



# UiTM Academic Compass

## **EDUCATION 5.0 @ UiTM**

### Navigating the Future



Academic Affairs Division  
Universiti Teknologi MARA



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*Academic Affairs Division, Universiti Teknologi MARA*

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## Moving *Into the Next*

Universities have very distinct noble mission. We generate new knowledge and talent for the industry and society. We define the learned person and ultimately the society we want to prosper in. The symbiotic relationship we have with external parties is kept in view as the society and the industry are also impacting the way higher education is evolving. Rapid global and technological changes following the fourth industrial revolution not only require quick response but also a proactive fervour to make higher education ecosystem future ready.

This is what Education 5.0@UiTM is all about. It is about nurturing the UiTM brand of *Millennials* – young enthusiastic, diligent, highly principled, and progressive thinkers who are constantly learning and mindful of current and future state.

The future of work, smart machines, advanced cutting-edge media, internet and social media technologies are contributing factors to a massive shift in the way we educate. The university needs to break away from the traditional, content-based teaching practices to a new way of educating individuals which values the personalisation of learning. In Education 5.0@UiTM, flexible and adaptive learning paths, focus on imparting life/transversal skills, student centric learning methods and incessant use of technology are deeply embedded with values and principles. The pace we set is important; we need to go beyond being ordinary to being extraordinary and remarkable. As we move into the next era, our strategy is to *leapfrog* and lead. Education 5.0 @UiTM is about eradicating complacency, discarding lethargy, emphasising ‘business unusuals’ and doing the right things in a swift and sure way.

## Preamble



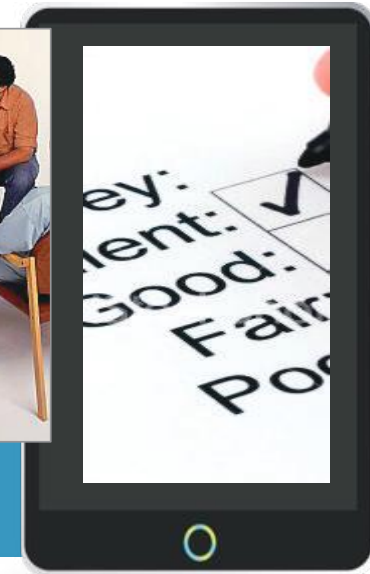
Emeritus Professor  
Dato Dr Hassan Said  
Vice Chancellor



# Methodology

How this book was planned and supported

The multi-strand approach included desk research (reviewing literature on the looming technological revolution and experiences of T & L with technology); online quantitative surveys with ~2000+ participants (all branches in UiTM); and qualitative interview sessions with academics and students. These approaches were intended to study how academics and students respond to changes and how relevant the proposed framework is to the academics and students' expectations. Focus group sessions with leaders, managers and policy makers were conducted to elicit ideas and strategies of deployment and assuring the success of the Education 5.0@UiTM initiatives. Chapters are then written based on these data and collective input. Illustrations of instances and quotes particular to the ideas are also provided.



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# Chapter Outline

## Chapter 1

- UiTM Current State
- The Changing Higher Education Landscape
- UiTM Forward

## Chapter 2

- What is Education 5.0@UiTM
- Five Pillars Supporting Education 5.0@UiTM
- Coherent and Relevant Curriculum
- Innovative Delivery and Assessment
- Meaningful Learning Experience
- Transformative Learning Environment
- Inspiring Educators

## Chapter 3

- Challenges
- Structures and Enablers
- Policies, Guidelines and Workable Models
- Technology and Accessible Resources
- Designated Centres
- Institute of Humanities and Contemporary Studies
- Centre for Innovative Delivery and Learning Development
- Partnerships
- The 5C Strategy
- Champions
- Communication
- Credit and Compensation
- Collaborative and Collective Effort
- Culture
- Roles and Timeline



# CHAPTER 1

## Navigating the Future of Education in UiTM

This chapter gives an overview of the need for creating an academic ecosystem that responds to the changing higher education scenario. It provides the background and current state of several selected matters in UiTM and at higher education level.



# We are UiTM

## A HUGE COMPREHENSIVE UNIVERSITY

Universiti Teknologi MARA (UiTM), a comprehensive university, is consistently ranked as the most popular university to study at. As of September 2018, our enrolment approaches 150,000 students with 17,617 faculty and staff members. From a single building, UiTM has grown from an institute to a huge university with 35 campuses and 508 academic programmes in the last 60 years. UiTM students study at many different campuses and graduate pursuing the same UiTM degree regardless of location.

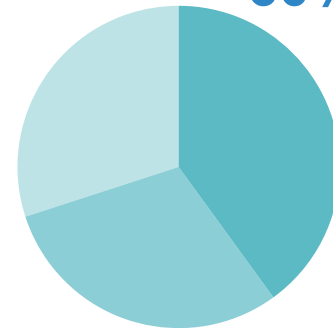
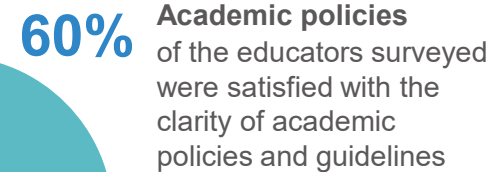
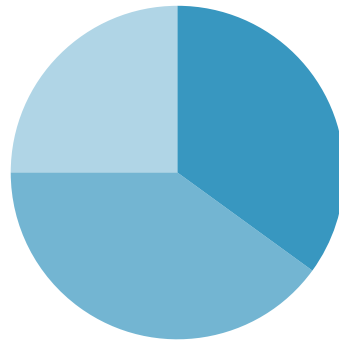
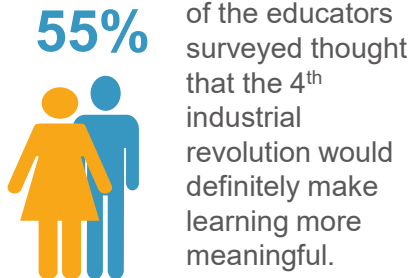
## OUR STRENGTHS

UiTM faculty members seek to fully integrate the results of their research and creative activities into their teaching and enhancing student learning. UiTM is an emerging national model for supporting students' success through innovative high-impact educational practices and co-curricular experiences. Our academic programmes are meticulously designed to produce technically adept and competent highly sought after graduates. By having campuses across the country, the whole nation vies for UiTM and seeks to be a part of this thriving university.

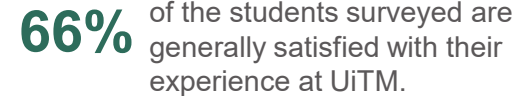
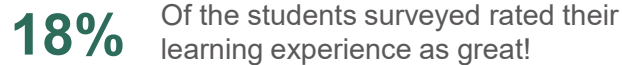
# Current State

UiTM constantly collects feedback and gauges academics' and students' responses to current changes, the system and the policies.

## Educators' take on technology



## Learning Experience



## Satisfaction

\* These are the results of several surveys conducted amongst students and academics at different points of time. The number of respondents may differ.

# Current State

## Awareness of new learning technologies

**52%**

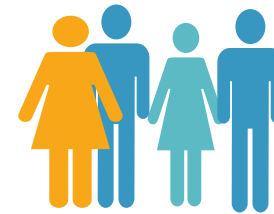


of learners surveyed had studied through MOOC  
A smaller percentage of  
13% had used  
augmented reality.



## 21<sup>st</sup> Century T & L Practices

of Educators surveyed reported engaging in some form  
of 21<sup>st</sup> Century T & L practice especially collaborative  
learning.



## Learning Experience

**13%**

of students surveyed had experience learning from international experts.

A small percentage had been involved in international mobility programmes

**16%**



# Lessons from the field : The shift from content and grade

An inherent shift prevails as learners move into the era of IR 4.0. Learners now value learning from experience, challenge, space to express and create, flexibility, be given voice, connectedness and learning that instigate change. When compared to responses collected in early 2015, there has been less emphasis on getting good grades and emerging top in class.

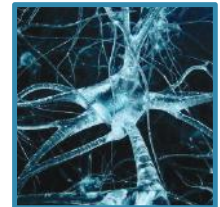
Meaningful learning to me is when learning activities relate with ICT because it give me a space for expressing my own ideas, designs and I can create.



Learning became meaningful & enjoyable cos you made it flexible, you let us explore. you didn't set any right or wrong and you're open to new/ unfamiliar idea. you let us voice out our mind & interest.

Meaningful ..when I can gain from the intentionally and unintentionally learning including from experiences, observation and etc...

is about being challenged... from the way you're thinking, the way you present, you have to put in your mind that it's all another level or else you'll be stuck just like in past.



Meaningful when I acquire knowledge that i am most passionate about, something that is super personal, close to my heart and will weigh significant impact – not only directly to me but also will benefit my family, friends..



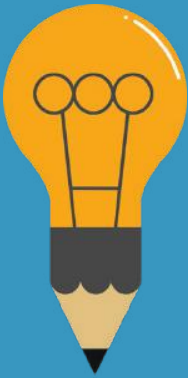
A learning process will be meaningful only when someone absorb something that will change the way he thinks, the way he feels, and also change what and who he was.

Meaningful when there are affection, connectedness and support

*\*Narratives from surveys done over several semesters 2015-2018*

## Why this Playbook

## The changing higher education landscape



### Changes in the education ecosystem

- The fast changing and pervasive nature of technology is undoubtedly altering educational delivery and shaping the learning experiences of the students. Content is no longer the focus since it is easily accessible and available in many forms through various platforms. Higher education is not confined to the "ivory tower"; instead, the industry and the community are becoming more aggressive in their demand for graduates who can work and function in society. Graduates are expected to thrive at both the national and global fronts. They are expected to be agile and to have an adaptive mindset.

### Evolving needs of society and industry

- As competition rises, industries are becoming more vigilant and fastidious in choosing their employees. Taking time to train new employees is not something industries indulge in. Having work ready individuals is preferable. Skills needed have changed tremendously with the advent of the fourth industrial revolution. In addition, competencies and skills that are required in the industries may not be formally taught on campus. Some are picked up in informal and non formal sessions. Some are self learned.
- On the one hand, it is imperative for society to have members who will contribute to its improvement and betterment. There are those who have strong values, passion and a strong sense of community mindedness. They will not only serve to protect the members but also its environment.

### Changes in UiTM

- UiTM has in recent years seen a fluctuating intake and interest in its academic programmes. Curriculum delivery and assessments require constant enhancement while review of the curriculum is ongoing to accommodate the changing needs of the society and industry. An alternative design and provision of academic programmes are necessary.
- Technology is key to positively respond to the growing demands of the fast changing world. UiTM needs to capitalise and leverage on technology to ensure provision of courses are efficient and students' learning experiences are meaningful and exciting. Staying abreast and staying ahead is vital for UiTM's survival in a complex and uncertain world.



## RESPONDING TO CHANGE

When the wind of change a  
blows, some people build  
walls, others build windmills

Chinese Proverb

# UiTM Moving into the Next

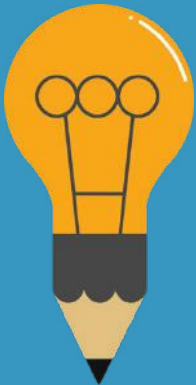
## WAY FORWARD: THE PIONEERING UNIVERSITY FRAMEWORK

The pioneering university frame envisions UiTM as taking the lead in driving impactful initiatives that are business unusuals and fulfil its quest to be in sync and relevant to the industry and society at large. In response to the technological advances, it is expected that UiTM campuses will be digital campuses, where activities right from enrolments to credentialing can be facilitated by technology.

## PRIME AREAS

There are five prime areas that have been identified in the Pioneering University Framework, one of which is Education 5.0@UiTM:

- Entrepreneurship Ecosystem
- Global Prominence
- Driving Research
- High End TVET





# CHAPTER 2

Concept and Framework of Education 5.0@UiTM

This chapter introduces the concept and the five pillars supporting Education 5.0@UiTM.



## Defining Education 5.0@UiTM

A learning - centric ecosystem that is sustainable, balanced and principled, driven by values, powered by intellect and afforded by new, ubiquitous technologies



Education 5.0@UiTM is not about smart technology and the machine's capability to do what humans do; rather it is about what humans can do well rendered by smart technology and machines.

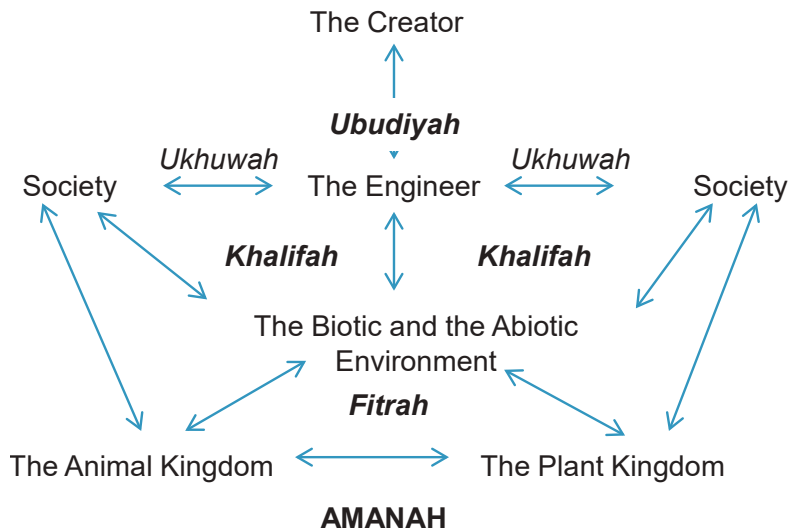
# What is Education 5.0@UiTM?



Education 5.0@UiTM embraces the elements of Education 4.0 with an emphasis on values and future progressive thinking. Within the Education 5.0@UiTM context, instilling values and principles in the learning ecosystem is imperative. Imbuing *Adab* and *Amanah* (trust) in the different facets of the educational realm is vital whereas technology acts as enablers, scaffolds, supports and affordances; A human-driven approach.

The crux of Education 5.0@UiTM is **learning**, by all parties i.e students, educators, administration and other university members. The essential goal is to nurture the philomath - a person who loves learning. In particular, learning is connected to the student or the learner, focused on the learner, demonstrated by the learner and driven by the learner. As such the learner is seen as a whole person of whose values, beliefs, thoughts, knowledge and skills are not seen as separate fundamentals to be nurtured and trained. Dynamic technology surrounds the learner and provides options for the learner's core decisions of what, where, when, how, why and with whom to study. There is however the central need to understand and to have *adab* or 'the proper place of things' to ensure meaningful learning and an even greater connection with the Creator.

## The Concept of *Adab* and *Amanah* in Teaching and Learning



Simply put, ADAB is knowing “the proper place of things”. It is the recognition and acknowledgement of one’s proper place in relation to one’s physical, intellectual and spiritual capacities and potentials (Al Attas, 1980). In Education 5.0@UiTM, creating a sense of appreciation for knowledge and acknowledging the relationship between man, the Creator and his environment is crucial. Learning is to take place with a clear notion of man’s relation with the Creator, to fellow beings and to the environment (*habluminallah-hablunminannas* and *habluminal’alam*). These relationships must be balanced and translated into all learning domains, content and delivery.

Teaching and learning are both *amanah*, entrusted upon humans so they fulfil their function as the *khalifah* (vicegerent) to establish a just social order, a peaceful society and civilisation on earth. *Amanah* is a huge contract of an individual with his society, with the animal world, with the plant world, and with the overall environment. In teaching, *amanah*, requires accountability, personalisation and adoption of an integrative approach to enhance the understanding of the centrality of the Creator.



## The Lecturer and the Student

Lecturer : Why didn't your friend come to class for two consecutive weeks? After all, the rest of you have done your presentations. He has to do his.

Student : He said that "...learning also occurs outside of the classroom, what more with the technology that we have".

Lecturer : I've said almost the same thing during my first lecture to the class! The difference was that I said... 'learning occurs beyond the 4-walls of the classroom'. In other words learning extends beyond the 4-walls of the classroom. For us, it starts in the classroom and extends elsewhere. So, what do you think? Being absent means what? What does that imply?

Student : He is not respecting his friends.

