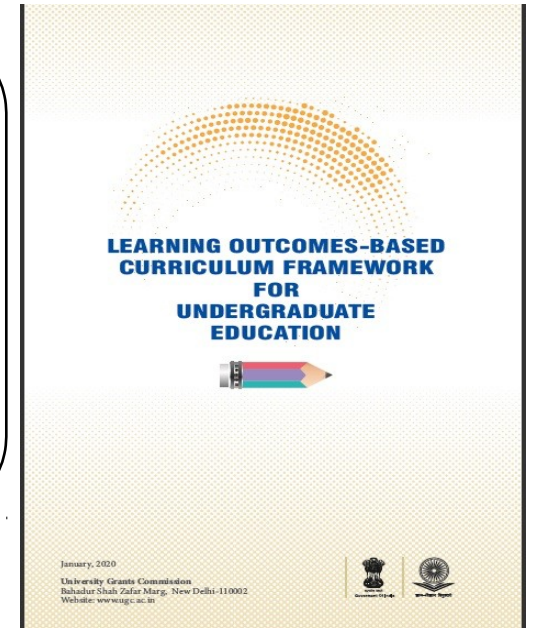
St. Xavier's Institute of Education. Mumbai



# BASIS OF LEARNING OUTCOMES

THE

in August 2018



[https://  
www.ugc.ac.in/  
pdfnews/  
4598476\\_LOCF-UG.pdf](https://www.ugc.ac.in/pdfnews/4598476_LOCF-UG.pdf)



# DOES EDUCATION ASSURE EMPLOYABILITY , NOT JUST EMPLOYMENT ??



## WHY LEARNING OUTCOMES FOR THE CURRICULUM?

- The LOCF approach “makes the student an active learner; the teacher a good facilitator and together they lay the foundation for lifelong learning”.
- “The University Grants Commission (UGC) believes that among other things, **LOCF** will improve their employability.”





# TYPES OF LEARNING OUTCOMES : THE INTERCONNECTEDNESS

## Learning Outcomes



U  
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2.6.1 (Q<sub>1</sub>M) Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

15/10

Programs = B.A,

Specific Programs =  
B.A ( History),

Course is the one  
that we teach in  
class.



**LEARNING OUTCOMES:** Learning outcomes describe what students will know and be able to do upon successful completion of a program or course.

# WRITING POs , PSOs AND COs

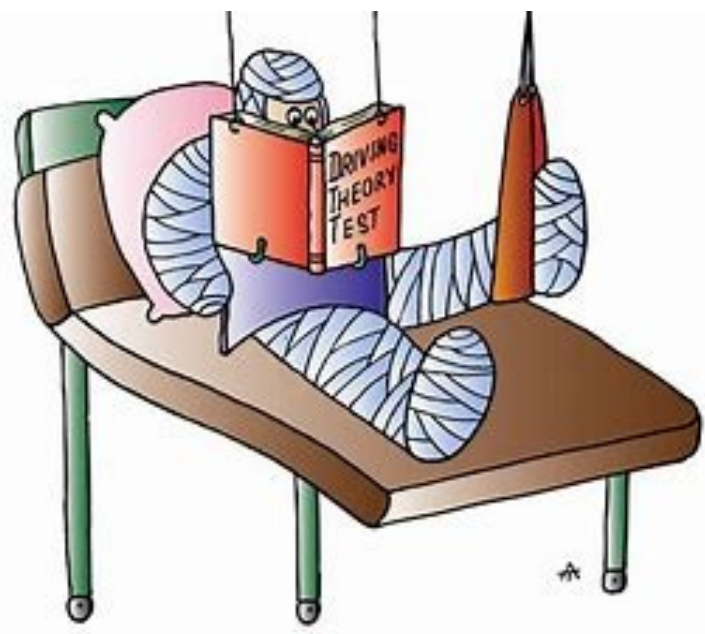
- There is a technique of writing these outcomes which will be dealt in a completely independent session on 3<sup>rd</sup> May 2020
- The Learning outcomes and it's connect **to Bloom's Taxonomy** will be handled then.
- **Student performance is seen as the realization of learning outcomes** which are specifications of what a student should be capable of doing on successful completion of a course and/or a programme.  
(NAAC GUIDELINES- CRITERIA 2)
- Upload outcomes and description of mechanism





# Car driving

- What should be the end result of learning car driving?



# Every beginning has an end so does education

- How do you see your students at the end of graduation?





