

INNOVATIVE DELIVERY: ENGAGEMENT, TRANSFORMATION AND GLOBALIZATION

ALYANI ISMAIL

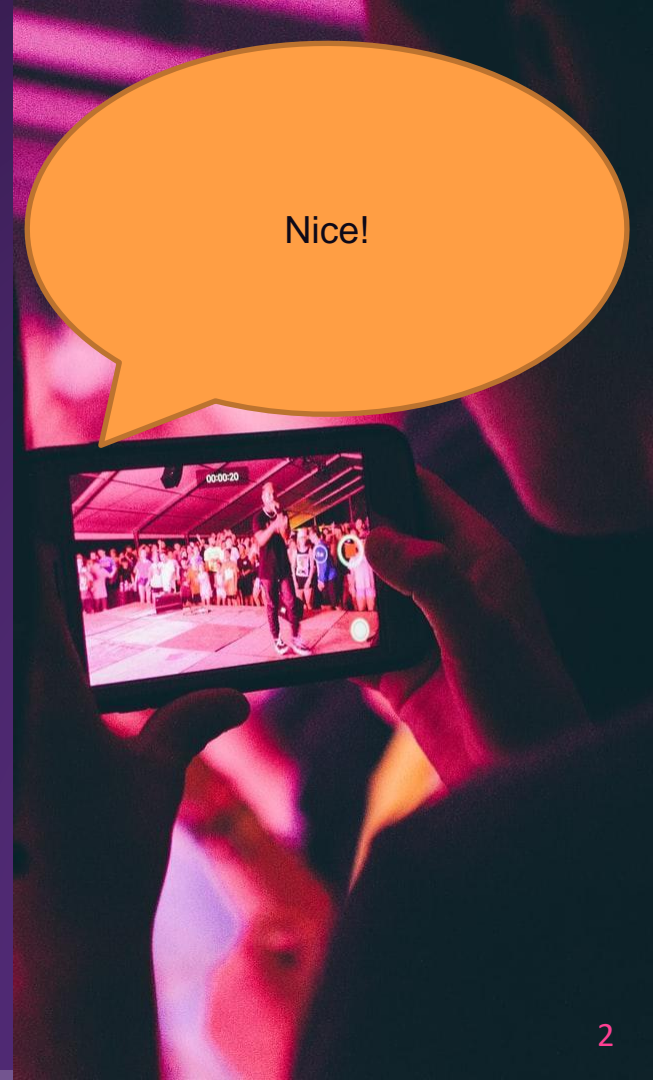
DEPUTY DEAN (ACADEMIC)
FACULTY OF ENGINEERING
UNIVERSITI PUTRA MALAYSIA



— TELL US..

What is the NICEST comment that you get for your innovative delivery?


Write in the Comment box



— TELL US..

What is the NASTIEST comment that you get for your innovative delivery?

Write in the Comment box



Hang buat Flipped Classroom? Orang buat lama dah haih, not something new

— INNOVATIVE DELIVERY

- ❓ What did you do that you did not do before to improve learning?
- ❓ Can you sustain the innovation?
- ❓ Your benchmark is **YOU and YOUR STUDENTS**

Innovative Teaching and Learning – Institutional view

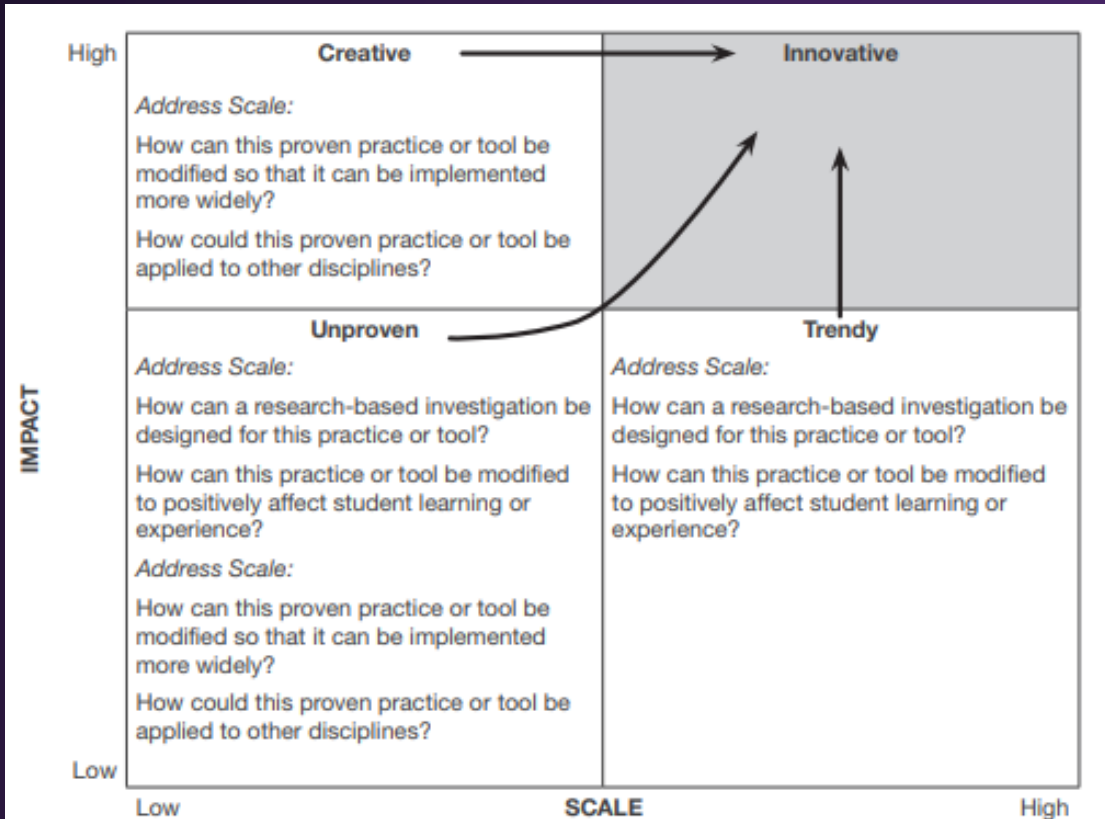
“Any teaching strategy, approach, technique, or tool that is used, or used in a new way, to produce **quantifiable gain** for student outcomes or the student experience, and can be **implemented widely** in the Institution.