Lecturer : Yes, he should listen to your presentation. Then....?

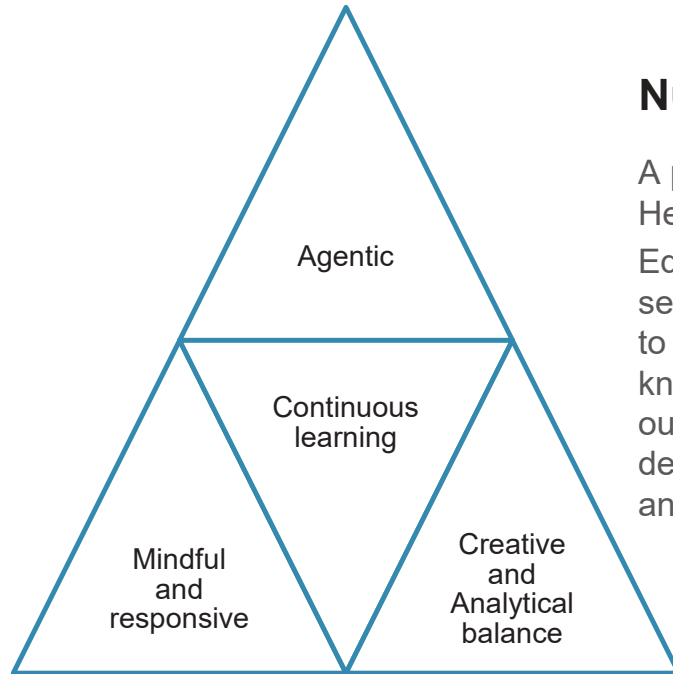
Student : Not respecting his lecturer...and not respecting knowledge.

A moment of silence...

Lecturer : If knowledge, you, others, and me are the Creations....thus most of all....

Student : ...err...He did not respect the Creator of the creations.

Lecturer : Yes.. He did not respect the Creator of Knowledge, and that is what *ADAB* is all about..



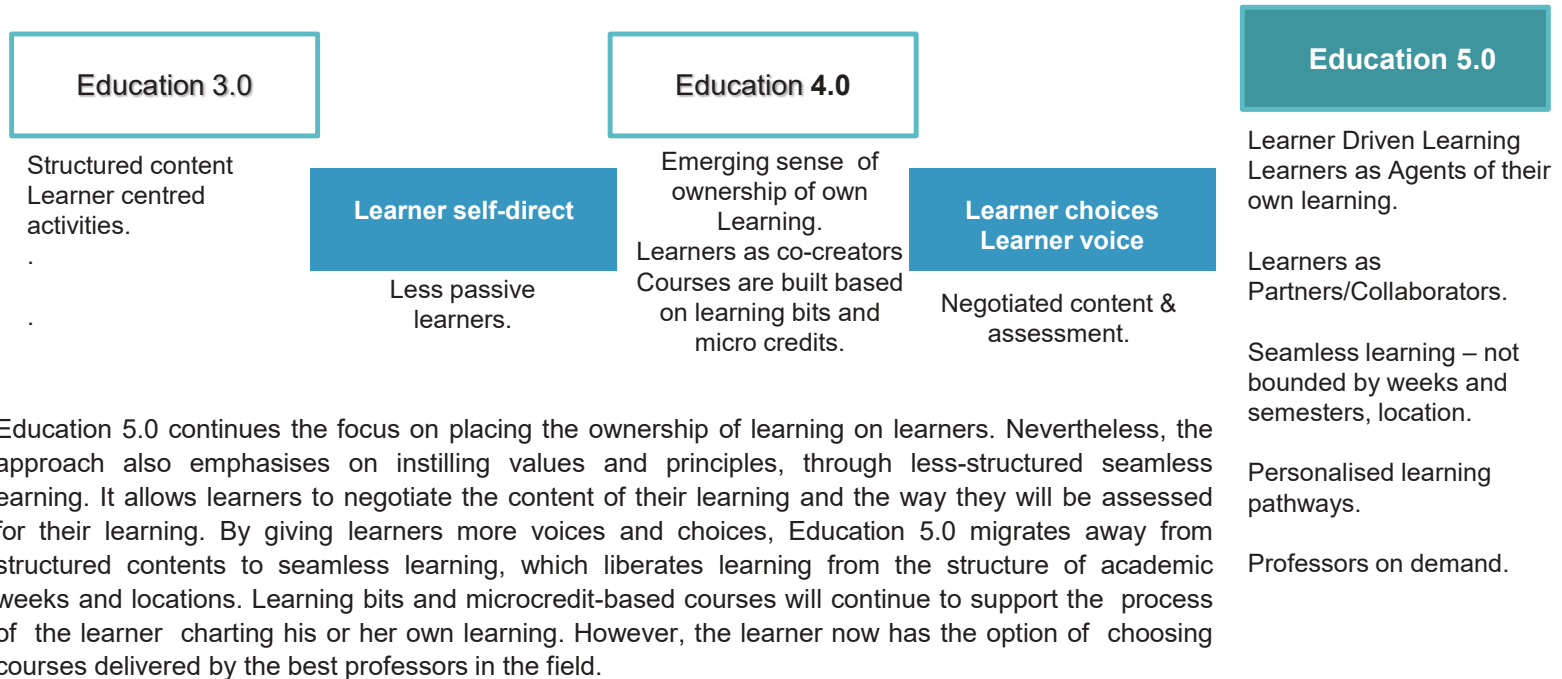
## Nurturing the Progressive Thinker

A progressive thinker is a person who loves and keeps learning. He or she is essentially an agent of his/her own learning.

Education 5.0@UiTM seeks to nurture progressive thinkers who see the larger picture and have solid vision of what they want to achieve. They have a penchant for learning new skills and knowledge, manage creative and analytical balance, move outside conventional thinking and take responsibility of their destiny. The progressive thinker is mindful of their environment and future.



## The Shift from Education 3.0 to 5.0





## INSTIGATING LEARNING

Knowledge is that which benefits, not that which is memorised

Imam Shafie

# Essentials of Education 5.0@UiTM

Nurturing Progressive Thinking Learners who are AGENTS of their own learning

The five core areas to be concentrated on in Education 5.0@UiTM and the nurturing of progressive thinking learners who are agents of their own learning are:

1. Learning that goes beyond earning good grades on campus.
2. Personalisation and personalised learning experience.
3. Design of space to learn and to create.
4. Provision of challenging tasks and content.
5. Inculcation of a values-based learning culture.

The core areas will support learning to know, learning to do, learning to live together and learning to be. The ultimate goal is the development of **progressive thinkers who are who are agile, have strong principles and possess a creative and global mindset.**

# Advocating Inspired Learning

I hear, I forget  
I see, I remember  
I do, I understand  
I think, I discover  
I feel, I value  
I share, I gain

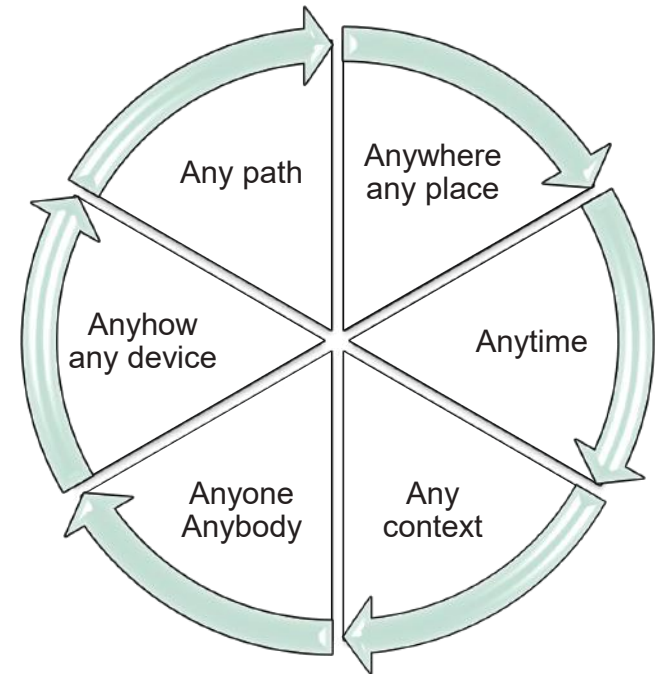
Education 5.0@UiTM will deliberate on the whole person and will provide an opportunity for him or her to learn via exciting the mind, stimulating the senses and enthusing the affective and social nature of the person. As such, learning is beyond the basic senses; it is expected to occur past the thick textbooks and the four walls of the classroom. Technology will be used to enhance learning through non-conventional delivery such as games and to link learners to other learners in different parts of the world. What is essential is to ensure the learners experience meaningful learning.

# Personalisation

## Redefining the Seat of Learning

Upcoming smart machines, new emerging media and extensive global interactivity will be the agents that will shape the different pathways for the attainment knowledge and skills in Education 5.0@UiTM. Choices of educational programmes will grow allowing for the learning of only things that really matter. Completion of training will take less time as we will learn just about everything we really need to know. The plethora of delivery and learning experiences will expand granting us the personalisation of our learning path supported by choosing the right connections with the right nodes.

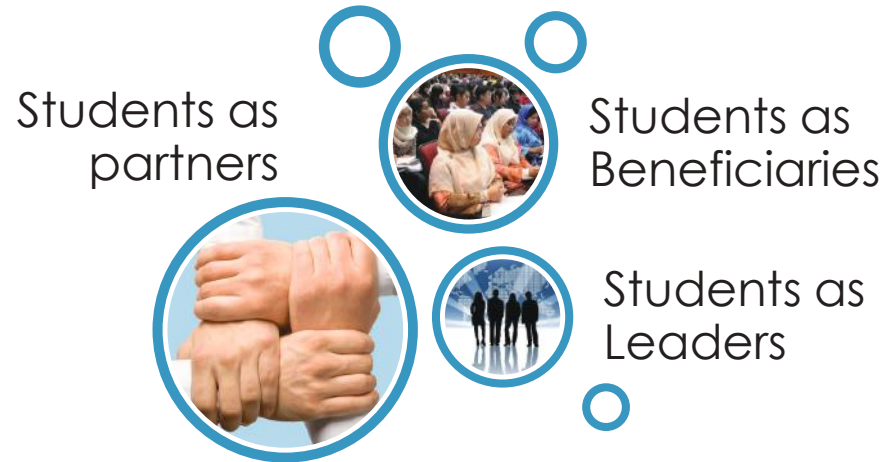
Education 5.0@UiTM will be about intelligent, open and linked web. Current options for the learning path will continue to advance where the web will communicate with us similar with human-to-human or face-to-face communications. Learning platforms will be more humanised where they will become more 'emotional', reacting to the learners' varied emotions. Personalisation in Education 5.0@UiTM will not encompass only choices we make by selecting our own path, devices, time, space, context or the curriculum. It will also be getting personal with our connections.



# Shifting the role of the Student:

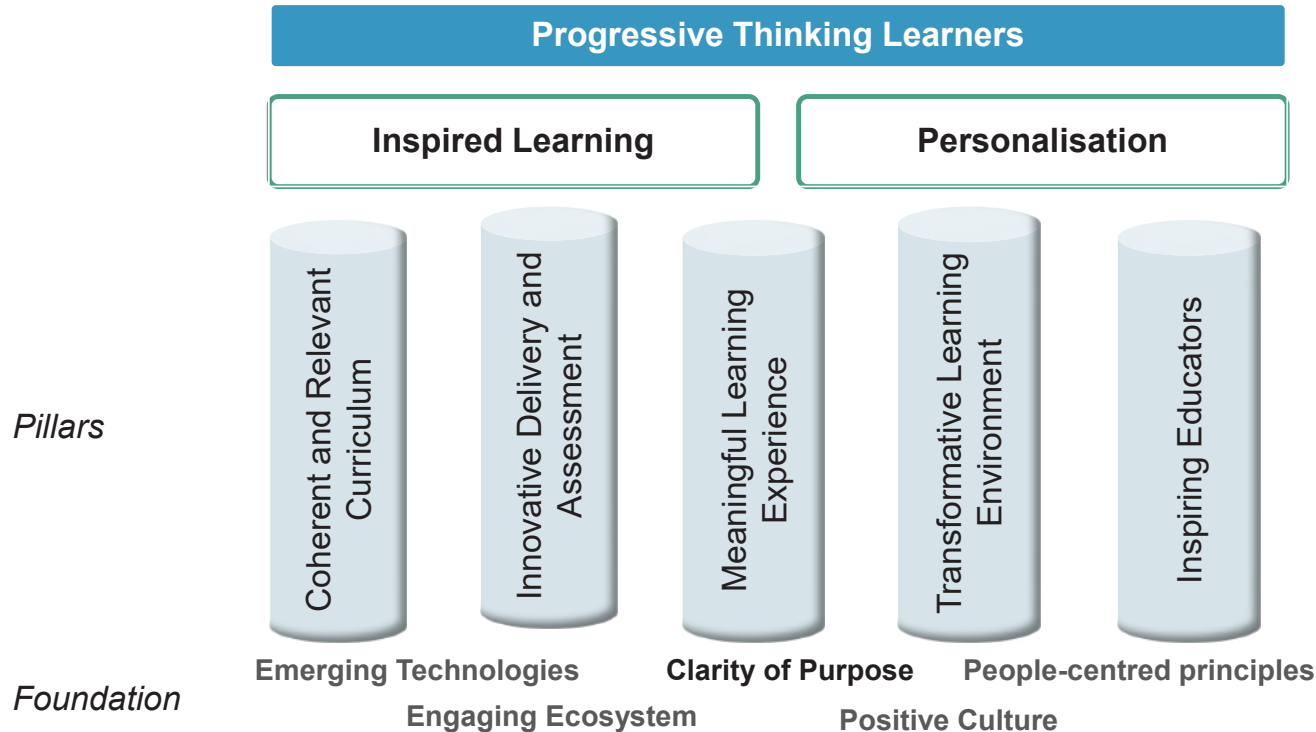
## The Three Lens Approach for Student Engagement

The banking model of knowledge transmission with knowledge created as another commodity to be transferred as efficiently as possible from sender to receiver is not supported in Education 5.0@UiTM. Students are not to wait for knowledge to be poured in, rather they are expected to provide input and give ideas to enhance their learning process. As such, a student is expected to lead in their academic and in other aspects of his/her university life. Any student engagement project or initiative must take into consideration these three roles of the students.



# Framing Education 5.0@UiTM

The elements of Education 5.0@UiTM: the foundation, the pillars and the goal

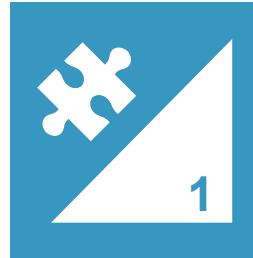


# Basic Elements Supporting Education 5.0@UiTM

Appropriating technology, focusing on the human potential in both student learning and talent .

## Clarity of Purpose

Technology investments and decisions are directed towards executing tasks that serve a clear purpose. In this case, building a learning centric ecosystem.



**Positive culture**  
Positive culture is vital and will permeate every aspect of Education 5.0@UiTM.

## Appropriate Emerging Technologies

Technology used is consistently reviewed to ensure recency and is appropriate to serve its purpose in achieving the goals set.



## People-centred principles

The emphasis will be on the people and the humanistic perspectives.

## Engaging Ecosystem

The ecosystem must support engaged learning. It must be smart, flexible, and allow fluid movement of learners in physical and virtual space. Spaces should be designed to foster reflection, innovation and collaboration.





## DRIVEN BY PURPOSE

“We won't be distracted by comparison if we are captivated with purpose”

Bob Golf

# The Five Pillars of Education 5.0@UiTM

The premises through which the five areas that make up Education 5.0@ UiTM and which can be projected are the curriculum, the learning experience, the learning environment, the educators and the delivery. Learners coming in will learn through relevant curriculum, facilitated by educators who have superb delivery techniques and be basked in a learning environment that is both enriching and exciting. Ultimately when they leave the university, they would have gone through a rewarding journey that has groomed them into societal contributors, job creators and leaders who are able to thrive in the working world.

