

CURRENT CHANGES IN MQF & COPPA AND MAPPING OF LO

Prof. Sr. Ir. Dr. Suhaimi Abdul-Talib
Chairman, UiTM Private Education Sdn. Bhd.
(suhaimi.talib@intec.edu.my)

*Workshop on Malaysian Qualification Framework Ver2,
Universiti Malaysia Kelantan, Kota Bharu,
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Presenter



SUHAIMI ABDUL TALIB

QUALIFICATIONS:

- **B.E (Hons) in Civil Engineering, University of Melbourne**
- **MSc in Water and Environmental Management with Distinction, University of Loughborough, UK**
- **Ph.D. in Water and Wastewater Engineering, UTM**

PROFESSIONAL EXPERIENCES:

- **Chairman, UiTM Private Education Sdn Bhd (INTEC)**
- Honorary Professor, Faculty of Civil Engineering, UiTM
- Deputy VC (Academic and International) UiTM
- Assistant VC (Facilities Dev and Management and ICT) UiTM
- Assistant VC (Puncak Alam & Puncak Perdana Campus) UiTM
- Deputy Dean (Academic/ Research & Industry Linkages/ Quality & Research) at Faculty of Civil Engineering (UiTM)
- **Visiting Professor at UTHM**
- Visiting Professor at Heidelberg University, Germany.
- Visiting Research Fellow at University of New South Wales

PROFESSIONAL APPOINTMENTS:

- **Member of Accreditation Committee at MQA**
- **Assessor for MQA**
- Former Lead Assessor for EAC
- Former Member of Expert Panel for the drafting of Standard on Engineering and Engineering Technology Programmes
- Former Member of EAC

ACKNOWLEDGEMENT

THIS PRESENTATION HAS INCORPORATED SLIDES FROM COURSES CONDUCTED BY VARIOUS EXPERTS WHICH I HAD THE PRIVILEGE OF ATTENDING. I WOULD LIKE TO ACKNOWLEDGE THE FOLLOWING EXPERTS FOR THE MATERIALS USED IN THIS PRESENTATION WHICH IS DULY CITED:

Prof. Dr. Hazman Shah Abdullah

Pn. Zita Mohd Fahmi

Tn. Hj. Mohamed Nazri Mohd Yusoff

0900– 0930	Opening Remarks from UMK
0930 – 1030	<u>Module 1</u> – Effects of Changing Landscape in HE on the Design of an OBE Curriculum.
1030 – 1100	Coffee Break
1100 – 1200	<u>Module 2</u> – Future Skillsets
1200 – 1300	<u>Module 3</u> – Changes in MQF2.0
1300 – 1415	Lunch & Prayer
1415 – 1515	<u>Module 4</u> – Changes in COPPA 2.0 & SRR
1515 – 1615	<u>Module 5</u> – The OBE Curriculum: The Blueprint
1615 – 1630	Closing Remarks & End of Programme