Relationship between quantifiable gain (Impact) and implementation (Scale).

IMPACT	High	<p>Creative practice or tool</p> <p>Any teaching strategy, approach, technique, or tool that represents a quantifiable gain for student learning or the student experience but cannot be implemented widely at RIT.</p> <p>For example, there is evidence that complex simulations improve student learning, but they are so time consuming and expensive to program that they cannot be widely implemented.</p>	<p>Innovative practice or tool</p> <p>Any teaching strategy, approach, technique, or tool that has demonstrated quantifiable gain for students and can be implemented widely at RIT.</p> <p>For example, Classroom Assessment techniques (a type of formative evaluation) have been shown to positively impact student learning and can be widely implemented.</p>
	Low	<p>Unproven practice or tool</p> <p>Any teaching strategy, approach, technique, or tool that has not demonstrated a quantifiable gain for student learning or the student experience and cannot be implemented widely at RIT.</p> <p>For example, use of tablets in the classroom has not yet been proven to positively impact student learning or the student experience and cannot yet be widely implemented at RIT due to costs and student access challenges.</p>	<p>Trendy practice or tool</p> <p>Any widely implemented teaching strategy, approach, technique, or tool that does not represent a quantifiable gain for student learning or the student experience.</p> <p>For example, Massively Open Online Courses (MOOCs) have become widely used in higher education, but have not yet been shown to positively impact student outcomes or the student experience.</p>
		Low	High
		SCALE	

Source: Innovative Learning Institute

How creative, unproven, or trendy practices and tools can be more innovative



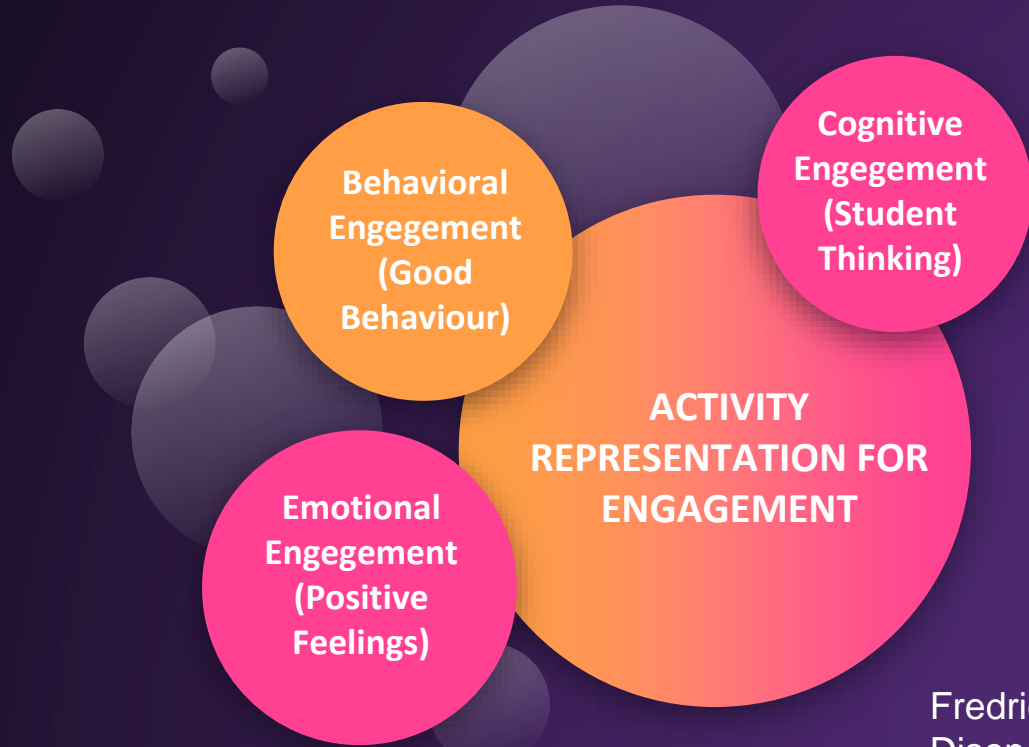
Source: Innovative Learning Institute

ENGAGEMENT

Research says...



STUDENT ENGAGEMENT



Fredricks, J. A. (2014). Eight Myths of Student Disengagement: Creating Classrooms of Deep Learning. Los Angeles: Corwin.