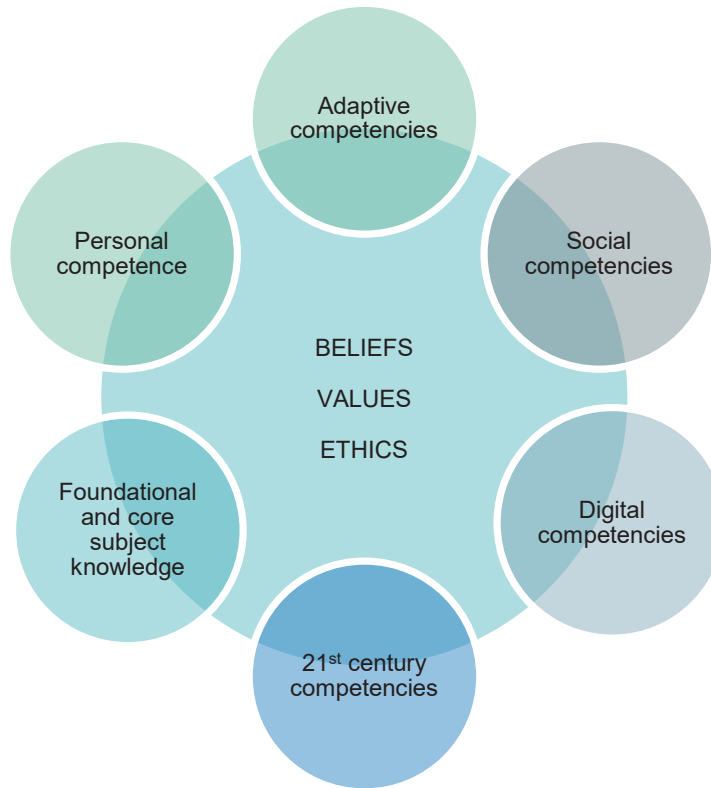
- Coherent and Relevant Curriculum
- Innovative Delivery and Assessment
- Meaningful Learning Experience
- Transformative Learning Environment
- Inspiring Educators



**Creative, innovative, adaptive, versatile professionals, job creators and leaders**

**Nurturing Progressive Thinking Learners who are AGENTS of their own learning**

## Pillar 1: Coherent and Relevant Curriculum



An intuitive approach is required for designing and developing a fluid, dynamic and organic curriculum. Students are prepared to face the changing world, to be able to use their existing skills and quickly learn new ones in order to be a participating member of the society. Other than the 21<sup>st</sup> century competencies, students must be socially competent, adaptive competent, digital competent and to have a high level of personal competence. To have these, the curriculum must be built upon the premises below.

**Industry and Community Relevant**

**Future proof content**

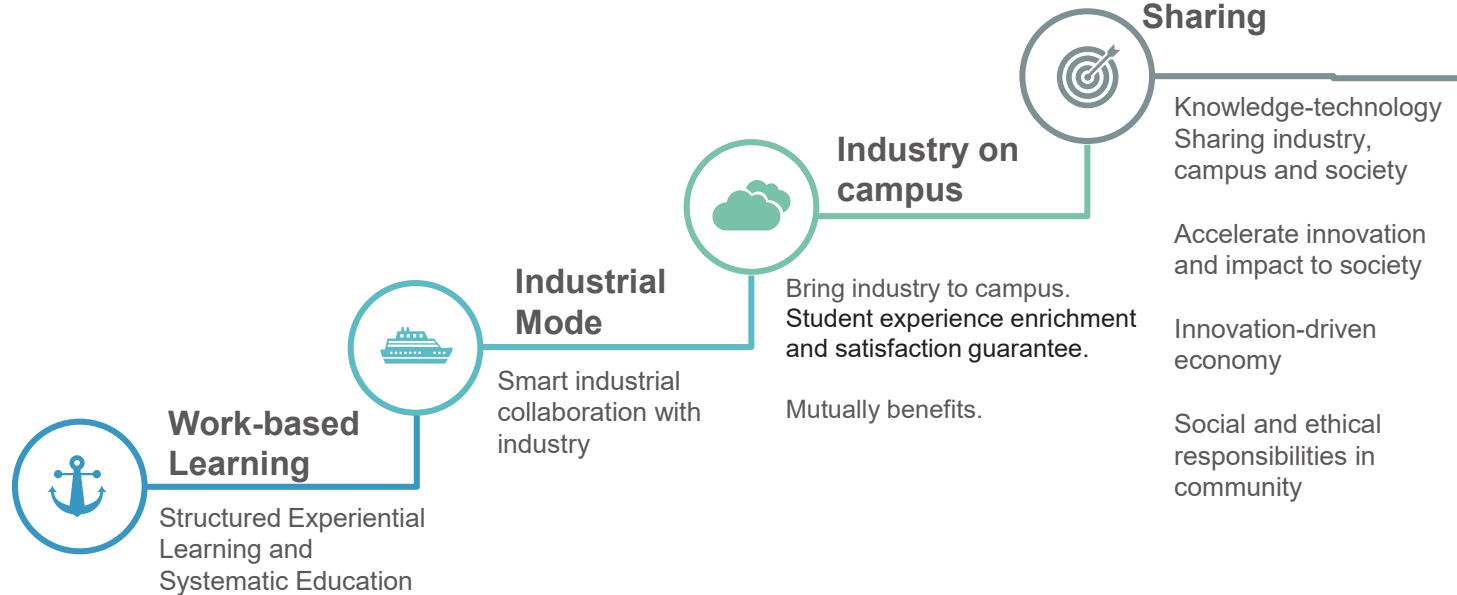
**Shared and Distributed Content**

**Expert Faculties**

**Multidisciplinary Electives and Programmes**

# Industry and Community Relevant

## EVOLUTION OF SMART INDUSTRY-CAMPUS-COMMUNITY PARTNERSHIP



# Industry and Community Relevant

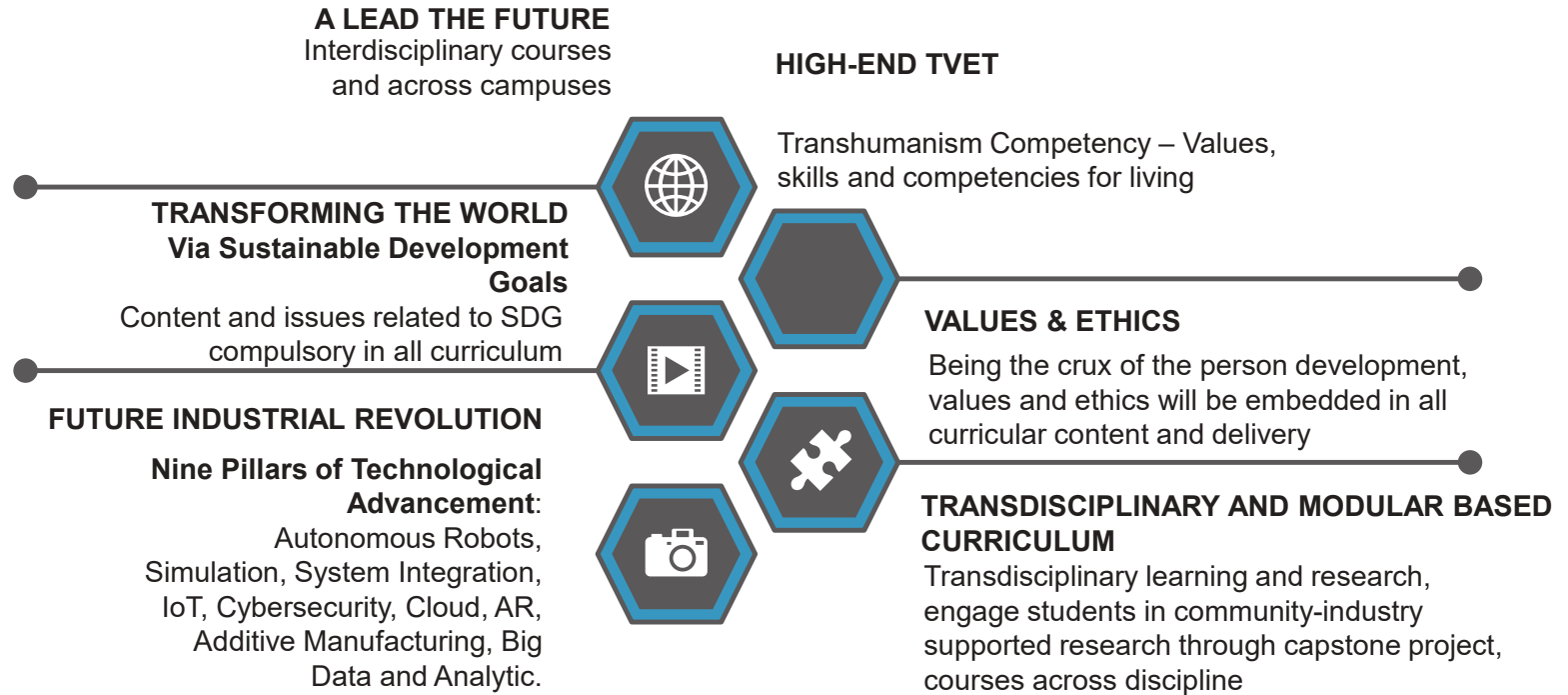
To be industry and community relevant, the curriculum will be continuously designed and reviewed with input from both industry and community. A smart industry-campus-community partnership is undoubtedly forthcoming. Evolution of smart industry-campus-community partnership (SICCP) consists of:

- Small network between university and industry.
- Engagement in project-based assessment of students, academic curriculum, research and innovation.
- Two ways of smart-partnership (technological change and competency-based approach):
  - through minimum one year internship (industrial mode).
  - Industry on campus.
- Industry-Campus-Community K-Tech Sharing: Evolution of SICCP produce better knowledge, technology and culture transfer cycle in multicultural and multidiscipline settings leading to social value.
- Enhance critical soft-skills required for future proof graduates:
  - communication, thinking skills, learning skills.
  - personal management skills, i.e. positive attitudes and behaviours, responsibility, adaptability.
  - teamwork skills.



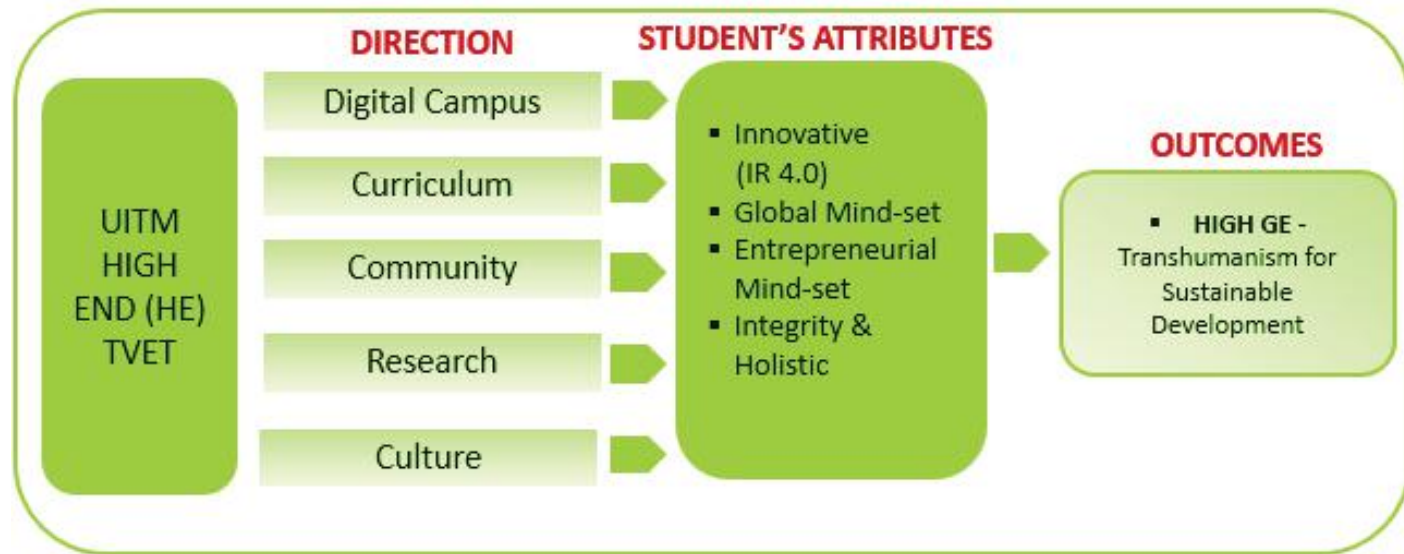
# Future Proof Content

Generative curriculum to equip graduates for life beyond graduation towards the development of personal or practical knowledge



# Future Proof Content

## HE TVET FRAMEWORK



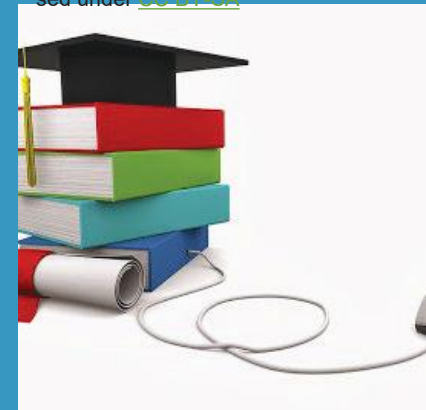
# SHARED AND DISTRIBUTED CONTENT

In responding to the need for more fluid and organic curriculum, learning materials should be made more accessible to all learners with the affordances of technology. Such learning materials should be provided online to enable easy access and to encourage collaboration with diverse group of learners. With regard to this, there is a need to increase shared and distributed content for students' seamless learning. To date, there are 485 Massive Open Online Courses developed and completed in UiTM, with another 450 of such courses completed at the end of 2018. By 2021, it is expected that there will be a proliferation of MOOCs and micro learning courses that will allow students to have a learning buffet, with a spread of courses that can be taken out of interest or for further certification in related fields.

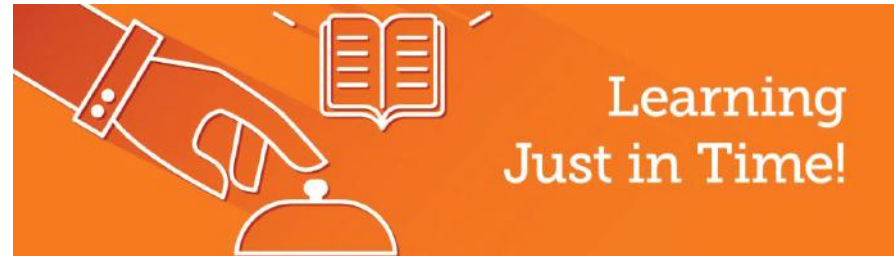
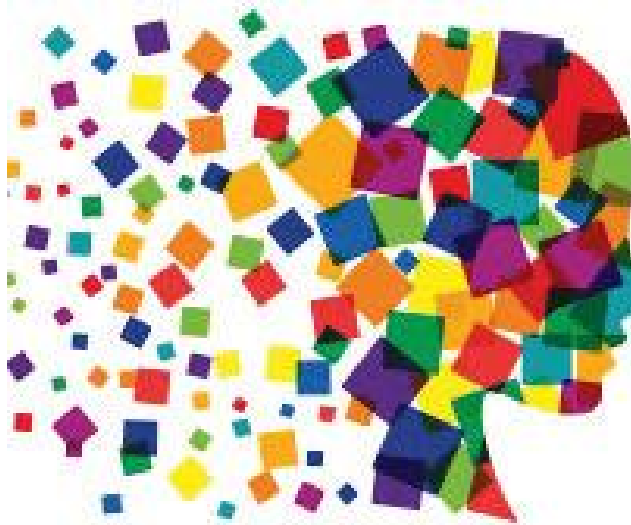
Credit transfer from courses taken from other universities or providers will be instituted to cater for the growing spirit of ubiquitous and distributed learning. This step will significantly reduce the number of classes and at the same time will reduce the utility cost of the university. It enables students to learn and have access to information anytime and anywhere.



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# NANO, MICRO, BITE-SIZED LEARNING

Learning capsules, shopping cart, shopping basket, shopping canister modules and learning buffet are terms associated to the notion of just in time, micro learning that will be supported in Education 5.0@UiTM.