MODULE 1

Effect of Changing Landscape in HE on the Design of an OBE Curriculum

OUTCOMES

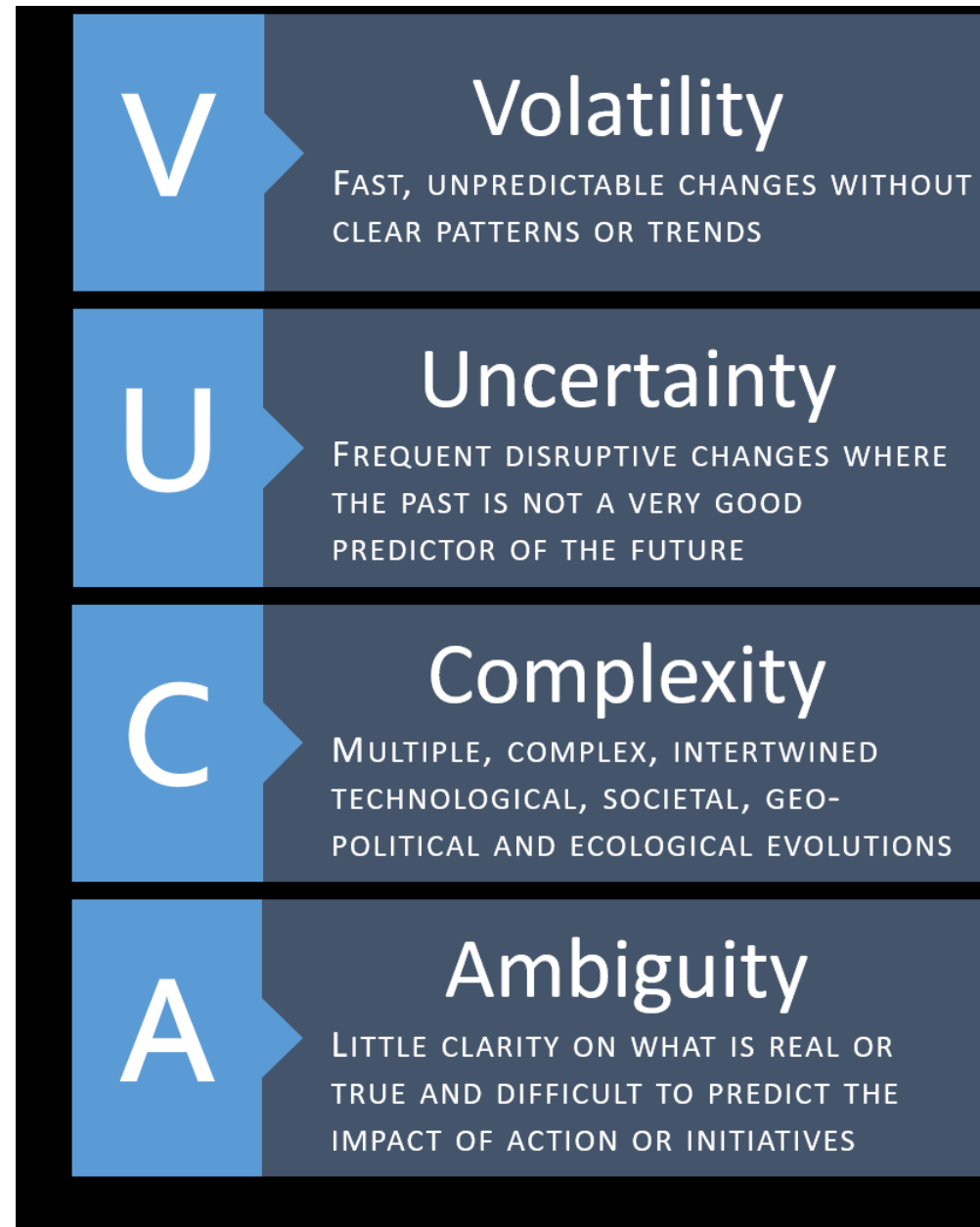
At the end of this module participants will be able to:

- Relate changes in HE landscape to future skillsets and Program Learning Outcomes.
 - Apply changes in HE landscape to curriculum design.



The **VUCA** concept was first introduced in the early 90s by the US Army War College.

Refers to the multilateral world that emerged after the Cold War as being more **V**olatile, **U**ncertain, **C**omplex and **A**mbiguous than ever before.



RAPID & DRASTIC CHANGES IN HE LANDSCAPE LEADING TO VUCA

CHANGES	IMPACT ON CURRICULUM
Globalization: ASEAN EC Global Economic Crisis	SKILLSETS – Learning Outcomes
Industry 4.0 & Disruptive Technology & BDA	SKILLSETS – Learning Outcomes. CONTENT & DELIVERY
New Generation of Learners: Digital Natives	DELIVERY and ASSESSMENT
Emerging Vocation and Graduate Employability	SKILLSETS-Learning Outcomes DELIVERY

THE FORTH INDUSTRIAL REVOLUTION @ INDUSTRY 4.0

The VUCA world?

Convergence of...

AI, IS, Robotics, IoT, Quantum, Nano, Biotech & 3D printing

Unprecedented

Velocity & Scope,
Exponential Growth & Disrupting
industries globally

Creation of...

Global Digital Neural Net or the Brain
Net.

Opportunity from ...

Growth, Ecosystems & Reduced
Costs

The Perfect Storm?