ENGAGEMENT REQUIRES INTERACTION

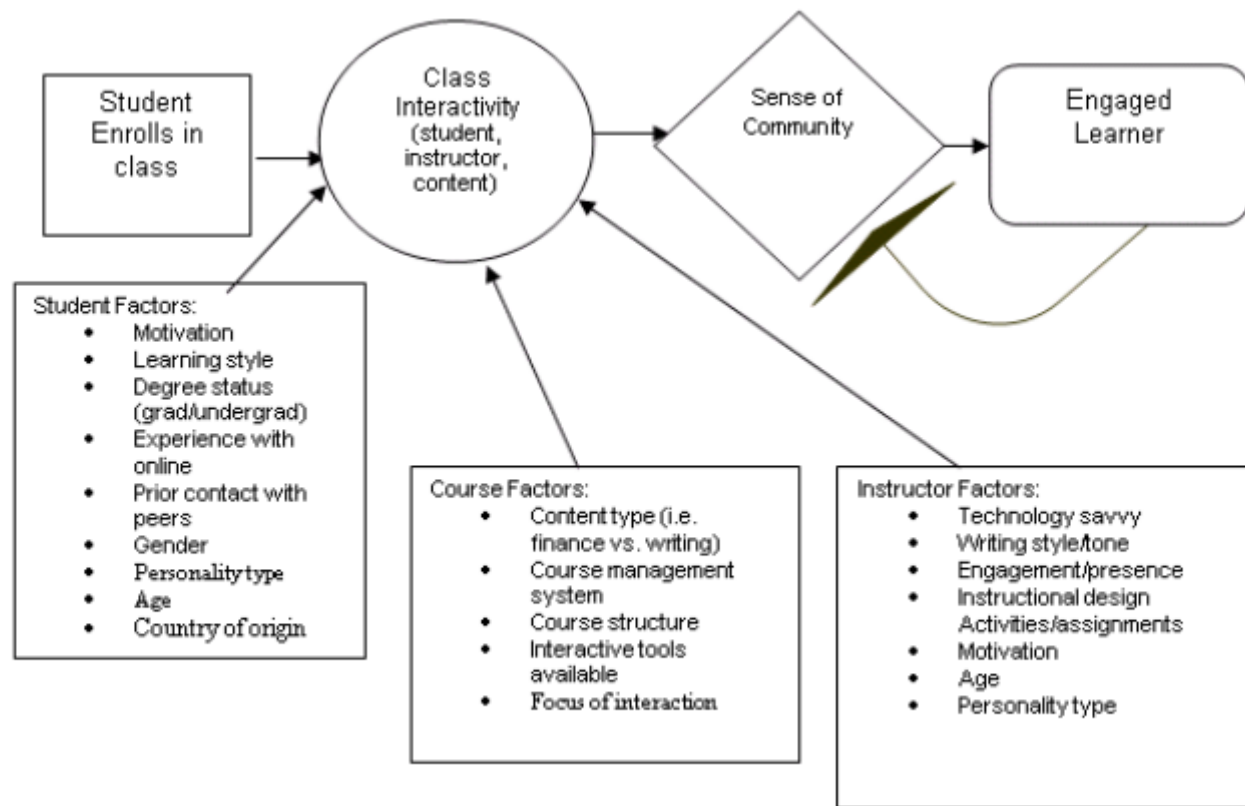
INTERACTION BETWEEN
INSTRUCTORS

INTERACTION BETWEEN
INSTRUCTORS AND
STUDENTS

INTERACTION BETWEEN
STUDENTS

INTERACTION BETWEEN
STUDENTS AND CONTENTS

Distance education online environment interactivity/community-process model



Source: "Interactivity/Community Process Model for the Online Education Environment," by J. L. Lear, C. Ansorge, and A. Steckelberg, 2010, Journal of Online Learning and Teaching, 6, p. 74

LEARNER TO LEARNER ENGAGEMENT

- ❑ assist students in feeling connected and can create a **dynamic sense of community**
- ❑ traditional technologies for engaged learning, such as discussion boards, chat sessions, blogs, wikis, group tasks, or peer assessment, have served well in promoting student-to-student interaction in online courses
- ❑ Twitter feeds, Google applications, or audio and video technology, social media

LEARNER TO INSTRUCTOR ENGAGEMENT

- ❓ Research found that students rated thorough and timely **instructor feedback** on their work as most valuable so that they can make improvements in their learning process. (King, 2014)

LEARNER TO CONTENT ENGAGEMENT

- ❑ the process of **intellectually interacting** with the content, which can change a learner's understanding and perspectives (Moore, 1993)
- ❑ **Real-world application** of projects that enhances subject mastery and critical thinking skills - authenticity of the course content shown through real-world examples (Britt, 2015).

— INSTRUCTOR TO INSTRUCTOR ENGAGEMENT

- ❑ Most forgotten – teaching often seen as ‘personal space’
- ❑ **Collaboration** between instructors are equally important to strategize course design and delivery

LEVELS OF ENGAGEMENT

According to Phillip Schlechty, there are five ways that students respond or adapt to school-related tasks and activities.



ENGAGEMENT

HIGH ATTENTION - HIGH COMMITMENT

The student associates the task with a result or product that has meaning and value for the student. The student will persist in the face of difficulty and will learn at high and profound levels.



STRATEGIC COMPLIANCE

HIGH ATTENTION - LOW COMMITMENT

The task has little inherent or direct value to the student, but the student associates it with outcomes or results that do have value to the student (such as grades). Student will abandon work if extrinsic goals are not realized and will not retain what is learned.



RITUAL COMPLIANCE

LOW ATTENTION - LOW COMMITMENT

The student is willing to expend whatever effort is needed to avoid negative consequences. The emphasis is on meeting the minimum requirements. The student will learn at low and superficial levels.



RETREATISM

NO ATTENTION - NO COMMITMENT

The student is disengaged from the task and does not attempt to comply with its demands, but does not try to disrupt the work or substitute other activities for it. The student does not participate and learns little or nothing from the task.



REBELLION

DIVERTED ATTENTION - NO COMMITMENT

The student refuses to do the work, acts in ways to disrupt others, or substitutes tasks and activities to which he or she is committed. Student develops poor work sometimes negative attitudes towards formal education and intellectual tasks.

Have you ever wonder what your students' level of engagement?

Source: <http://ajjuliani.com/epic-guide-student-engagement-classroom/>

— INTERMISSION 1 – Teka Teki

1. Before Mt. Everest was discovered, what was the highest mountain in the world?
2. Which word in the dictionary is spelled incorrectly?