# EXPERT FACULTIES

## UiTM Talent UiTM First

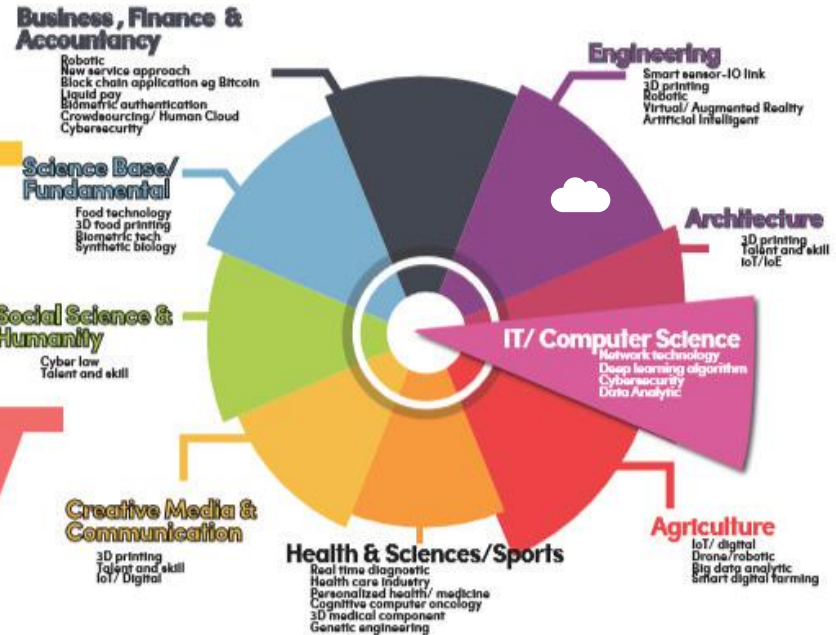
- Each faculty with its own pool of experts can serve other faculties and campuses
- Leveraging on expertise in IoT, Robotics, Effective computing, Cloud-based Systems, AR, AI, 3D digital printing, animation, etc.
- Working towards serving the UiTM community.
- May contribute to curriculum development, innovation, and supervision.
- Based on high collegiality and communality.



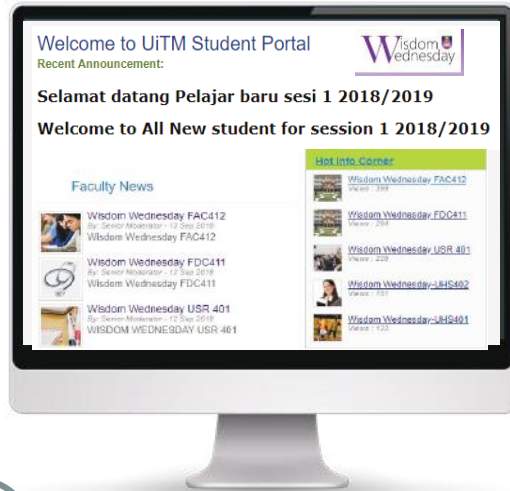
Transdisciplinary approach  
IT/CS based on the Center for 4.0  
Unprecedented opportunities  
Humanity element

Delivery:  
Humangram  
Hologram  
Virtual mentor  
Virtual classroom

## TRANSDISCIPLINARY ACADEMIC PROGRAM MODEL for 4IR



# MULTIDISCIPLINARY ELECTIVES



## MULTIDISCIPLINARY ELECTIVE COURSES

**WISDOM WEDNESDAY: cross faculty, cross campus, multimodal delivery**

Faculty or campus offer multidiscipline elective course across field. Examples: Malaysian cinema, robotic, sports, music, health care, animation, multimedia, Islamic astronomy, data analytic etc.

## FLEXIBLE & DYNAMIC ECOSYSTEM

- Flexibility and freedom to choose (personalise learning & learner progression routes)
- Multiskill and Multitalent

## MULTI to TRANSDISCIPLINARY

Competent in discipline, Job creator  
3F: Fast, Furious, Flexible Course Development

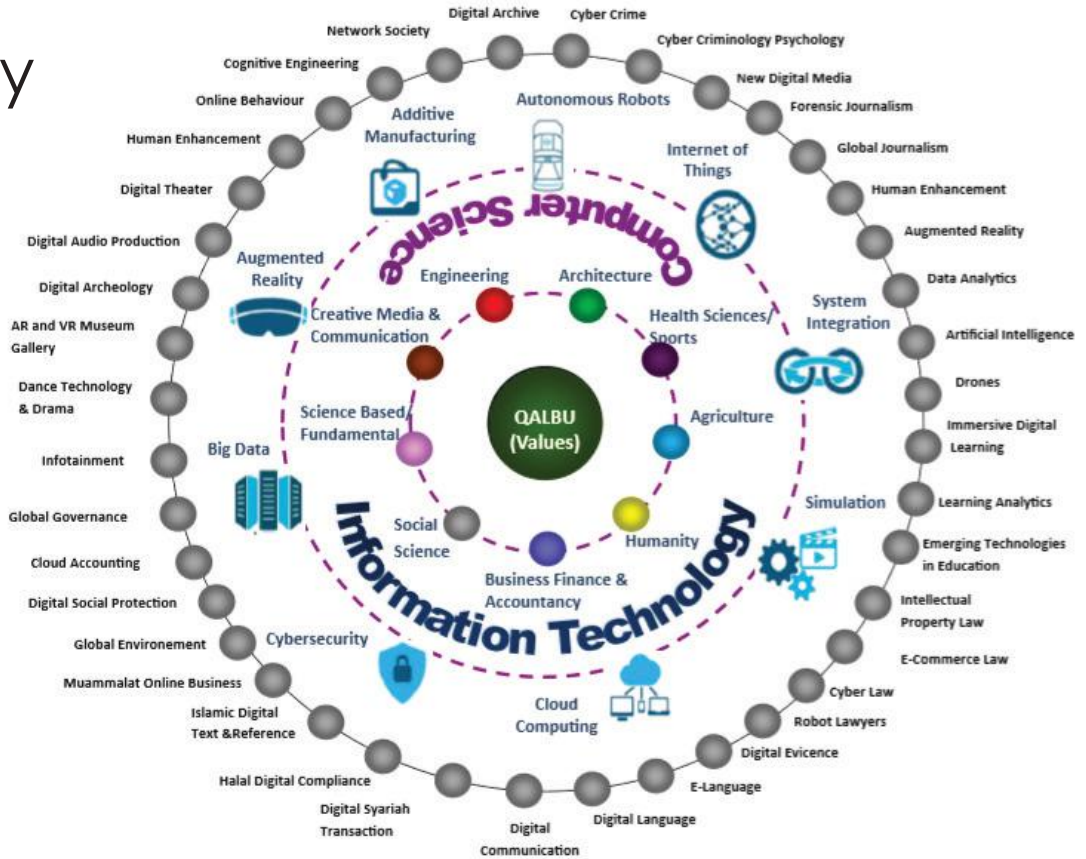


**Institute of Multidisciplinary Studies**

# A Multidisciplinary Programme Development Model

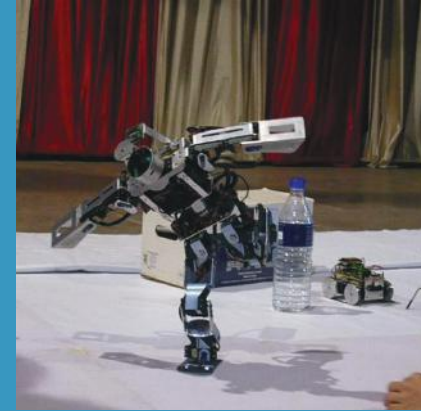
The model advocates a dynamic and progressive academic programme development. It is made possible by the provision of multidisciplinary elective courses from the different faculties in UiTM.

The central non-changing element is the values and *Qalbu* based practices. With the advances affected by IR 4.0 and high technology, each programme can be tailored to be multidisciplinary with a huge number of courses to choose from, that will fit current and future needs.



“Technology is nothing. What's important is that you have faith in people, that they're basically good and smart, and if you give them tools, they'll do wonderful things with them”.

Steve Jobs



## Pillar 2: Innovative Delivery And Assessment

Delivery will be the most exciting aspect in Education 5.0@ UiTM as technology proliferates and demands from learners increase. Engaging the whole person is still the mainstay of this process. This will be done by reinforcing several elements as bases in delivery.

### A student is not a statistic

Students will not be treated as just numbers to indicate the success of a faculty in terms of graduate employability or graduating on time; each student is different and his/her learning needs and preferences are different. Thus, the necessity for diverse delivery and multiple representations of teaching.

### 50-30-20 (experience – peers- formal )

Formal sessions involving direct instructions are reduced. The thrust will be on experiential learning.

### Immersive, brain-based , active learning

Techniques involving immersive, active and brain-based learning will be rudimentary in learning sessions.

### Efficient, flexible ,ubiquitous technology

This is the fundamental aspect of Education 5.0@UiTM delivery. Technology will not only act as the conduit for efficient transfer of content but will enhance learning and initiate creative output and significant outcomes.

### Multiple means of representations

Learning will be designed, delivered and represented in various forms. The traditional classroom teaching will be a thing of the past.

### Contemplative approach

This entails integration of introspection and experiential learning into academic study. It supports academic and social engagement, develop self-understanding as well as analytical and critical capacities and cultivate skills for engaging constructively with other competencies

### Lifewide and lifelong learning

The notion of both lifewide and lifelong learning will perpetuate through the delivery of courses. In essence, delivery method will move away from the didactic mode to include learners actively seeking information and synthesising them into knowledge.

### Global integration

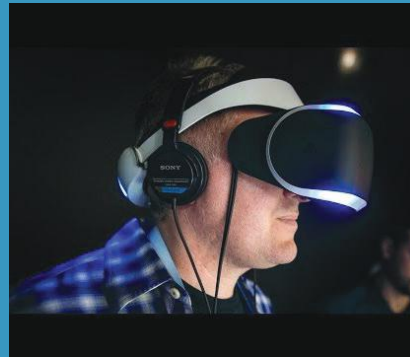
It is crucial to integrate global standpoint within the delivery of courses. This allows for the development of a wider perspective, going beyond local context.

# Effective, Flexible Technology

Supporting Ubiquitous and Collaborative Learning in Education 5.0@UiTM



**Augmented Reality**



**Virtual Reality**



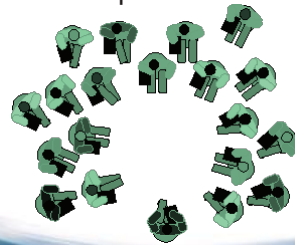
**Mobiles & IoT**



**Learning-on-cloud  
Across Platform  
Learning and  
Cloud-based Tutor  
Space**

## Learning on Demand

Rethinking delivery is a module developed by UiTM lecturers that addresses progressive changes that can be incorporated in a lecturer's training on instructional delivery. It encompasses case studies and best practices, tried and tested in UiTM with evidence of paramount success. The practices can be emulated and adapted by many others. The uniqueness of the module is its growing content, as more academics share their own practices. Rethinking delivery will be offered as a MOOC.



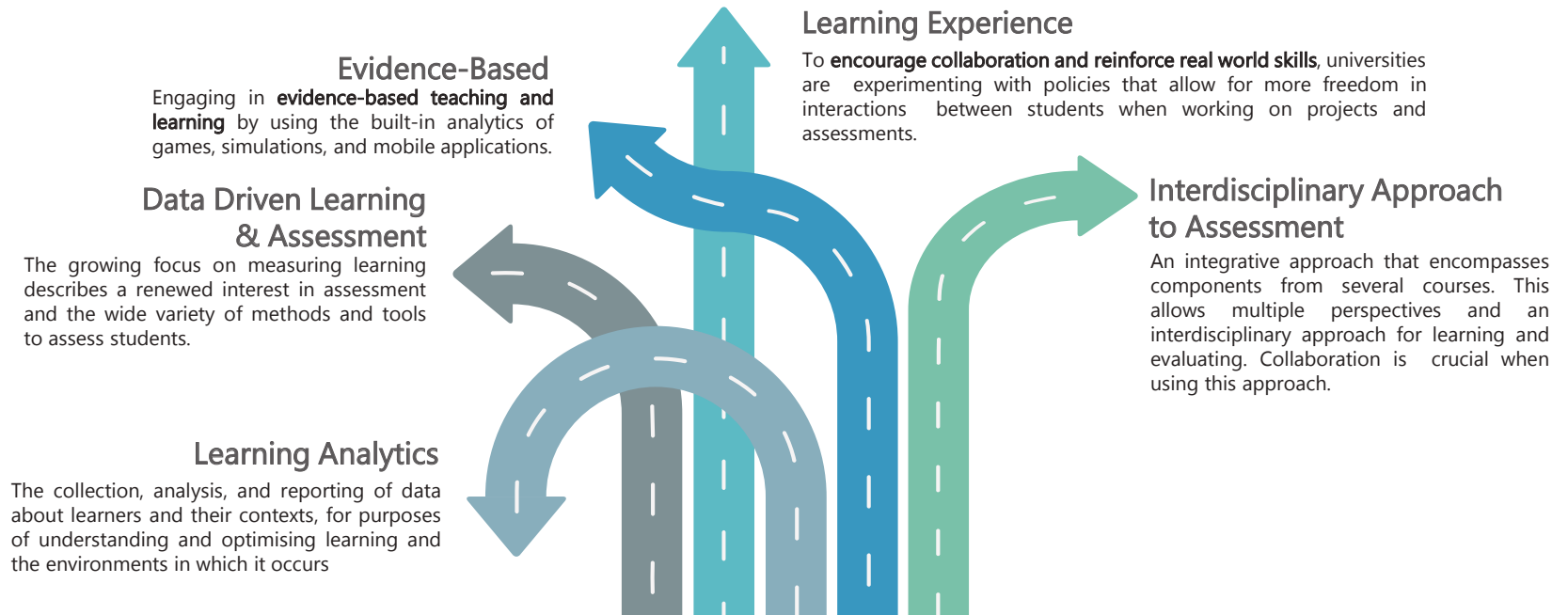
# Rethinking Delivery

A MOOC for UiTM Academics



# Forging Ahead with Forward Thinking Assessment

Education 5.0@UiTM seeks to re-orientate assessments beyond the standardised tests and final examinations and to establish evidence-based learning. This calls for intuitive technology and adaptive approach to measuring learning outcomes.



## Types of Alternative Assessment

Alternative assessment, also called authentic or comprehensive assessment, refers to all sort of assessment that measure student knowledge, skills and values in performing complex tasks that related to intended learning outcomes.

Self/Peer-based Assessment

Group-based Assessment

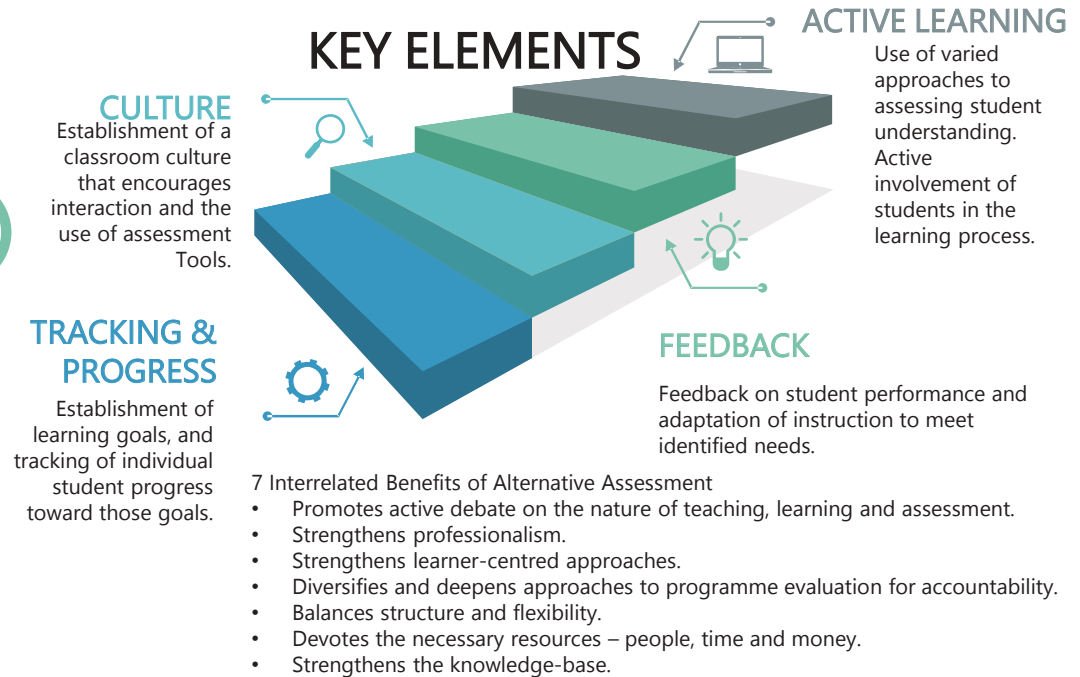
Portfolio-based Assessment

Performance-based Assessment

Negotiation-based Assessment

## Adaptive Assessment

The embedding of maker culture in higher education and students as an active contributors to the knowledge ecosystem. The assessment should be designed based on the real context situation (articulate what they have learned and connect it to workforce needs). They learn by experiencing, doing, and creating, demonstrating newly acquired skills in more concrete and creative ways.