**Key Indicator- 2.6**

**Student Performance and Learning Outcomes (60)**

**2.6.2(QIM) Attainment of programme outcomes and course outcomes are evaluated by the institution.  
(15/10)**

**Dr. P. S. Tambade**

**IQAC Coordinator**

**Prof. Ramakrishna More Arts, Commerce, and  
Science, College, Akurdi**

# CO-PO mapping

Programme:

Course Name :

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO-1		1									
CO-2							1				
CO-3			2								
CO-4					2						
CO-5	1										
CO-6								2			
CO-7						3					
CO-8										3	

weak

1

medium

2

Strong

3

[Link](#)



## CO Attainment

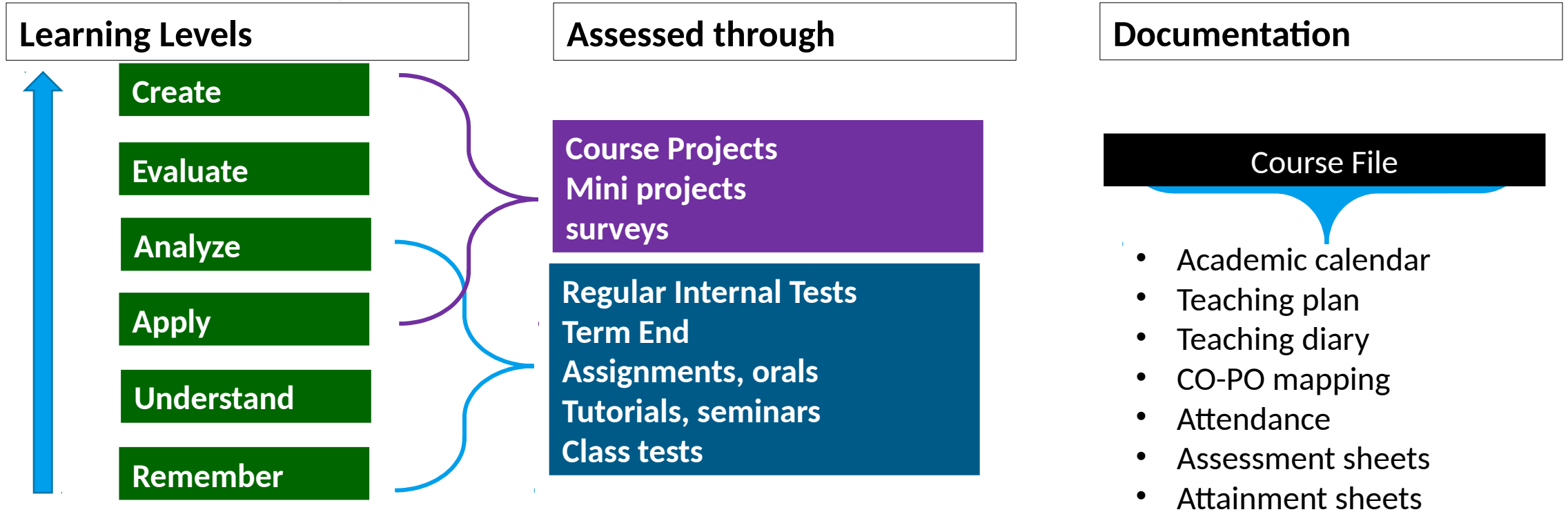
- The assessments should be in alignment with the COs
- Question paper should be so set to assess all COs
- The average marks obtained in assessments against items for each CO will indicate the CO attainment
- Instructors can set targets for each CO of his/her course
- Attainment gaps can therefore be identified
- Teacher can plan to reduce the attainment gaps or enhance attainment targets
- If the assessment is in alignment with COs, the performance of the students indicates the CO attainment





# Attainment: Course Outcomes

## Assessment Strategies



## Attainment Strategies

Target and level of attainment for CO-POs are pre decided

Prepare CO-PO mapping sheets in each programme



# Attainment: Program Outcomes

## 1. Direct attainment

- Attainment of course outcomes using internal evaluation
- Attainment of course outcomes using external evaluation
- Mapping of course outcomes with program outcomes/program specific outcomes

## 2. Indirect attainment

- Course End Survey
- Program end survey

[Assessment sheet](#)

[Link](#)



# CO-PO Mapping sheet for a course

41													
42	<b>CO-PO and CO -PSO Mapping:</b>												
43	<b>Course Outcome</b>	<b>Program Outcome</b>											
44		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
45	PHYUT501.1	3		3			2					2	1
46	PHYUT501.2	3		1			2					2	
47	PHYUT501.3	3		1			1					2	
48	PHYUT501.4	3		1			1					2	
49	PHYUT501.5	3		1			1					2	
50	PHYUT501.6	3		1			1					2	
51	PHYUT501.7	3		1			1					2	
52	PHYUT501.8	3		1	3	3	3	0	0	0	0	2	0