TRANSFORMATION

- Putra InnoCreative Delivery (PrIDe)
- InnoCreative Delivery Framework
- Educator Transformation (PreCEptor)



*PrIDe:
Putra
InnoCreative
Delivery*



PrIDE

Putra InnoCreative
Delivery

Meet the TEAM



Assoc. Prof. Dr. Nurfadhlina Mohd Sheref (Leader)

Prof. Dr. Alyani Ismail

Prof. Dr. Goh Yong Meng

Assoc. Prof. Dr. Dahlia Zawawi

Assoc. Prof. Dr. Fairuz Izzuddin Romli

Assoc. Prof. Dr. Nur Izura Udzir

Dr. Rafidah Hod

Dr. Mas Nida Md. Khambari

Mr. Mohd Idham Abdul Rashid

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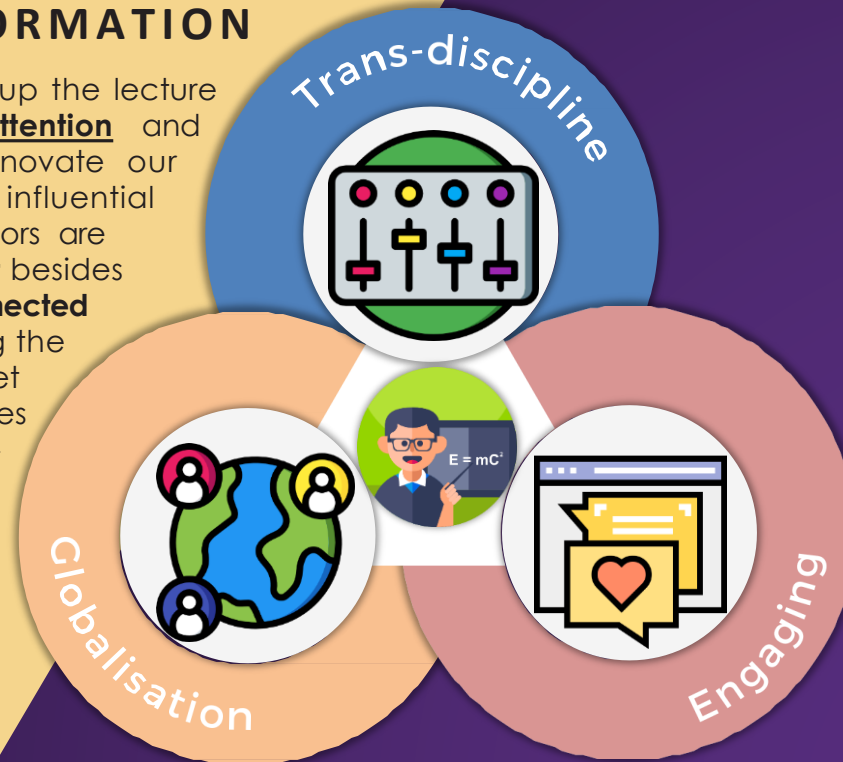
Photo Credit: CADe UPM

PHILOSOPHY

"InnoCreative teaching and learning delivery is a continuous effort towards producing future-proof graduates through impactful learning experiences designed to meet the expected learning outcome and personalized to the learner needs".

Principles of DELIVERY TRANSFORMATION

The millennials who are filling up the lecture benches demand **different attention** and require us to continuously innovate our teaching. Essentials to be influential lecturer to them mean educators are **critically and digitally proficient** besides **communicative, creative, connected and compassionate** in designing the course and program delivery yet ensuring the learning outcomes are met and they possess future-proof attributes.





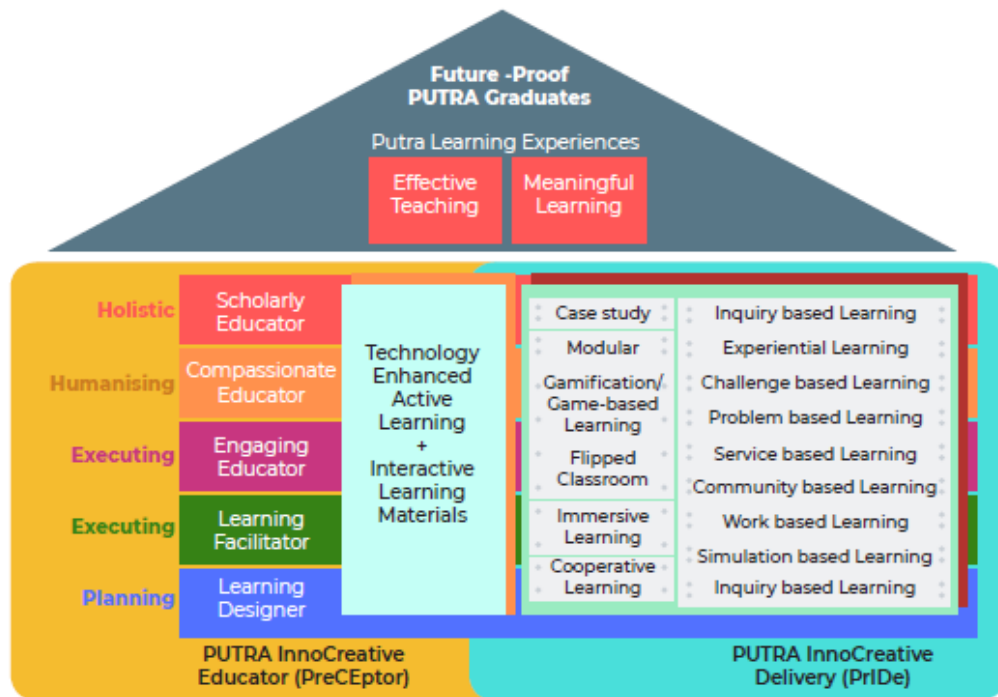
ACADEMIC TRANSFORMATION THROUGH INNOCREATIVE DELIVERY

PART 1

ATTRIBUTES OF FUTURE-PROOF PUTRA GRADUATES



InnoCreative Delivery Framework



The initiatives in the Innovative Teaching and Learning Delivery Transformation could be implemented by the PUTRA InnoCreative Educator (PreCEptor) who enables PUTRA InnoCreative Delivery (PrIDe) for effective teaching and meaningful learning towards producing Future-Proof PUTRA Graduates.