“Experience fails to  
teach when there is  
no desire to learn”

George Bernard Shaw

## Pillar 3: Meaningful Learning Experience

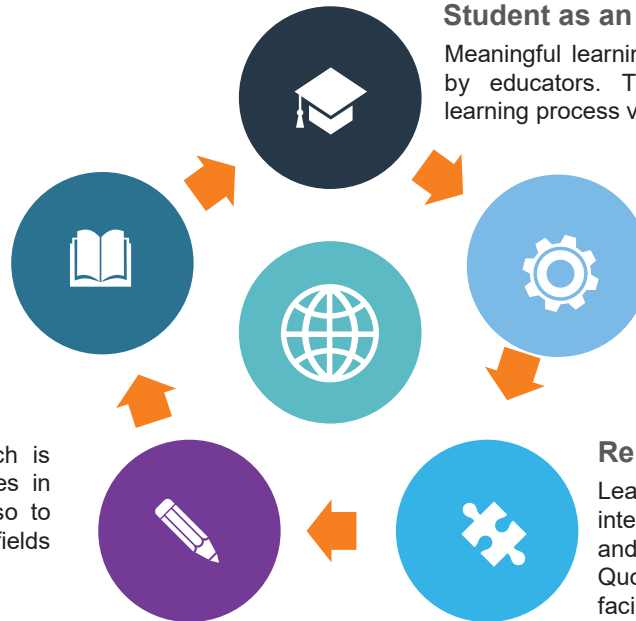
A meaningful learning experience is the sum of a holistic set of dimensions – agency, diversity, flexibility, inclusivity, respect and relevance.

### Experience and interaction mediate meaningful learning

The learning journey is immersive and exciting by linking to the industries and society. Students are exposed to the real world and hands-on experience in preparing them to meet the 21<sup>st</sup> century challenges.

### Diversity and flexibility

The delivery is flexible and dynamic which is easily diversified to cater for the differences in learner needs and preferences. This is also to respond to the requirements of numerous fields and academic programmes.



### Student as an agent of learning

Meaningful learning is constructed by learners and facilitated by educators. Technology utilisation would enhance the learning process via various platforms.

### Inclusivity and Respect

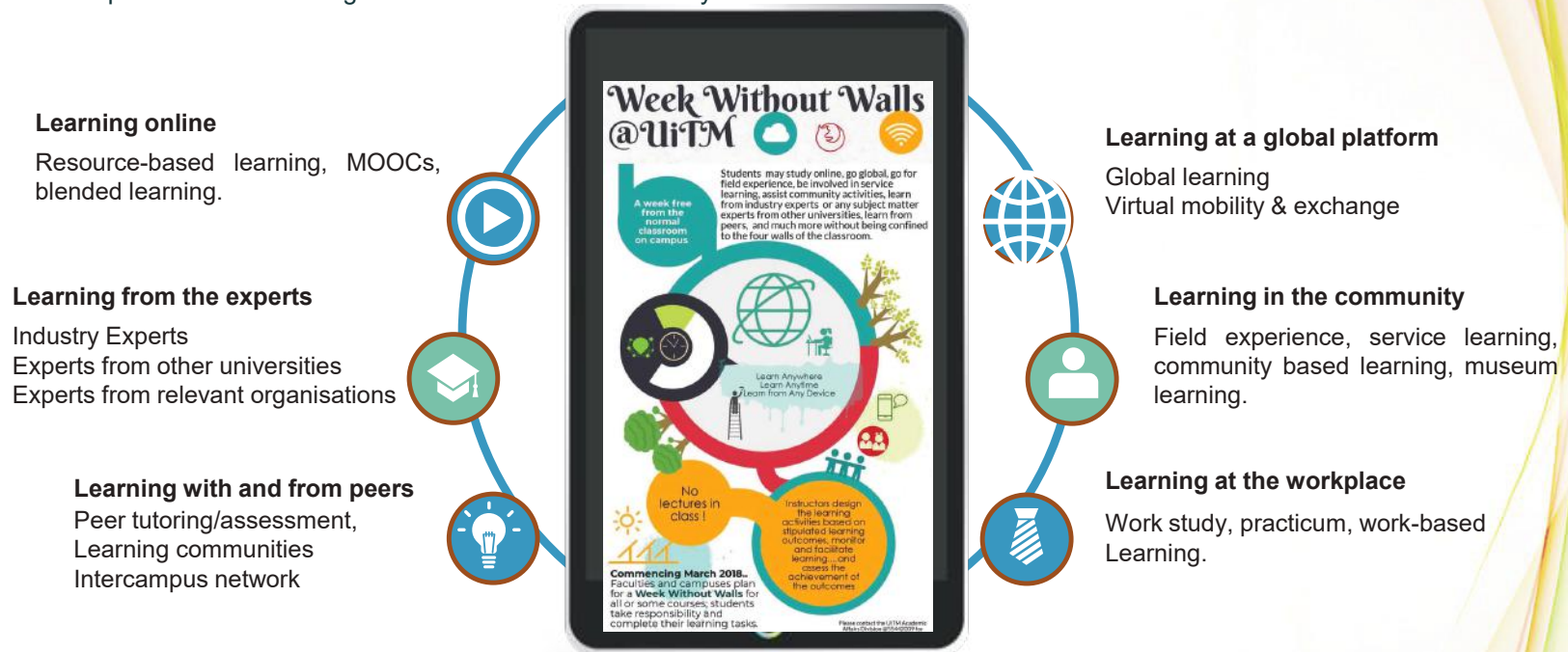
Education 5.0@UiTM seeks to respect diversity of the learners by providing them with flexible opportunities and chances according to their abilities and needs. Inclusive education will lead to meaningful learning experience. The whole learning design will be based on UDL (universal design of learning).

### Relevance

Learning experience is emphasised beyond the intelligence quotient (IQ), Emotional Quotient (EQ) and Social Quotient (SQ) elements. Adaptability Quotient (AQ) is the vital element for learners facing with the 21<sup>st</sup> century challenges

# Meaningful Learning Experience

Acculturation is important. In Education 5.0@UiTM, learning is intuitive and adaptive. Learning is also seamless and learning can happen anywhere, anytime, from any device, with and from anyone, and through any path. Thus, learning experience can be designed to be diverse and of variety.



# Enhancing Learning Experience



## Monitoring Learning Experience

Learning Experience Survey (LES) to be the instrument to be used to gauge students' learning experience at UiTM. An initial survey involving 4800 respondents provides the baseline - the instrument will be administered yearly to final year students.



## Measuring AQ

Adaptability Quotient (AQ) is a vital element for learners facing the 21<sup>st</sup> century challenges. The instrument will be developed with input from industry and will be used to gauge first year and graduating students' adaptability quotient starting mid 2019.



## Experts in UiTM Classroom

Synchronous sessions supported by technology will be promoted to allow learning with national and international experts as well as home grown experts. This initiative gives opportunities to the learners to gain state of the art knowledge and current practices in the field.



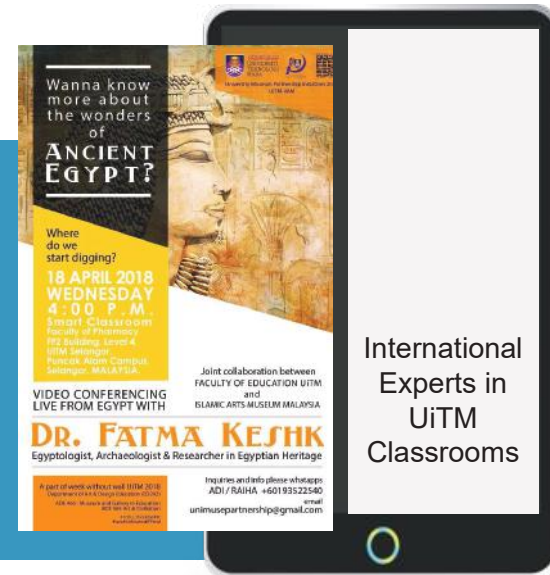
## Mobility

Learning through taking on-campus courses, across campus courses, and through mobility programmes (physical and virtual mobility) will be emphasised. Students are given the opportunity to experience learning with learners from other universities and/or countries when they join video conferences, online classes, webinars and MOOCs

# High Impact Educational Practice: Global Learning

## GLOBAL LEARNING PASSPORT

Global learning instils a more expansive understanding and global consciousness about various/particular field of studies where students learn, interrogate and reflect about the world without physically crossing a geographic border. It is about moving the mind, not the body through virtual mobility and exchange, lectures, seminars via various synchronous online platforms.



Education 5.0@UiTM espouses global learning through taking on-campus courses, real physical mobility and virtual mobility programmes. The utmost important will be that students are given the opportunity to explore cultures, life experiences and worldview different from their own. It allows an appreciation of diversity and awareness of multiple perspectives.

# A Whole Approach to Global Learning in Education 5.0@UiTM

In global learning, students move from global awareness to having a global perspective and eventually, global engagement

1. Awareness - Knowledge of the inter relatedness of local, global and international as well as intercultural issues, trends and systems.
2. Perspective - Ability to construct multiperspective analysis of local, global and international issues and intercultural problems.
3. Engagement - Willingness to engage in local, global and international as well as intercultural problem solving.

## GLOBAL LEARNING Lecturers

Lecturers to design and deliver global learning opportunities for students as well as to nurture and enthuse students. Lecturers are also (well-) connected to people in specialised content.



## GLOBAL LEARNING Students

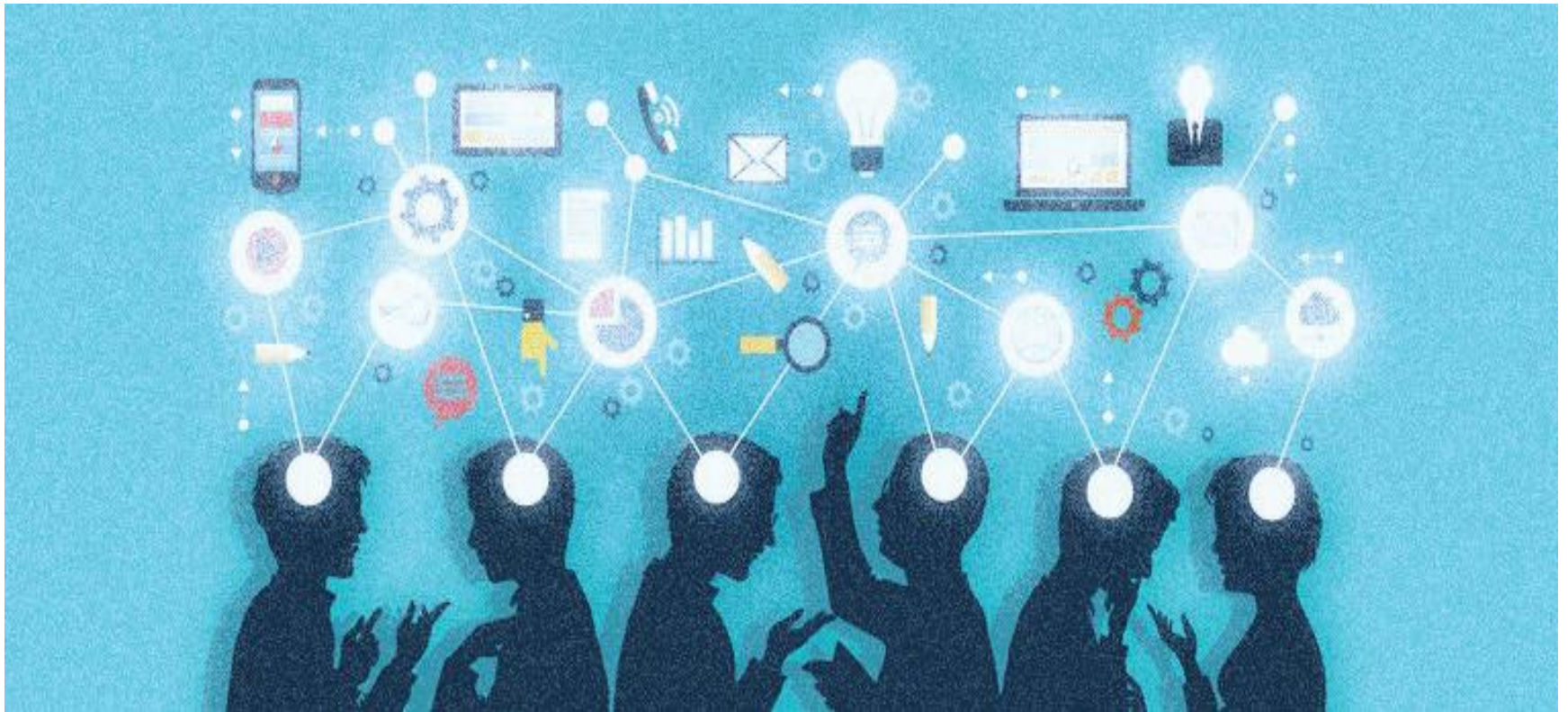
Students to be encouraged and motivated to engage in global learning. They are exposed to being more critical, reflective, open minded, inquisitive, self-aware, globally aware, connected, creative, willing to engage.

## GLOBAL LEARNING Leaders/ Governance

Allocate the necessary time, training and resources to support the development of lecturers and provide good quality learning opportunities.

*The cogs will not turn without others moving*



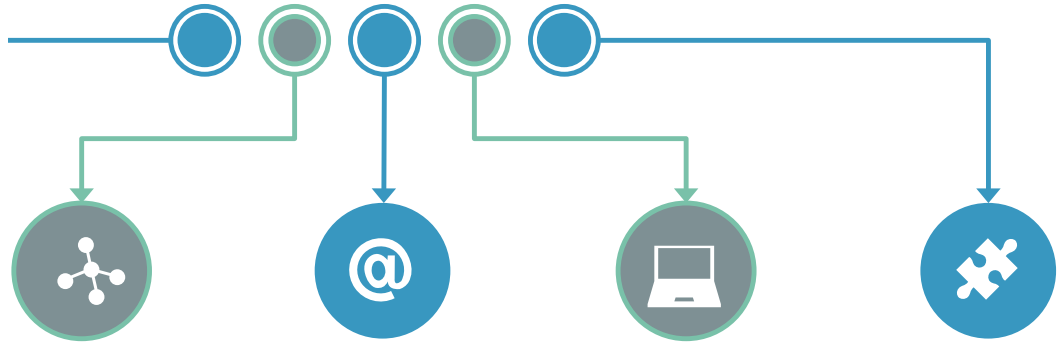


“Especially in technology, we need revolutionary change, not incremental change”

Larry Page

# Pillar 4: Transformative Learning Environment

Transformative learning environment is the expansion of unique and creative learning through adaptive immersive technology to enable effective and meaningful learning. Transformative learning environment involves deep experiences, structural shift in the basic premises of thoughts, feelings and actions amongst academicians and students to change their beliefs, attitudes and emotional reactions towards UiTM Education 5.0@UiTM.