# CO-attainment sheet for internal assessment

PDEAs' Prof. Ramkrishna More Arts, Commerce and Science College, Akurdi

Department of Physics  
CO Attainment Datasheet

Class: MSc. Part 1, Sem I

Course  
Strength of

Course Instructor: Mr.Kolhe V.N

Internal Asses

Exam. No.	Roll. No.	Internal Assessment																			
		CO1					CO2					CO3					CO4				
		TEST AVG	0	ASSN AVG	%Total of All Tools	Students Attained Y/N	TEST AVG	0	ASSN AVG	%Total of All Tools	Students Attained Y/N	TEST AVG	0	ASSN AVG	%Total of All Tools	Students Attained Y/N	TEST AVG	0	ASSN AVG	%Total of All Tools	Students Attained Y/N
	Max Marks	15	0	5	100		15	0	5	100		15	0	5	100		15	0	5	100	
205553	17	3		5	40.00	N	0		2	10.00	N	6		3	45.00	N	1		4	25.00	N
205554	10	11		4	75.00	Y	15		5	100.00	Y	11		5	80.00	Y	7		4	55.00	Y
205555	6	9		4	65.00	Y	10		5	75.00	Y	8		5	65.00	Y	13		4	85.00	Y
205556	9	6		4	50.00	Y	7		4	55.00	Y	5		4	45.00	N	8		4	60.00	Y
205557	1	11		4	75.00	Y	12		5	85.00	Y	14		5	95.00	Y	10		4	70.00	Y
205558	15	0		3	15.00	N	3		4	35.00	N	6		5	55.00	Y	5		2	35.00	N
205559	4	6		4	50.00	Y	7		5	60.00	Y	5		5	50.00	Y	10		4	70.00	Y
205560	8	5		4	45.00	N	4		4	40.00	N	6		4	50.00	Y	8		4	60.00	Y
205561	20	5		4	45.00	N	3		4	35.00	N	4		4	40.00	N	4		4	40.00	N
205562	19	8		4	60.00	Y	9		4	65.00	Y	10		4	70.00	Y	7		4	55.00	Y
205563	12	6		4	50.00	Y	7		5	60.00	Y	5		5	50.00	Y	10		4	70.00	Y
205564	13	5		4	45.00	N	4		4	40.00	N	6		4	50.00	Y	8		4	60.00	Y
205565	5	5		4	45.00	N	3		4	35.00	N	4		4	40.00	N	4		4	40.00	N
205566	18	8		4	60.00	Y	9		4	65.00	Y	10		4	70.00	Y	7		4	55.00	Y
205567	14	10		4	70.00	Y	7		4	55.00	Y	6		4	50.00	Y	11		4	75.00	Y
205568	16	8		4	60.00	Y	9		4	65.00	Y	10		4	70.00	Y	7		4	55.00	Y
205569	3	10		4	70.00	Y	7		4	55.00	Y	6		4	50.00	Y	11		4	75.00	Y
205570	7	5		5	50.00	Y	5		2	35.00	N	7		3	50.00	Y	3		4	35.00	N
205571	2	6		4	50.00	Y	6		4	50.00	Y	4		4	40.00	N	8		4	60.00	Y



Internal Assessment

External Assessment new

CO-PO mapping and attainment sh

Result

PO ATTAINMENT CALCUL ...



**Department of Physics**  
**CO Attainment Datasheet**  
 2017-18

<b>Course</b>	<b>Classical Mechanics</b>		<b>Class</b>	<b>MSc. Part 1, Sem I</b>
<b>Course Instructor:</b>	<b>Mr.Kolhe V.N</b>			
<b>Strength of Class:</b>	<b>24</b>			

<b>Course Outcomes</b>	<b>Internal</b>			<b>External</b>		
	<b>% Average of individual Targets of all Internal Tools</b>	<b>No. of students achieved CO</b>	<b>% of achievement of CO</b>	<b>% Average of individual Targets of all External Tools</b>	<b>No. of students achieved CO</b>	<b>% of achievement of CO</b>
<b>PHYUT501.1</b>	50.00	14.00	58.33	50.00	20.00	83.33
<b>PHYUT501.2</b>	50.00	14.00	58.33	50.00	20.00	83.33
<b>PHYUT501.3</b>	50.00	15.00	62.50	50.00	20.00	83.33
<b>PHYUT501.4</b>	50.00	16.00	66.67	50.00	20.00	83.33
<b>PHYUT501.5</b>	50.00	14.00	58.33	50.00	20.00	83.33
<b>PHYUT501.6</b>	50.00	14.00	58.33	50.00	20.00	83.33
<b>PHYUT501.7</b>	50.00	15.00	62.50	50.00	20.00	83.33
<b>PHYUT501.8</b>	50.00	13.00	54.17	50.00	20.00	83.33

# CO-PO Mapping a course and attainment of F



TARGET MATRIX												
COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
PHYUT501	3		1.25	3	3	1.5					2	1
PHYUT502	2.125		2		3	2		2	1	2	1	2
PHYUT503	2.4		3			1.6			0.8			0.8
PHYUT504	1.125	2	1	1	1	2		1	2	1.5	1.375	2
PHYUT505	1	1.125	3	3	2	1	2	1	1	2	1.125	2.125
PHYUT506	1	1	3	2	2	2	2	2	1	2	3	3

## Key Indicator- 2.6 Student Performance and Learning Outcomes (60)

### 2.6.3 (Q<sub>n</sub>M) Pass percentage of Students (Academic Year recently completed) **30**

- Final year students' appeared for the examination
- No of students passed
- Programme wise pass percentage
- Annual report link



## Key Indicator- 2.7 Student Satisfaction Survey (60/50)

2.6.3 (Q<sub>1</sub>M) Online student satisfaction survey regarding to teaching learning process. **60/50**

Name/Class/Gender

- Student Id Number/Adhar Id number
- Mobile number
- Email Id
- Degree Programme





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