PART 2



**PUTRA
INNOCREATIVE
EDUCATOR
(PreCEptor)
Transformation**



PUTRA INNOCREATIVE EDUCATOR (PreCEptor)



- ❓ The meaning of preceptor is **teacher or instructor**.
- ❓ A PreCEptor is defined as a PUTRA educator who aspired to be characterised by the ability to apply critical thinking skills, creative in problem solving, has **good communication and collaborative ability, inherit good citizen attributes and has positive characters, compassionate in educating students, competent in the trained discipline, connected to updated knowledge and committed in delivering effective teaching.**

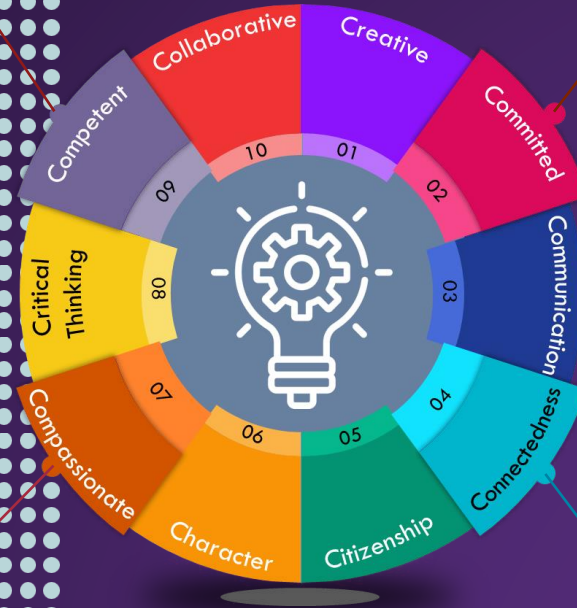
**PreCEptor is NOT a
Dinosaur**

Attributes of PUTRA InnoCreative Educator

PreCEptor is the key enabler of PrIDE for the transformation towards producing future-proof PUTRA Graduates. InnoCreative Educator is a term to model an educator who has the ability to ensure meaningful learning using designed, engaging, personalized and scholarly teaching delivery. The attributes of an InnoCreative Educator is the extension of the Future-Proof PUTRA Graduates attributes which are critical thinking, collaborative, creative, communicative, character and citizenship.

Subject-matter expert should be the basic of teaching to ensure accurate content delivery.

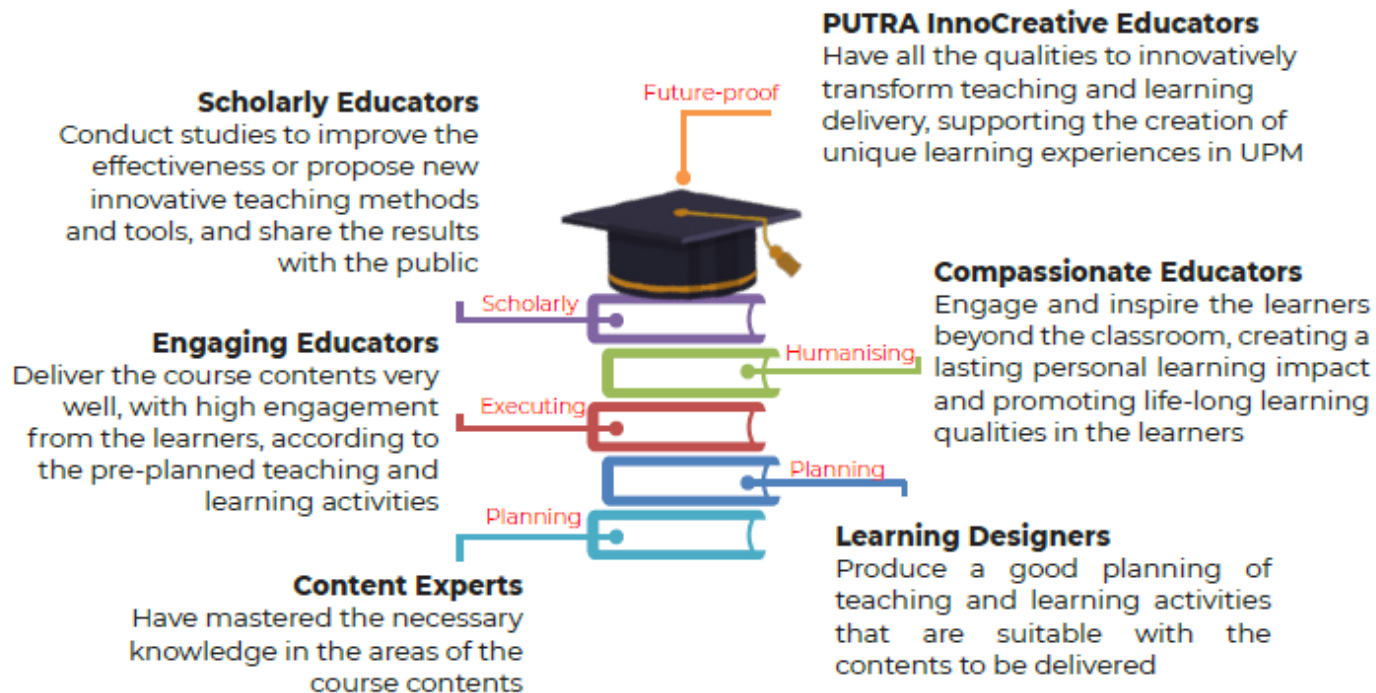
Educator is aspired to design the teaching strategies according to the learning needs.



This ensures that learners have the soul to go beyond acquiring the expected learning outcome.