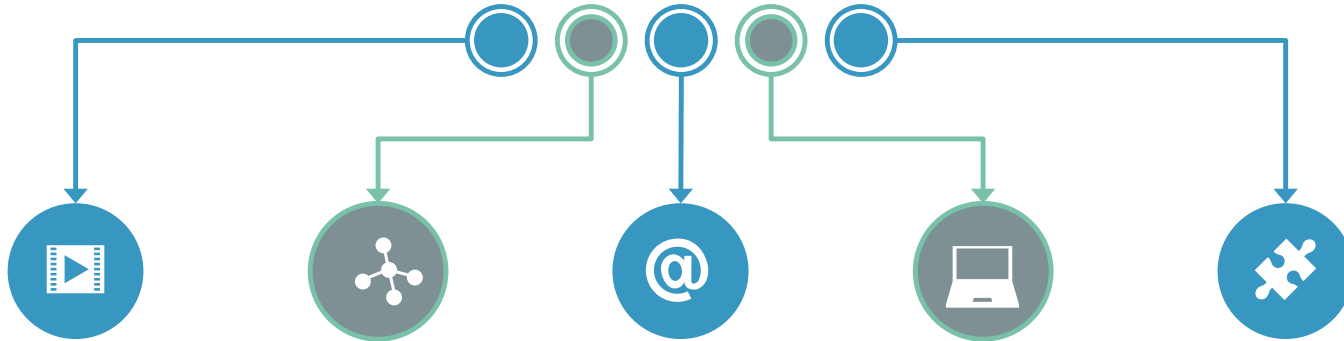
## **DATA ANALYTICS LAB**

The UiTM Data Analytics Lab is a hub for advanced data analytics projects, supporting researchers and helping academics and industries and businesses compete on a global scale. Currently, UiTM has 13 data analytics lab on various campuses in Malaysia. The lab applies text, user and data analytics research to academic/industry-driven projects that solve problems and provide efficiencies in key areas including education, health, logistics, smart cities, social environment, humanity and security.

## **SMART CLASSROOMS**

Smart classrooms are technology enhanced classrooms that foster opportunities for learning by integrating with technology, such as computers, devices, specialised software, networking and audio/visual capabilities. Smart Classroom Services leads the support, design and planning for Active, Relevant, Interactive and Fun learning (ARIF). Currently, UiTM has 69 ARIF classrooms.

# Transformative Learning Environment



## LEARNING SPACE

New ideas about learning spaces represent a significant opportunity for UiTM to make learners and learning more successful. Through the application of information technology, today's learning spaces have the potential to serve the new learning paradigm and at the same time meet the needs and expectations of the most recent generation of students. Flexible learning spaces enable students to match learning spaces with physical and digital spaces in which to frame their focused experience.

Besides, learning through social media promotes self-directed and active learning. Social media also allows students more freedom to connect and collaborate beyond the physical classroom, which means students anywhere can start to experience their own learning rather than passively absorbing information.

## MAKER SPACE

UiTM maker space is an industry sponsored facility for making, exploring and sharing that uses high-tech tools. UiTM has Experiential Lab and Entrepreneurial Cafe to foster maker mind set of creating something out of nothing and exploring the interest that's at the core of a maker space.

The screenshot displays the iLearn V3.0 Learning Management System interface. On the left is a dark sidebar menu with options: myCourse, EDU455, Summary, Announcement, Course Content, Assessment, Assignment, Entrance / Exit Survey, Glossary, References, Course Forum, Join Group, ED2462B (201841), SuFO, KiFO, myDrawer, Blended Learning, and myCommunity. The main content area is titled 'Course Summary' and contains a table with the following data:

Course Code	EDU455
Course Name	INSTRUCTIONAL TECH
Course Description	This course introduces spreadsheet use, telec to use computer appli to teaching and learnii alternatives of teachin application being expl
Course Learning Outcomes	1) Explain the basic ele 2) Describe the basic c 3) Apply application pr 4) Describe the basic e 5) Discuss issues and f
Syllabus Content	1) Introduction: Comp - Computer system (input, output, storage - Application software - Operating Systems ar  2) Introduction to Wind - The Desktop - The Taskbar - Windows and Icons - User Interface - Menu. button. dialog

## Dual system Learning Management System

Part of the vital attributes for transformation into Education 5.0@UiTM is the learning environment that learners are learning in. The Learning Management System (LMS) is commonly developed to focus on providing an ideal environment for effective online learning, fostering the learner-instructor connection as well as the provision of support and communication platform to the learners. With the borderless space that the World Wide Web is offering, it would make more sense to allow communication and collaboration of learners with more diverse group of people, which is seen as a way to inculcate global citizenship among learners. Hence, one initiative is to allow duality within UiTM's LMS. This provides the instructor with options on whether to offer his/her course to anyone from any where around the world or limit the course to only UiTM registered students.



“True teachers are those who use themselves as bridges over which they invite their students to cross; then, having facilitated their crossing, joyfully collapse, encouraging them to create their own.”

Nikos Kazantzakis

## Pillar 5: Inspiring Educators

Great educators make students WANT TO LEARN...

It is the university's aim for lecturers to be inspired educators; those with great qualities, proactive in learning and enhancing abilities.

All gained knowledge, skills and abilities from academic and research work must be positively brought in and shared together in class.

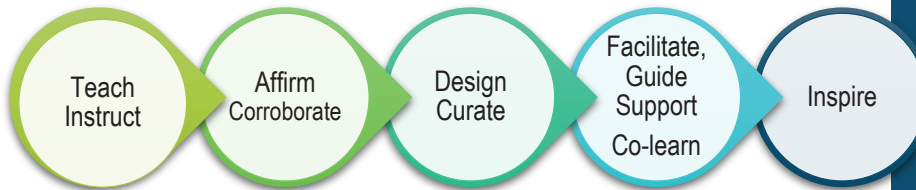
Together, a flexible, positive and fun workplace need to be created. Such a workplace environment may stimulate strong work ethics, high productivity and upholds the values of the organisation. It is also cherished that an enhanced workplace spiritually encompasses the values of individual-based *adab* and *amanah*.



*I cannot teach anybody anything. I can only make them think..*

*- Socrates -*

# Dynamic, Multiple, Adaptive Roles in T & L



Lecturers must maintain multiple roles as educators with good qualities.

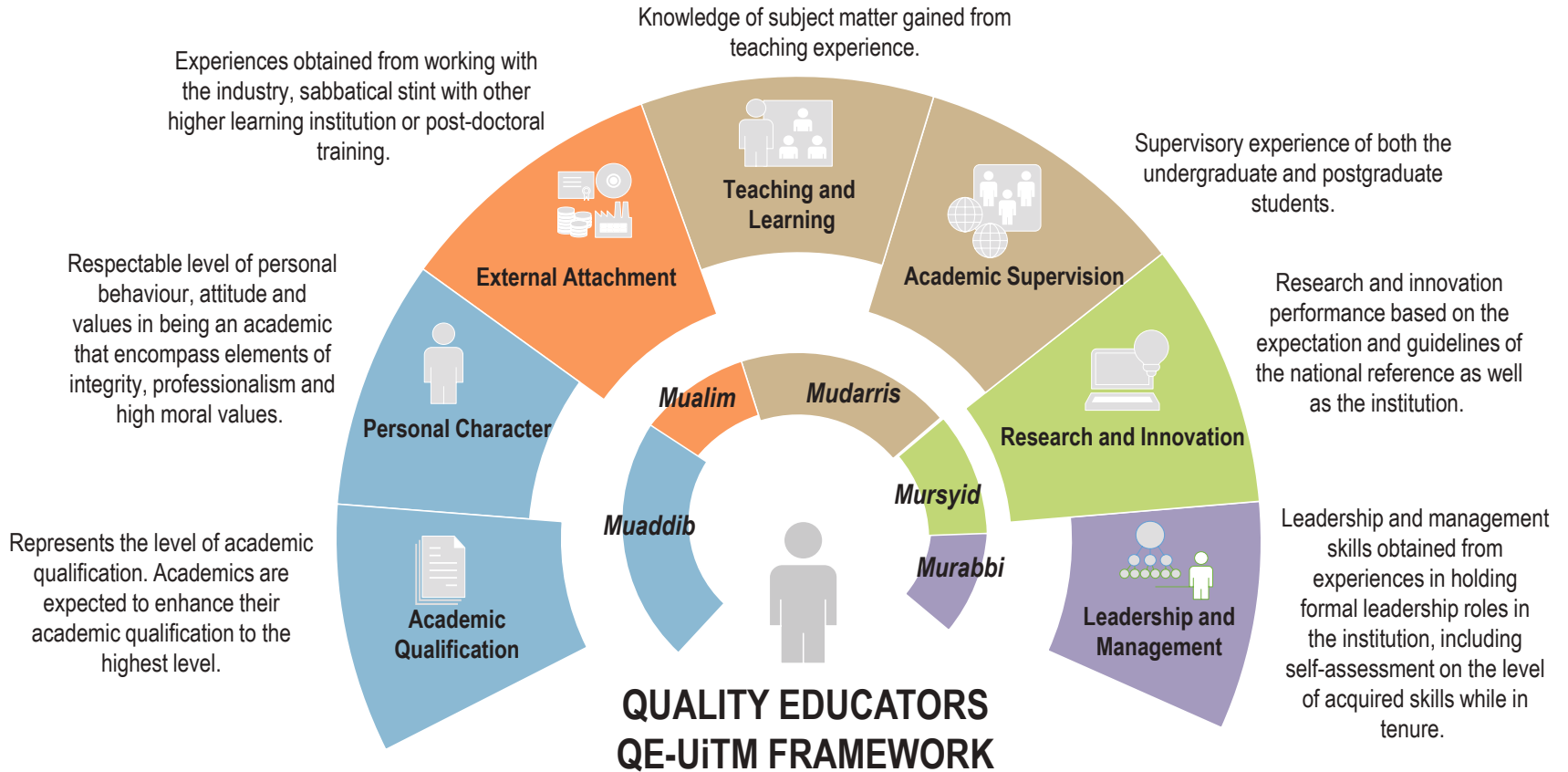
The roles encompass a continuum of functions and responsibilities are as follows:

- ✓ delivers knowledge to students.
- ✓ drives and guides the design and the learning process of content and knowledge.
- ✓ facilitates and coaches the potentials and positive utilisation of knowledge acquired both by them and the students.
- ✓ inspires students and others to strategically value the content, knowledge and benefits of the overall teaching and learning.

Educations 5.0 will facilitate the university in producing lecturers and educators who **HOLISTICALLY** possess specialist knowledge, practical skills, critical and creative thinking skills, communication and leadership skills, information technology proficiency, and simultaneously are highly committed, compassionate, ethical, professional, entrepreneurial, socially responsible and practice lifelong learning.

Inspiring educators at UiTM are basically professors on demand; they are highly sought for their knowledge and their ability to deliver, to generate scholarly review, to influence learning and to spark interest in doing good for society and the environment.

# Essential Roles and Attributes of an Inspiring Educator





The QL-UiTM framework presents the general guidance for UiTM lecturers' professional development and training plan. It targets all lecturers to establish and acquire sufficient academic-teaching related skills towards becoming quality educators.

In general, it aims to strengthen the lecturers' educational and pedagogical-andragogical-heutagogical skills.

- The programme is mandatory for newly lecturers at UiTM.
- Lecturer Training Programme is also offered to lecturers who do not have any prior training in education.

The programme runs on demand, requires several hours of work by the participant and consists of teaching and learning, research and innovation as well as self development elements.



Lecturers will be trained the relevant teaching strategies with higher education expertise and also cultivating the flexibility of face-to-face or blended course delivery and assessment techniques through technology tools.

Lecturers need to acquire a substantial role that is more advanced than merely being described as a facilitator of experiential learning.

Lecturers are highly encouraged to get engaged in a process of scholarly leading for the betterment of each individual student's learning outcomes.

# Training for Educators

In Education 5.0@UiTM, training for lecturers will place emphasis on progressive skill set and classroom innovations.

## The Top 30% (Innovators)

“Feed the hungry” concept of training on advanced learning technologies and delivery methods

## The Mass - 70%

Investment in educator training focused toward developing facilitator mindset and heutagogy

## POLICY

Compulsory training hours on innovative delivery and assessment for all lecturers.

Triad of instructor teaching evaluation to be implemented (Self-peer and student evaluation).

National  
and  
Global  
Mobility

## ACCESS AND SUPPORT

Maker Space support for innovators

Professional development modules for academics staying in the Teaching and Learning track.

Design and development research grants for innovators.





# Chapter 3

## Deploying and Sustaining Education 5.0@UiTM

This chapter discusses general strategies for deploying Education 5.0@UiTM as well as specific strategies related to governance, leadership, funding, infrastructure and info-structure that are pertinent in making Education 5.0@UiTM a success. The challenges are also presented in the chapter.

# Structure and Enablers

01

## Policies, Guidelines and Workable Models

Policies, guidelines and workable models to support new impending practices that cast a change from the norm are essential.

02

## Technology and Accessible Resources

Content to be developed: Cloud-based Systems, Artificial Intelligence, IoT, Blockchain, VR, AR, dronagogy and other appropriate technology must be invested in.

03

## Experts and Support system

Technology and delivery experts and support system personnel must be within reach and accessible. They too must have the passion to contribute. Mechanism for tracking and constant feedback is rudimentary.

04

## Leadership, Governance and Funding

Transformative leaders, good governance and sustainable model for funding are highly required to move Education 5.0@UiTM.

05

## Partnership

Partnerships with the industry and societies is a sure way of staying abreast of changes and gaining significant input .

06

## Workplace Training and Learning on Demand

Awareness, drive, training, re-training and upskilling are vital to ensure both internalisation and adoption by academics.

07

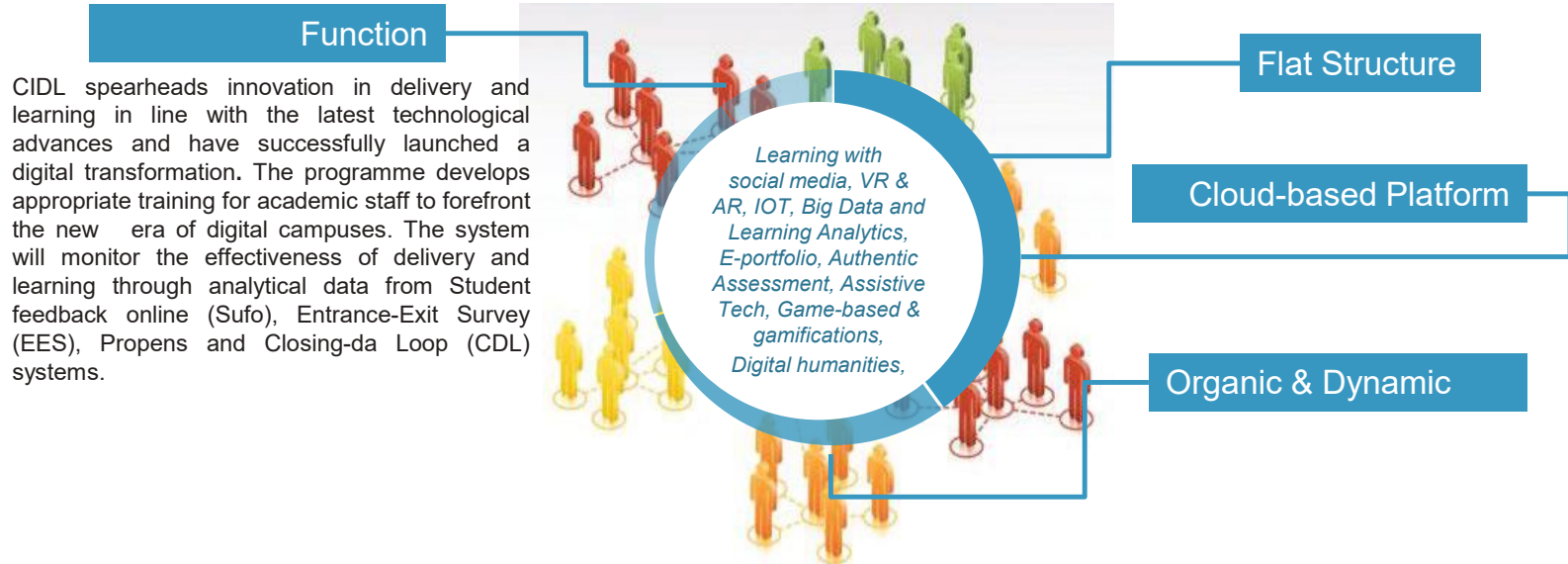
## Designated Centres

Centre of Innovative Delivery and Learning Development, Institute of Multidisciplinary Studies

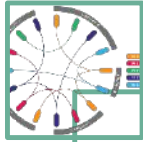
# Centre for Innovative Delivery and Learning Development

The Centre for Innovative Delivery and Learning Development (CIDL) is a Virtual Future Learning Centre

UiTM has 4P (*Platform Pembangunan Penyampaian & Pembelajaran*) programme which provides access to academics for virtual future learning centre. The 4P programme explores the effectiveness of delivery and learning designs with pedagogy, andragogy and heutagogy methods using new technologies including Augmented Reality (AR)/Virtual Reality (VR), Mixed Reality (MR), Robotics, Big Data Analytics, Apps, Artificial Intelligent, Internet of Thing (IoT), Blockchain and Gamification to create a creative learning experience.