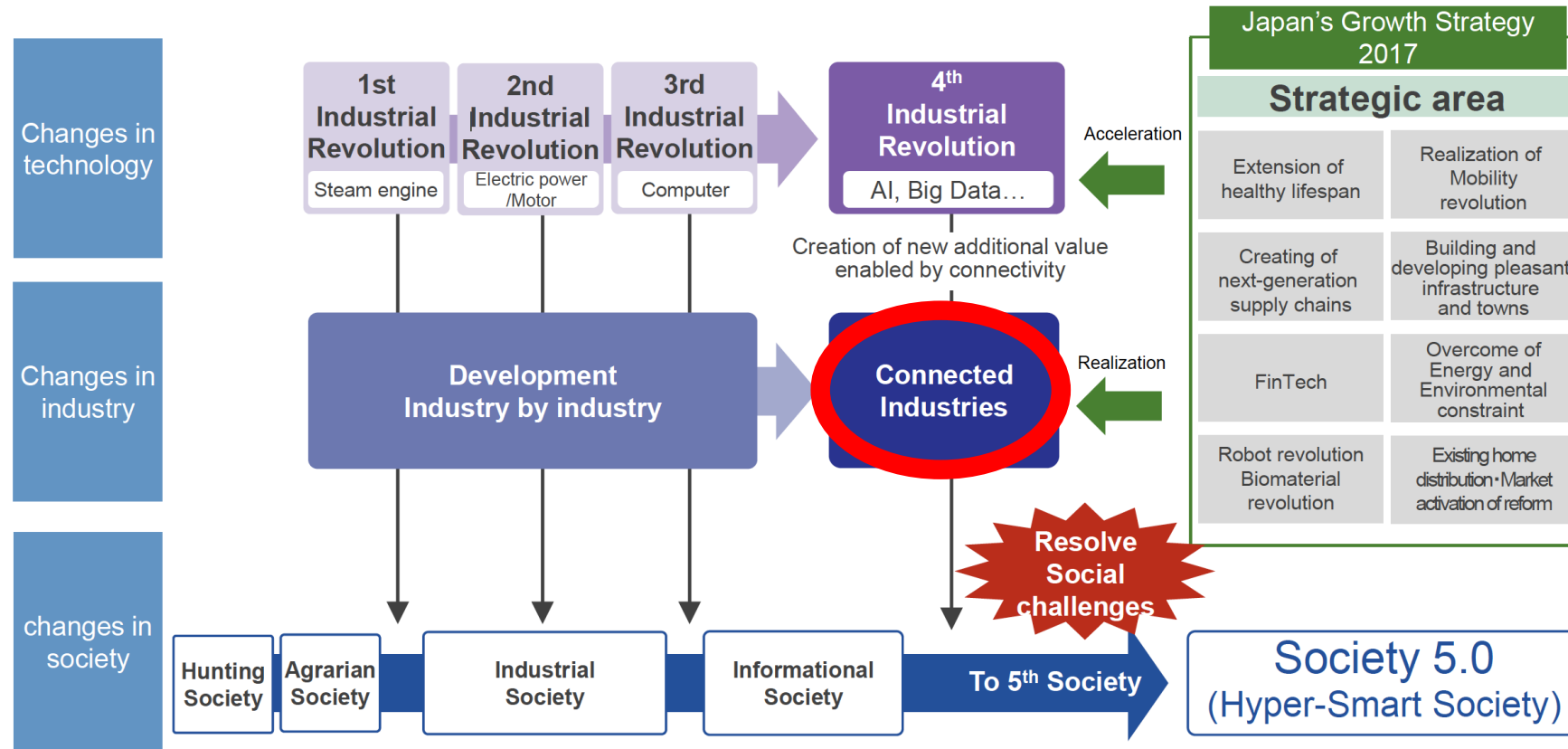
True story of a **confluence of storms** destroying the *Andrea Gail* and its crew off the shore of Gloucester, Massachusetts.

...it is the best of times, it is the worse of times...

JAPAN'S 'SOCIETY 5.0'

Abenomics 'Growth Strategy 2017 - accelerate '4th Industrial Revolution' and materialize 'Society 5.0'

'Society 5.0' or hyper-smart society is the society where technology solves social challenges and corresponds to various requirements thereby providing comfort living for everyone