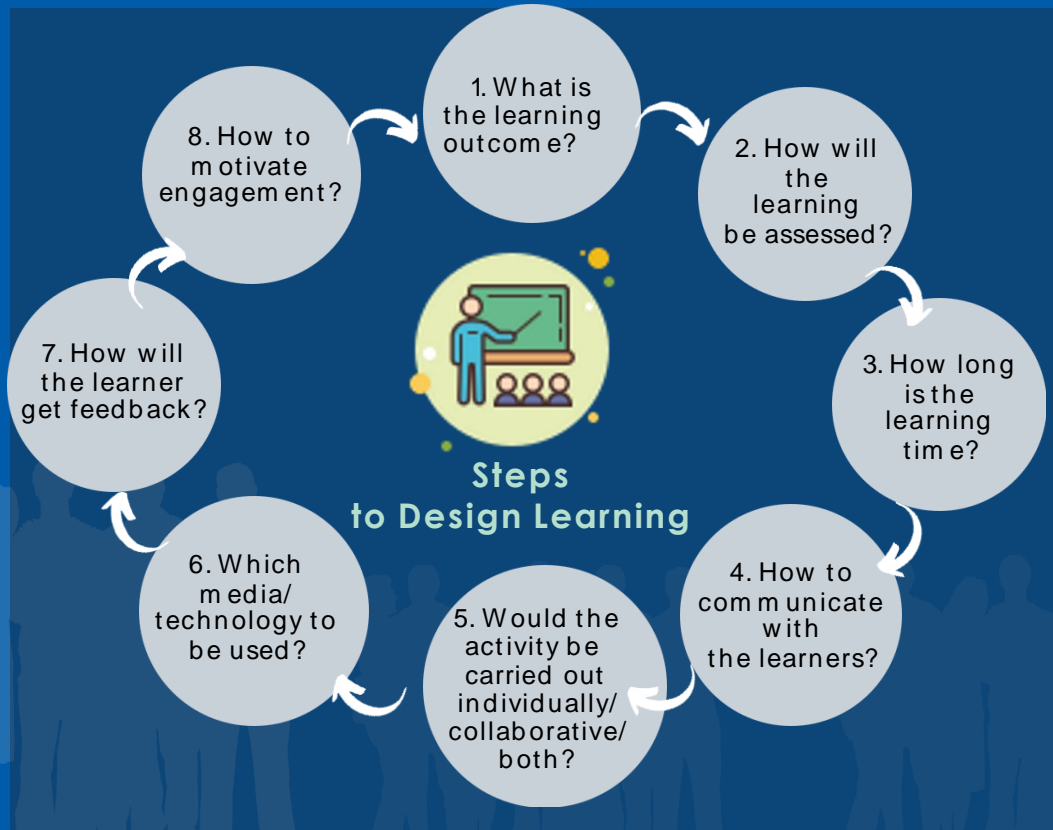
Access and dissemination of updated relevant knowledge and interaction with learners through a variety of connectivity means.

PreCEptor Transformation

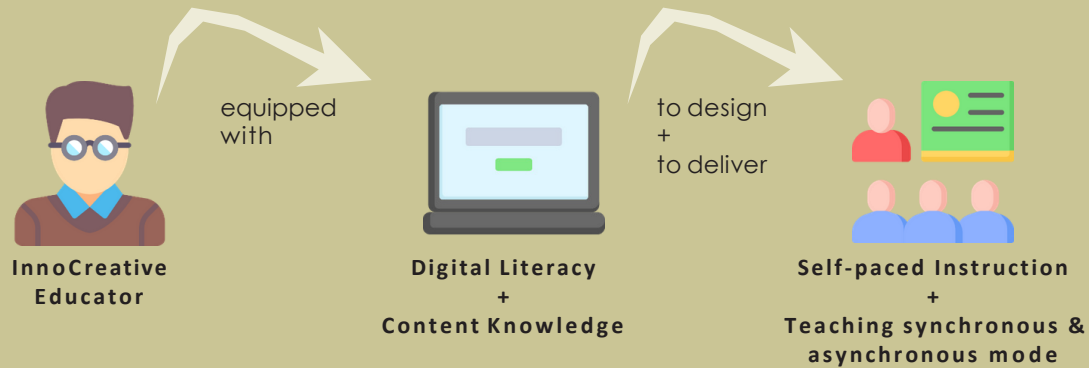


PreCEptor Transformation Milestone Rubric

Standards Roles	Adequate	Developing	Skilful	Excellent
Learning Designer	Able to identify learning needs, conduct minimum learning activities that suit the learning outcomes, and usually has a rough plan on how the lesson and assessment will be conducted using available resources and materials.	Able to imitate available learning design and customize it to the needs of his/her classroom. Able to craft learning activities and assessments that are more structured and involve learners' participation. Reflects and revises the implementation of the learning design.	Able to imitate innovative learning design, and personalize the course delivery through the creation of new personalized learning materials and activities. Able to integrate active and participative learning activities and assessment according to the needs of his/her classroom. Planning strategies to improve learning design through reflection and revision, and implements the strategies reciprocally.	Comes up with innovative pedagogies and/or resources that may be adaptable and/or replicable to other areas. Able to integrate inclusiveness, equitability and meaningful learning experience in the planning of the lesson and assessment. Reflection and revision of learning design has become habitual.
Learning Facilitator	Uses common learning materials and techniques for course delivery that can provide nudges for learners.	Combines and integrates learning materials and techniques for course delivery that can enhance students' learning experience.	Scaffolding activities are evident in course delivery that are customized to the needs of his/her classroom.	Exhibits natural attributes of an accommodating educator. Able to sustain harmonious scaffolding activities that are personalized to the needs of his/her classroom.
Engaging Educator	Able to involve learners in learning activities.	Able to integrate teaching resources/materials and techniques in teaching and learning activities that can trigger learners to be participative and opinionative.	Creates an exciting learning atmosphere in the classroom through several nudges (in the form of resources/materials and/ or techniques) that can encourage learners to be participative and opinionative in learning activities.	Creates an amellifluous active learning classroom culture that is inclusive and can instil heutagogical skills and soft-skills that are beyond those listed in the course outcome.
Compassionate Educator	Acknowledges and responds to students' learning needs and/or challenges.	Offers alternatives and/or options to learners to address their learning needs or overcome their learning challenges.	Recommends customized and personalized solutions that can address several learning needs and challenges to learners. Encourages learners to seek for opportunities to polish their potential.	Empathizes with students' needs and challenges. Exercises organic and flexibility in teaching and assessment, establishes good rapport with learners, and builds opportunities and platforms for learners to optimize their potential.
Scholarly Educator	Able to imitate best teaching practices, conduct simple classroom research and unofficially share them with other people.	Comes up with an improvised teaching practices and assessment that resonates his/her own teaching philosophy, conducts classroom research, and shares the findings on official platforms.	Able to readjust teaching philosophy that aligns with students' learning needs and challenges. Teaching, learning and assessment activities are original. Conducts comprehensive classroom research and publishes the findings in multi-platforms.	Continuously formulates innovative teaching and learning approaches. Consistently conduct assessment and classroom research, publish findings in a multitude of ways. Able to assist others to do the same, advocates scholarship in teaching and learning, and promotes for wider implementation of scholarship of teaching and learning.