# Centre for Innovative Delivery and Learning Development



Flat Structure

- The Head of Delivery and Learning Development monitors collaborative Groups which consist of expert representatives from Augmented Reality (AR)/ Virtual Reality (VR), Mixed Reality (MR), Robotics, Big Data Analytics, Apps, Artificial Intelligent, Internet of Thing (IoT), Blockchain and Gamification. Collaborative groups will plan, design, develop, implement and evaluate the latest learning technology to extent the effectiveness.



Cloud Based

- UiTM typically utilises cloud-based platform as a way to increase capacity, enhance functionality of 4P programme activities or add services on demand without having to commit expensive infrastructure costs and connect passionate UiTM Academics. Rigorous Internet based collaborative activities to promote innovative delivery and learning that befit the era of IR4.0.



Collaborative groups

- UiTM academics grow in numbers as well as collaborative groups. Some may dissolve as technology evolves to assure innovative delivery and learning meets the goals while saving money and generating resiliency for infinity ecosystem in UiTM education.

# Institute of Multidisciplinary Studies

The Institute of Multidisciplinary Studies will be established in three phases and will offer courses and programmes that are interdisciplinary and interdepartmental, spanning both the sciences and humanities. The institute is expected to provide ample opportunities for the development of holistic students with excellent knowledge of humans and their surroundings.

## First phase:

- ❑ Well-rounded knowledge and skills in facing the unknown challenges of the future and digital world by offering multidisciplinary and transdisciplinary courses across faculties and campuses. Various course options from science and health science to non-sciences background, art and design, music and film, finance and hospitality, data analytics etc. Ultimately students will graduate and participate as multiskilled and multi-talented citizens.
- ❑ Thinking skills such as critical thinking, creative thinking, design thinking and quantitative reasoning/mathematical thinking to be included.

## Second phase:

- ❑ Comprehensive humanities-related knowledge programme such as in the area of philosophy/history/anthropology/global affairs/literature/arts and humanities/environmental/astronomy.
- ❑ Great Leadership skills: sincere, integrity, communication, loyalty, decisiveness, managerial competence, empowerment.
- ❑ A university chancellor's scholar programme that focuses on leadership attributes among students will be developed and run at the Institute

## Third phase:

- ❑ Transdisciplinary programme: joint cluster or discipline, hybrid programme that will produce new discipline such as halal technologist (combination of scientist, *sharia* experts and management).



## Humanities and Human Sciences

Philosophy, History, Arts, Culture and Diversity, Gender studies, Values and Ethics, Peace and Social Justice, Psychology, Human Development, Child and Family Studies, Food and Nutrition



## Creative Arts

Arts &  
Aesthetics  
Digital Media  
Languages



## Environmental Sciences

Astronomy,  
Environment  
and Sciences,  
Climate  
Change

# Partnerships



Partnership is paramount to move Education 5.0@UiTM and to ensure a thriving learning ecosystem. The quadruple helix approach is a synergistic university-industry-community-government collaboration that drives innovation and development that ultimately benefits the community. What is important is the action of placing students at the core of any undertakings. Employability and branding of graduates should be embedded in the integration of systems involving the industry, alumni, government and entrepreneurs with community sustainability. Both curriculum and design of the learning experiences must be aligned to the industry's and society's needs. Thus, the necessity to ensure students and lecturers are constantly exposed to the industry and participating in the community. Several means of partnerships will be prevalent in Education 5.0@UiTM.



## Global Universities

Faculty partnerships with global universities to develop offerings for liberal curriculum programmes, MOOC, sharing of expertise, etc. Faculties to internationalise their courses and programmes



## Industry

Industry on campus maker space and labs provided by industry. Students gain industrial experience on campus in addition to internships and practical trainings. Students' work/product directly linked to the relevant industry



## Community

Partnership and involvement in the community. Driving education to the community's doorstep and benefiting society at large



## Alumni

Working with alumni to stay abreast of change and to spur innovation through think forward mindset. The alumni understands the university and have a comprehensive view of its potential and needs.





## Leadership, Governance and Funding

- A sufficient and sustainable funding model.
- A sufficient and sustainable staffing model.
- Active support from the university leadership.
- Active support from the faculty and campus.
- Effective engagement of the entire university community.
- Dedicated leadership of the area.
- Develop leadership capacity in staff and students
  - talent pool for university's leaders.
- Prepare a technology-led strategy that drives the entire functioning of the university.
- Crowd funding for projects.
- More research-based funding from local society and industry to develop solutions that solve education issues and challenges.
- Adequate and continuous training for the university community.
- Cultivating innovative talent – should not only focus on training knowledge-based skilled staff, but more on cultivating innovative talent.
- Develop skills of academicians, administrators and university leaders to work toward developing talent and capabilities in addressing Education 5.0@UiTM.



# Education 5.0@UiTM

## Selected Initiatives for 2019 -2021

1. Curriculum, Delivery and Assessment
2. Learning Experience and Learning Environment
3. Educators

# Focus Areas (2019-2021)

PILLAR	STRATEGY	FOCUS	STRUCTURE and ENABLERS	RESPONSIBILITY
Coherent and Relevant Curriculum	Design and deliver curriculum that propounds values and culture thinking, with strong linkages and exposure to the real world.	Industry and community Relevance Value based curriculum Future proof content - Multidisciplinary & Transdisciplinary HE TVET	Policies, guidelines and workable models Experts and Support System Designated Centre: Institute of Multidisciplinary Studies Partnerships	Academic Affairs Division Institute of Neo Education ICAEN
Innovative Delivery and Assessment	Develop technology driven flexible delivery and recalibrate assessments that support personalised and inspired learning.	Flexible Delivery - MOOCs, microcredits Classroom innovations Alternative and Authentic Assessment Universal Design for Learning	Policies, guidelines and workable models Technology and accessible resources Workplace training & learning on demand Designated Centre: Centre for Innovative Delivery and Learning Development Leadership, Governance and Funding.	Academic Affairs Division ILD Institute of Neo Education Faculty of Education
Meaningful Learning Experience	Design and implement learning beyond the traditional classroom – anywhere, anytime from anyone, anyhow, any mode and using any device.	Mobility Global learning Learning beyond the classroom International and local experts in UiTM Classroom Adaptability quotient	Policies, guidelines and workable models Technology and accessible resources Workplace training & learning on demand Leadership, Governance and Funding.	Academic Affairs Division ILD,OIA Institute of Neo Education iCAEN Student Affairs Division
Transformative Learning Environment	Expansion of unique and creative learning through the provision of learning spaces and adaptive immersive technology.	Smart classrooms Big data labs Maker space Dual system LMS	Technology and accessible resources Workplace training & learning on demand Designated Centre Partnerships	Academic Affairs Division ILD Institute of Neo Education UiTM Facility
Inspiring Educators	Develop excellent academics with relevant skill sets, and with stout principles.	Competencies & skill sets of Educator 5.0 Professional development and in-service training for UiTM lecturers: Professors in demand	Workplace training & learning on demand Policies, guidelines and workable models Technology and accessible resources Designated centre.	Academic Affairs Division ILD Institute of Neo Education Faculty of Education

# Focus Areas (2019-2021)

PILLAR	STRATEGY	OUTCOME/OUTPUT 2019	OUTCOME/OUTPUT 2020	OUTCOME/OUTPUT 2021	RESPONSIBILITY
Coherent and relevant Curriculum.	Design and deliver curriculum that promotes values and future thinking, with strong linkages and exposure to the real world.	<ul style="list-style-type: none"> <li>❑ 1 Smart-industrial-community collaboration framework.</li> <li>❑ Multidiscipline and 4IR elective courses across campuses through Wisdom Wednesday.</li> <li>❑ Credit transfer available for 3 UiTM MOOC.</li> <li>❑ Establishment of the Institute of Multidisciplinary Studies</li> <li>❑ Inception of the Chancellor Scholars Programme.</li> <li>❑ 5 Elective courses individually developed and offered by renowned professors/experts in the area.</li> </ul>	<ul style="list-style-type: none"> <li>❑ 10% of Diploma programme offered are HE TVET.</li> <li>❑ 3 Industries on campus.</li> <li>❑ Curriculum, teaching, MOOC and faculty partnerships with local and global universities: 10 partnerships.</li> <li>❑ A LEAD 2 FUTURE: 200 multidiscipline, 4IR elective courses and renowned professors/experts in the area.</li> <li>❑ Chancellor Scholars Programme begins.</li> </ul>	<ul style="list-style-type: none"> <li>❑ Transdisciplinary/Hybrid and Modular Based Curriculum started for 3 programmes.</li> <li>❑ Global learning elements/modules embedded in 100% of final year courses.</li> <li>❑ Credit transfer available for all UiTM MOOC.</li> </ul>	<p>Academic Affairs Division InED ICAEN</p> <p>Faculties and campuses</p>

# Focus Areas (2019-2021)

PILLAR	STRATEGY	OUTCOMES/ OUTPUT 2019	OUTCOME/OUTPUT 2020	OUTCOME/OUTPUT 2021	RESPONSIBILITY
Innovative delivery and assessment	Develop technology driven flexible delivery and recalibrate assessments that support personalised and inspired learning.	<ul style="list-style-type: none"> <li>❑ 1 Policy on flexible learning and teaching.</li> <li>❑ Augmented Reality and Virtual reality for T &amp; L introduced at all faculties and campuses.</li> <li>❑ 1 universal design of learning module developed at ILD.</li> <li>❑ E-portfolios as alternative assessment at 5 faculties</li> <li>❑ 1 centre for innovative delivery and learning development starts operation – minimum 4 active Collaborative Groups (CG).</li> </ul>	<ul style="list-style-type: none"> <li>❑ 1 learning development specialist appointed for all main campuses.</li> <li>❑ A 3 module-training for 13 learning development specialists conducted.</li> <li>❑ Micro learning and credit transfer for open elective courses offered at the Institute of Multidisciplinary Studies.</li> <li>❑ 100k grants for design based research.</li> </ul>	<ul style="list-style-type: none"> <li>❑ Flexible learning programmes with multiple entry and exit points offered at Institute of Neo Education</li> <li>❑ Assessment on demand at 5 faculties.</li> <li>❑ Negotiated assessment at all faculties</li> <li>❑ E-portfolios as alternative assessment at all faculties.</li> <li>❑ Centre for innovative delivery and learning development at full swing – minimum of 12 active Collaborative Groups (CG).</li> </ul>	<p>Academic Affairs Division ILD Institute of Neo Education Faculty of Education IRMI</p> <p>Faculties and campuses</p>
Meaningful learning experience	Design and implement learning beyond the traditional classroom – anywhere, anytime from anyone, anyhow, any mode and using any device	<ul style="list-style-type: none"> <li>❑ Findings from Learning Experience Survey (LES) to be reported in Senate annually starting Jan 2019</li> <li>❑ Learning across campuses at 3 faculties.</li> <li>❑ Measure for Adaptability Quotient (AQ) pilot tested.</li> </ul>	<ul style="list-style-type: none"> <li>❑ Virtual mobility programme for students: Minimum 5 faculties.</li> <li>❑ Global learning elements/modules embedded in 50% of final year courses.</li> </ul>	<ul style="list-style-type: none"> <li>❑ Learning across campuses at all faculties.</li> <li>❑ Global learning elements/modules embedded in 100% of final year course.s</li> </ul>	<p>Academic Affairs Division, ILD,OIA Institute of Neo Education iCAEN Student Affairs Division</p> <p>Faculties and campuses</p>

# Focus Areas (2019-2021)

PILLAR	STRATEGY	OUTCOME/OUTPUT 2019	OUTCOME/OUTPUT 2020	OUTCOME/OUTPUT 2021	RESPONSIBILITY
Transformative learning environment	Expansion of unique and creative learning through the provision of learning spaces and adaptive immersive technology.	<ul style="list-style-type: none"> <li>❑ All (100%) smart classrooms actively used</li> <li>❑ Maker spaces on all main campuses.</li> </ul>	<ul style="list-style-type: none"> <li>❑ BYOD on all main campuses</li> <li>❑ Mobile device for students programme offered at all main campuses.</li> <li>❑ Improved wireless connectivity at all campuses (2GB/s).</li> </ul>	<ul style="list-style-type: none"> <li>❑ Digital campus in full swing</li> </ul>	Academic Affairs Division ILD Institute of Neo Education UiTM Facility
Inspiring Educators	Develop excellent academics with relevant skill sets, and with stout principles.	<ul style="list-style-type: none"> <li>❑ Statement of principles launched</li> <li>❑ 1 Policy on mandatory training hours in development and delivery approved</li> <li>❑ Revamping basic teaching courses(KAP) - 100% revised</li> <li>❑ Learning design starter pack for all lecturers developed</li> <li>❑ 1 Qalb based instructional leadership module developed</li> <li>❑ 1 Workshop on instilling <i>adab</i> and professionalism in the classroom for educators</li> <li>❑ Implementation of educator 5.0 certification starts: minimum 40 academic staff</li> </ul>	<ul style="list-style-type: none"> <li>❑ Learning analytics solutions used for all curriculum development.</li> <li>❑ 5 Learning on demand online modules for lecturer's CPD started.</li> <li>❑ Award for innovative curriculum and learning design launched.</li> <li>❑ 1 Policy on learning design and delivery for the purpose of confirmation.</li> <li>❑ Educator 5.0 certification: 800 academic staff certified.</li> </ul>	<ul style="list-style-type: none"> <li>❑ QL system launched</li> <li>❑ Lecturer mobility in place.</li> <li>❑ Cross university teaching: 15 academics involved.</li> <li>❑ Educator 5.0 certification: 2000 academic staff certified.</li> </ul>	Academic Affairs Division ILD Institute of Neo Education Faculty of Education



In UiTM, size is both a challenge and an opportunity

# Challenges

Challenges are numerous and amassed from the volume of responsibilities and multiple campus logistics. In general, challenges faced may be seen in managing change, managing communication flow and managing heftiness

## Managing change

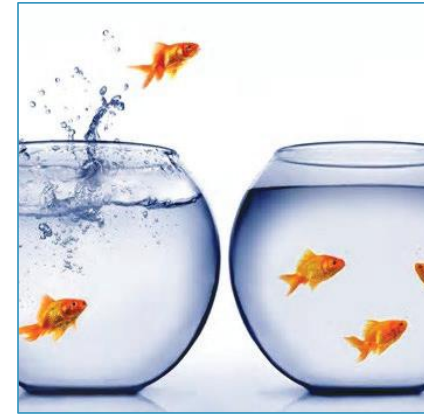
- Acculturation of technology-changing the paradigm and the static mindset.
- Changing and improving ways of doing.
- Rewarding and defining success.
- Financial and technical risk.

## Managing communication flow

- Sustaining efficient knowledge transfer.
- Scaling up innovation.
- Deployment of new ideas.
- Internalisation.