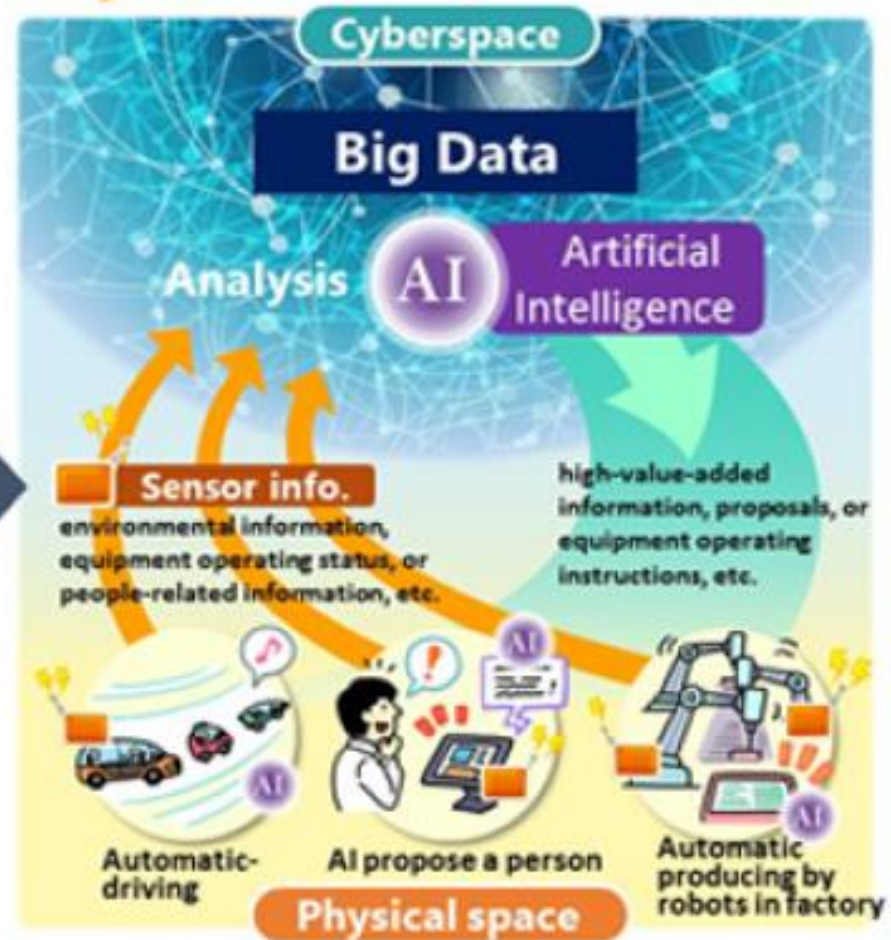
(Source: Compiled by Industry Research Department Mizuho Bank, Ltd.)

Current information society (4.0)



[source: CAO,Japan]