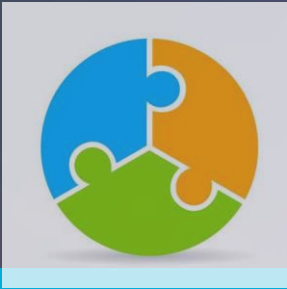


ENGAGING EDUCATOR



Blended Learning

Teaching with technology can engage and deepen student learning by supporting instructional objectives. Technology is the use and knowledge of tools, techniques, systems or methods to solve a problem or serve some purpose and this definition refers not only to tangible items such as materials, tools, hardware, or software, but also to knowledge, processes, or strategies and tactics (Twymann and Heward 2018). Blended learning is one of the tools in teaching where lesson is delivered through the combination of online and physical face-to-face session. The learners can control the time, pace, and place of their learning. Online technology is no longer optional and is the preferred learning mode by the millennial generation.



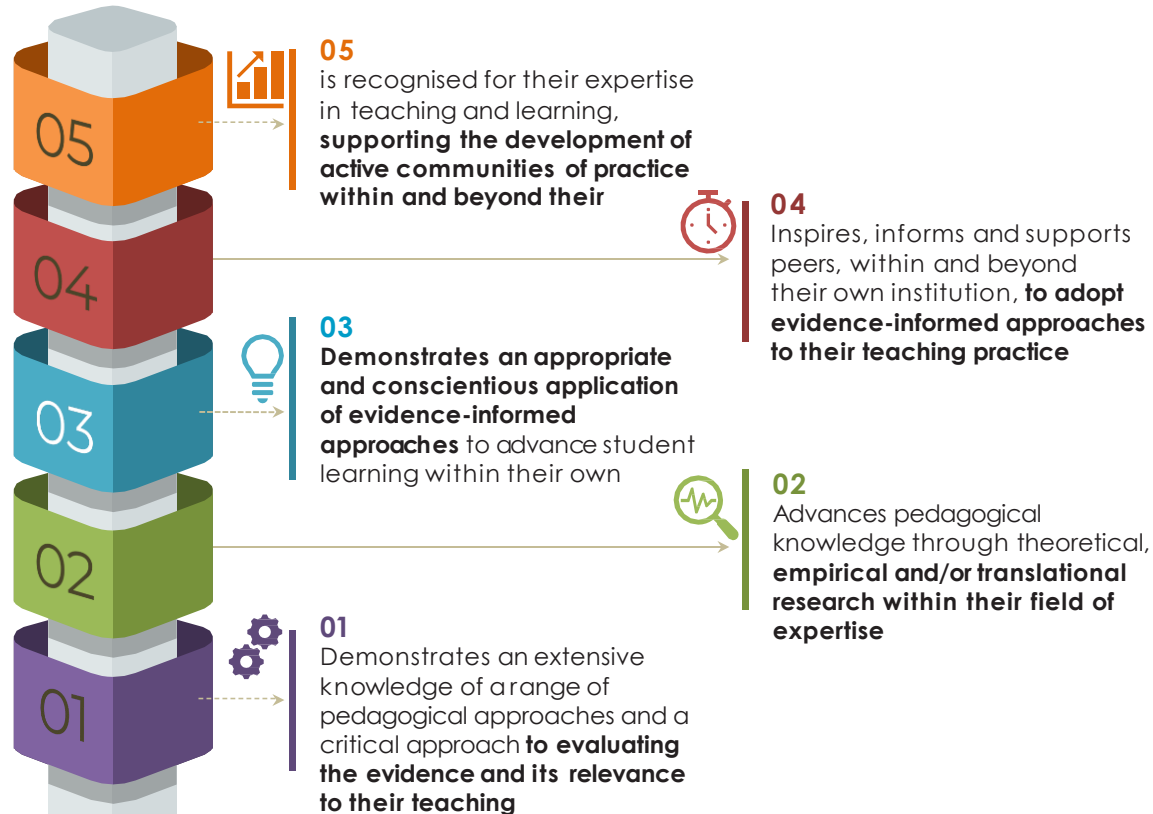
COMPASSIONATE EDUCATOR - SKILLS

Adaptive teaching is one of the important skills of a compassionate educator.

Adaptive teaching is the ability to provide personalised learning according to students need by applying different instructional strategies to different groups of learners so that natural diversity prevailing in the classroom does not prevent any learner from achieving success (Borich, 2011)

- 1 **Aware of the social dynamics of the classroom**
- 2 **Able to address such variations in order to enhance learning among the learners**
- 3 **Able to blend the curriculum, instructional delivery, and assessments to provide a more holistic understanding of learners needs**
- 4 **Respond to the learners as they proceed, and reading the signals of the learners is crucial in ensuring a higher level of learning**
- 5 **Encourage the highest number of leaners in the class by challenging learners to share experiences and be involved in critical thinking exercises.**

Attributes of Scholarly Educator



— INTERMISSION 2

1. How many months in the year have 28 days?
2. A man goes out in heavy rain with nothing to protect him from it. His hair doesn't get wet. How does he do that?



— GLOBALIZATION

UPM GLOBAL ONLINE LEARNING
EMPOWERMENT



**We go out to the
world?**

OR

**The world come
to us?**



SHIFT #9: Globalized Online Learning

of Malaysian Education Blueprint:
Higher Education 2015 - 2025



Focus

Enhancing the quality of teaching and learning; bringing niche area to Global arena; visibility, positioning and branding; as well as lifelong learning.