## Managing heftiness

- Empowerment vs highly supervised performance.
- Internal politics.
- Workforce competencies.
- Work overload.





# Challenges

## EDUCATORS

- Attitude of some lecturers who are resistant to change in T&L approach and method.
- Outdated skills in T&L technology among the lecturers.
- Lack of pedagogical skills among new lecturers.
- Lecturers are unequipped with psychology knowledge to deal with and educate the new generation who are exposed to Adverse Childhood Experience (ACE).
- Lack of knowledge to teach students with special needs.

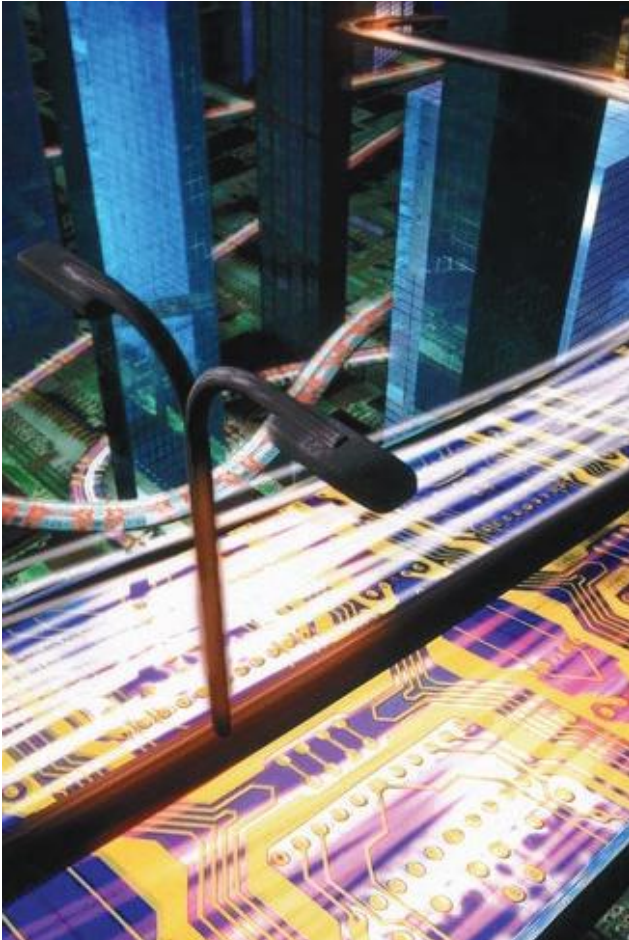
## STUDENTS

- Students from disadvantaged background who have no means of financial support.
- Negative culture and attitudes; complacent, too dependent, fear to the unknown.

## NON-ACADEMICS

- Practice of negative work culture; refuse extra tasks, refuse to learn new things, non-competitive, complacent.
- Rigid job scope.
- Negative perception toward Education 5.0@UiTM among head of departments and units thus, being unsupportive.





# Challenges

## INFRASTRUCTURE and INFOSTRUCTURE

- Low-speed and limited coverage of internet access and wifi.
- Insufficient number of smart classrooms and big data labs.
- non-ideal condition of lecture rooms.
- Non-strategic location of campuses; far from industry.
- Insufficient educational facilities for students with special needs
- Digital divide.
- Possible gaps when access is not equitable.

## MANAGEMENT AND ADMINISTRATIVE

- Rigid, inflexible and outdated regulation, circulars, administrative instructions, expenditure rates and university procedures unsuitable for Education 5.0@UiTM.
- Weak alumni management.

Strategise.  
Deliver.

*“There is no shortcuts to any  
place worth going”*  
Beverly Sills

# Effecting Education 5.0@UiTM: The 5C Strategy

With the looming challenges, several strategies need to be in place in order to move Education 5.0@UiTM. The current mindset and readiness of the academics and the students to move away from their traditional approach to teaching and learning must be scrutinised in order to bring new perspective and practices.

Champions are required; communication of initiatives and its philosophy is crucial so people will move readily from just being aware to accepting and participating in the changes. No one should work in isolation; with collaborative and collective effort, a culture of innovation will naturally emanate. The university must also be generous in rewarding and acknowledging academics who respond well and who work to champion the cause.



01

## CHAMPION

Champions at the faculties and campuses.

02

## COMMUNICATION

Moving from awareness ---- acceptance --- making it second nature

03

## COLLABORATION & COLLECTIVE EFFORT – *Breaking down the walls*

04

## CULTURE

Instilling culture of optimism, culture of innovation, passion and seamless learning, student at the core

05

## CREDIT & COMPENSATION

Acknowledgement, credits, rewards, grants for both academics and students.

# CHAMPION



## Educators

- Build a group of champion academicians coming from different faculties and branches in emerging areas.
- Appoint learning development specialist at branch level.



## Non-academics

- Appoint champions for Education 5.0@UiTM from all units and departments.
- Ascertain the roles of the Students Affairs (HEP) and Islamic Affairs (HEI) as champions for positive and moral values among the citizens of campuses and faculties.
- Ascertain the roles of the treasury to champion initiatives for new financial resources generation to finance Education 5.0@UiTM.
- Appoint champion to lead waqf system



## Info and infrastructure

- Reform library into learning spaces and excellence, centre more flexible and open which is equipped with the updated technology.



## Administration and the university

- Identify champions among discipline-related industries nearby campuses and faculties.
- Appoint industry idols.
- Appoint champions among alumni who can contribute towards Education 5.0@UiTM.

# COMMUNICATION

## Educators



- Trainings for UiTM academics to enhance T&L skills.
- Review of the content of Basic Teaching Course (KAP) module to include pedagogical skills of Education 5.0@UiTM.
- Sharing sessions among lecturers.



## Students

- Trainings for UiTM students to enhance learning skills.
- Sufficient space for expression of opinions from students to realise the needs of the younger generation.
- Rectification of the students' mindset during orientation week.
- Sharing sessions with idols or influential figures.
- Expansion of outbound and inbound activities to enable students to think and act intellectually.

## Non-academics

- Trainings for UiTM academics, non-academic staff and students to enhance skills.
- Periodic training in technology skills.
- Comprehensive understanding on the importance and necessity of Education 5.0@UiTM at all levels.
- Dissemination of information suitably covers all levels of acceptance and understanding.

## Info and infra

- Rapid deployment of high-speed communications network.
- Smart devices mediated communication such as skypes, email, bulletin/LED boards, computer conferencing.
- Social media tools to explore, discover and exchange information quickly, creatively and independently.

## Administration and the university

- Awareness on current T&L technological approaches and its deployment among university community.
- Extensive campaigns on encouraging changes toward Education 5.0@UiTM.
- Wide-ranging platform for feedback on Education 5.0@UiTM.
- Bridged communication among all UiTM citizens.
- Platform for effective feedback for the review of the mentioned.
- Comprehensive understanding on the importance and necessity of Education 5.0@UiTM among all internal stakeholders; ownership of and engagement in Education 5.0@UiTM among heads of departments and units to implement and support this new education system.
- Utilisation of all existing communication channels to campaign for practice of positive values.

# COLLABORATION & COLLECTIVE EFFORT

## Educators

- T&L innovation partnerships: inter-university arrangements for pursuing collaborative T&L innovation
- A buddy programme with two-pronged objectives; the seniors to guide the juniors and the juniors to share the latest technology in T&L with the seniors.

## Non-academics

- Collaboration with external organisation for sponsorship of T&L facilities at campuses and faculties.
- Mobilisation of international crowd funding through online system.
- Review of job scope to include Education 5.0@UiTM.
- Flexible job scope to enable contribution for development of Education 5.0@UiTM.



## Info and infra

- Collaboration through open-sourced tools. Technology deployment to local-global cooperation and collaboration.
- Provision of space with free rental initiative for corporate organisations to operate in campus.
- Sponsorship of space (building) and facilities from external organisation and alumni.
- Development of social business entity to generate revenue to fund purchase of high-tech equipment and facilities for T&L.
- Provision of space with free rental initiative for corporate organisations to operate in campus.

## Administration and the university

- Local-international linked programmes. University-industry collaboration
- Cross faculty/department/unit collaborative initiatives.
- Financial collaboration with financially resourceful organisations (such as corporates, foundations and *zakat centres*) to assist disadvantage students to buy the latest technology gadgets for T&L.
- Increase of alumni involvement in T&L process through sharing of expertise and financial assistance.
- Education hub for students with special needs be developed and the lecturers be trained for this purpose.
- Introduction of new UiTM corporate culture; not only ideal as official document but also be appreciated for practice.
- Strengthening of the alumni management unit in terms of finance and staff.
- Readiness to accept and consider opinions and views with regard to the review of the mentioned by the university executive body.

# CREDIT & COMPENSATION



## Educators

- Awards, acknowledgment, Rewards for innovative academics ; Innovative T&L incentives and grant awards,
- Merit for job promotions,
- International attachment – special offer/invitation for sabbatical leave, research fellowship, invited lecturers at top 100 world ranking universities/ top-notch industries,
- Use of the latest technology be included as a criterion in PROPENS and given a high weightage.



## Students

- Advanced credit systems for MOOC completions.
- Awards for students , opportunities for summer sessions overseas.
- Loans of learning devices to marginalised students.
- Grant, scholarship and award for students who run projects / initiative for Education 5.0@UiTM.

## Administration the university



- Acknowledgment and appreciation to the industries and public that actively engage in Education 5.0@UiTM.
- Implementation and practice of Education 5.0 to be a criterion in annual appraisal (LNPT).
- Special grant allocation (awards) to faculties and branches for their exceptional initiatives or effort implementing Education 5.0 among university staff and students.
- Best Info and Infra Award towards Education 5.0@UiTM to be nominated annually which involves all faculties and branches in UiTM.



# CULTURE



## Academics and non-academics

- Understanding and practice of excellent corporate culture among UiTM citizens.
- Acculturation of Malay and Islamic ethics (*adab*) amongst UiTM citizens



## Students

- Three Lens Approach for student engagement.
- Future of learning as dynamic – the idea of active lifelong learning and experiential learning.
- Creating a seamless flexible learning environment throughout the campus: Classes to the fields and to the Residential colleges.
- Instilling *adab* in all realms of campus life.



## Administration and the university

- High integrity, Positive thinking, Passionate, Disciplined, Confident, Competitive, Efficient, Effective, diligent.
- Partner with industry and local society across all aspects of the education value chain, from curricula and faculty/campus to infrastructure, research, study experience and placements.
- Integrate life skills across the curriculum through integration with real world stakeholders such as industry, society and entrepreneur networks.

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UiTM Pulau Pinang Rector, senior management and registrar  
Group 7 META 21 members  
UiTM Pahang selected academics  
Committee for the establishment of the Institute of Multidisciplinary Studies  
Associate committee for the establishment of the Centre for Innovative Delivery and Learning Development  
Selected young lecturers, selected degree and postgraduate students

# Acknowledgements



# Appendix

# Appendix A

## Definition of 5Ms

### MURABBI

An educator who attempts to impart holistic development of learners in accordance with Islamic educational philosophy. The holistic development covers the development of all aspects of the human being i.e., physical, intellectual, social, moral and spiritual.

### MUDARRIS

An educator who encourages students to read, repeat and remember information and also seeks to impart basic knowledge to the minds and hearts of students usually by direct instruction.

Source:

Badrasawi, K. (2018). "The Concept Of Murabbi In Muslim Education with Reference to Selected Teaching Methods of the Prophet Muhammad (S.A.W)". Special Issue: Education. 331-362.

### MU'ALLIM

An educator who has mastered the techniques of instruction such that students study a range of subjects in a variety of ways. One who is able to organise information and learning activities using a variety of instructional strategies, either teacher-centred or learner-centred; capable to stimulate and motivate through effective pedagogy and attractive learning environments.

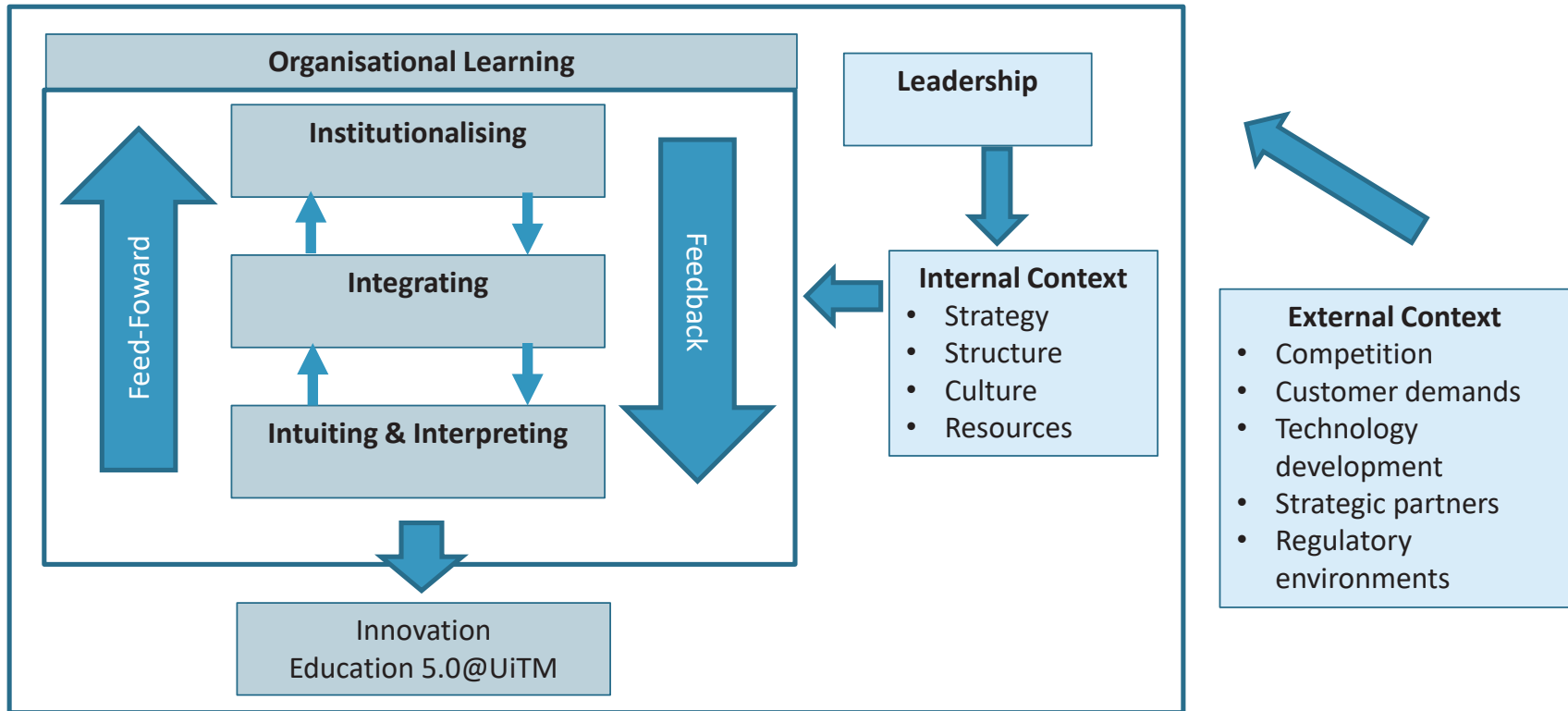
### MU'ADDIB

An educator who seeks to train students in terms of *akhlāq* (good behaviour) and *adab* (good manners) by means of setting a good example as well as by disciplining them through the use of positive and negative reinforcement. Thus, allowing students to internalise values and apply them in good behaviour.

### MURSHID

An educator who guides their followers (murīds) on a spiritual journey known as *tarīqa* (the path) through *suluk* (spiritual wayfaring). One who does not only embodies good behaviour, but transforms his devotee by means of 'spiritual transmission' and purification of the heart.

# Appendix B : Organisational Learning Model of Education 5.0@UiTM



Adapted from Organisational Learning Ambidexterity Model by Fahrudi, A. N. (2018). *Managing organisational learning ambidexterity: An exploratory study of Australian large service organisations*. Retrieved from <https://ro.ecu.edu.au/theses/2120>



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