GOVERNMENT-LED OPEN EDUCATION RESOURCE INITIATIVE IN MALAYSIA

Open
Educational
Resource

Open
Courseware

Massive
Open Online
Course

UPM Global Online Learning Empowerment

**Blended Learning Substitute
(Pembelajaran Teradun Gantian)**

A teaching approach that combines physical and virtual meeting (maximum of 79% online). In UPM the maximum virtual lessons allowed is 7 weeks. The number of learning elements to be developed is based on the course's credit hour.

1

**PutraCGOL (Putra Collaborative
Global Online Learning)**

Students in UPM and collaborating international institution learns together online between 4 to 6 weeks in an academic course

5

**PutraMOOC (Putra Massive Online
Course)**

A PutraMOOC that meets the quality standards will be offered to four target participants which are academic students, community, industry and individuals

2

**Credit Transfer MOOC
(Pindah Kredit MOOC)**

Students are allowed to transfer credit from equivalent MOOC courses into their academic program in UPM

3

Putra-eVF (Putra e-Visiting Fellow)

Scholars from and outside UPM are engaged for online service within minimum 2 weeks

4

Initiative 1- 5 can be performed through PutraMOOC



What is PutraMOOC?



An initiative of open education by UPM



UPM Massive Open Online Courses



Registered domain for UPM MOOC platform
www.putramooc.upm.edu.my/mooc/

PUTRAMOOC COURSE OFFER STRATEGY

* Faculty / School can offer the same PutraMOOC courses in various forms of offer categories.

CATEGORY



ACADEMIC



SPECIAL COMMUNITY



INDUSTRY



PUBLIC SOCIETY

TARGET PARTICIPANTS

Students enrolled in any academic program (eg higher education institutions and schools)



Specific communities (e.g. uniformed team clubs using PutraMOOC courses as knowledge development training)



Industry (for example, the training unit of a company that takes PutraMOOC courses to improve staff competencies)



Public (taking PutraMOOC course to improve general knowledge and develop self-competence)



80%

PutraMOOC courses offered through the Academic category require

content equality

to provide an opportunity for students to apply

MOOC credit transfer

Support "University for Society" in UPM Strategic Plan 2020-2025

Strengthening the impact of development expertise and knowledge - UPM global visibility

Innovation in attracting new students for various academic programs at UPM

One of the options for community and industrial networking activities by the faculty

Activities with MoU partners

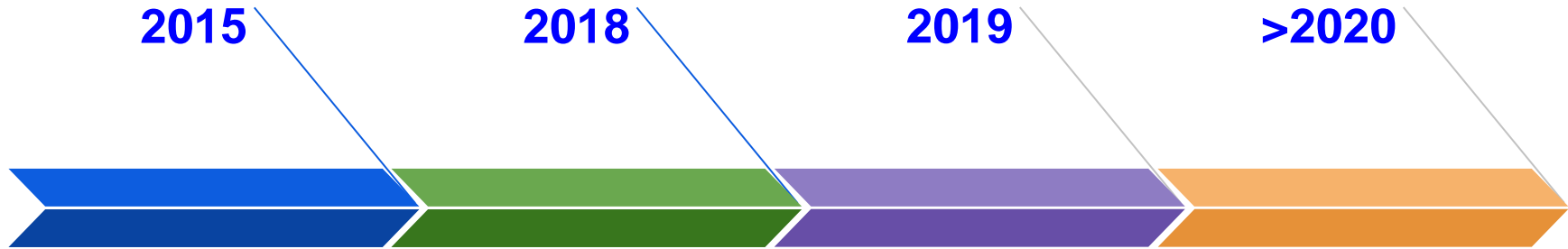
As Summer Camp program by faculty

Opportunities for students to apply for MOOC Credit Transfer



<http://putramooc.upm.edu.my/mooc/>

PutraMOOC progression



Exploration

PutraMOOC was introduced as an initiative for global online learning. In year 2016, 4 courses are launched

Reinforcement

16 PutraMOOC courses have been active between year 2014 until 2018. Each faculty is requested to develop 2 PutraMOOC courses

Empowerment

A new PutraMOOC platform is launched, at www.putramooc.upm.edu.my/mooc
PutraMOOC course quality assurance is implemented

Acceleration

24 PutraMOOC courses are ready to be offered. Focuses on outreaching to inclusive learners. Credit Transfer MOOC to support flexible curriculum

ADVANTAGES OF PutraMOOC



Courses developed by
subject matter experts



**Engaging courses through
collaborative learning
activities**



Get Certificate of
Completion upon
fulfilling all learning
components



**Global learning
experience**



Study at your own pace



**Get Certificate of
Accomplishment for
grading
acknowledgement**

UPM MOOC Credit Transfer

On 11th June 2020, Senate in its 677th meeting has approved the proposal for MOOC credit transfer implementation in UPM beginning First Semester 2020/2021.

CADe has conducted a briefing on PutraMOOC equivalency assessment, attended by appointed assessors by involved faculties.

A guideline has been developed and accessible at <http://putramooc.upm.edu.my/mooc/mod/resource/view.php?id=2935>



UPM
UNIVERSITI PUTRA MALAYSIA

PUTRAMOOC
PUTRA MASSIVE OPEN ONLINE COURSE

**GARIS PANDUAN
PEMBANGUNAN DAN PENAWARAN
KURSUS PutraMOOC
UNIVERSITI PUTRA MALAYSIA**

DISEDIAKAN OLEH:
PUSAT PEMBANGUNAN AKADEMIK (CADe), UPM

PERTANIAN • INOVASI • KEHIDUPAN
BERILMU BERBAKTI I
WITH KNOWLEDGE WE SERVE

4
SATU
BUKUKAN



1. Marks for **innovation** using MOOC in assigned academic course
2. Marks as **subject matter expert in developing** PutraMOOC course
3. Marks in offering PutraMOOC course as **extension** to community
4. Marks in offering PutraMOOC course as **professional service** to industry
5. Marks in **generating funding** through PutraMOOC
6. **Awards** for Best InnoCreative Educator in PutraMOOC
7. **PICTL** and other innovation competitions

**Recognition to staffs leveraging
PutraMOOC as a platform for
innovation**

Thank You
alyani@upm.edu.my