Society 5.0

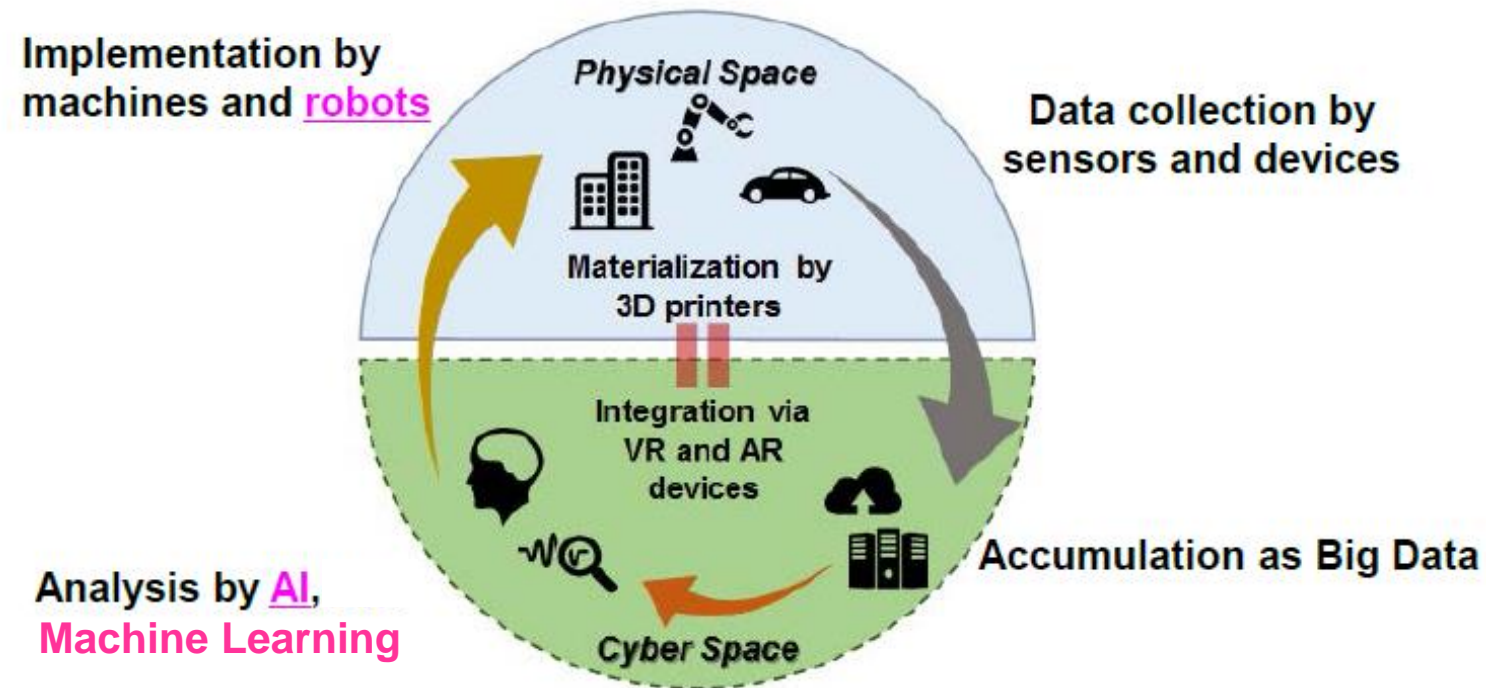


https://www8.cao.go.jp/cstp/english/society5_0/index.html

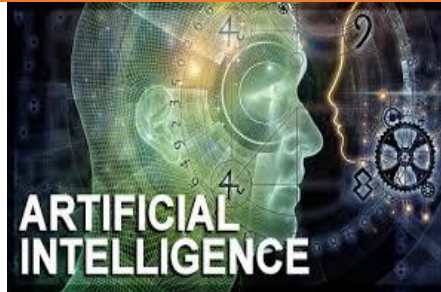
A human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates **cyberspace** and **physical space** (Video: Sophia & Jack)

INTERACTION OF THE CYBER SPACE AND THE PHYSICAL SPACE

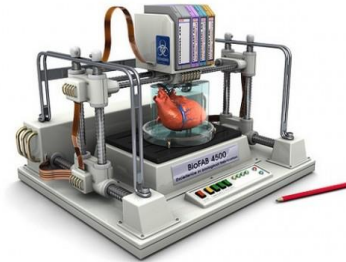
- ❑ The foundation to underpin the reform is a creation of new values by integration of cyber space and physical space (CPS) with rapid evolution of ICT as a background.
- ❑ Value creation is also accelerated by AI and robots based on CPS.



Emerging Technology Breakthroughs



Sophia the social Robot



3 D Printing



Autonomous Car



Virtual Reality



AlphaGo
• March, 2016



Alpha Go

(Tapsir, 2017)

DISRUPTIVE TECHNOLOGIES

THE MOST USED/ABUSED SLIDE

 **UBER** The world's largest taxi company owns no vehicles

 **airbnb** The largest accommodation provider owns no real estate

 **facebook** The most popular media provider creates no content

 **Instagram** The most valuable photo company sells no cameras

 **NETFLIX** The fastest growing television network lays no cables

 **Alibaba.com** The most valuable retailer has no inventory

????? **University without campus** [Video \(3:37\)](#)

None of these six companies existed twenty years ago

Intellectual Inputs
REPLACE natural resources or physical endowment as key catalyst of growth and development

New networked economy (replaces Industrial economy)
Industry 4.0: **gritty, interference, collaboration, sharing, business**

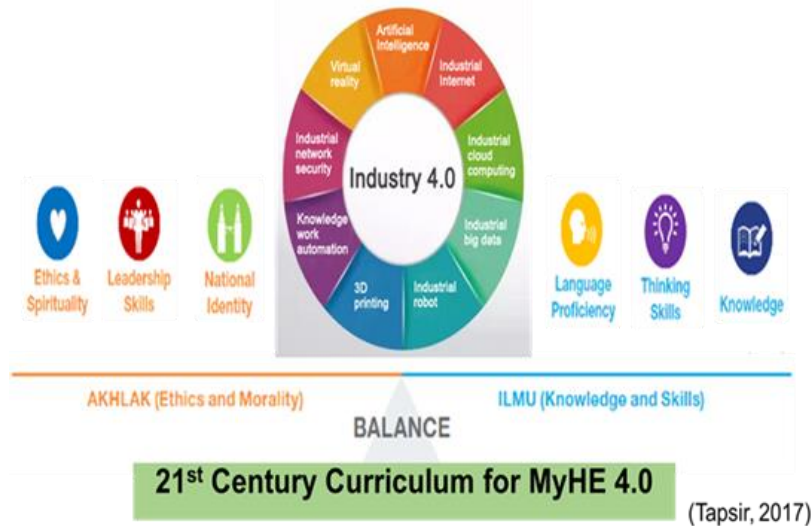
HUMANITY

REMOVAL OF THE MIDDLEMAN

IN MALAYSIA.....



**HAPPINESS, LOVE & MUTUAL RESPECT
(Maszlee, 2018;2019)**



HIGHER EDUCATION 4.0

KNOWLEDGE INDUSTRY HUMANITY



To nurture future leaders with a sense of love, care and compassion for others

(MOHE, 2018)

NATIONAL EDUCATION PHILOSOPHY (1996)

Education in Malaysia is an **on-going effort** towards further **developing the potential of individuals** in a **holistic and integrated manner**, so as to produce individuals who are **intellectually, spiritually, emotionally** and **physically balanced** and **harmonious**, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are **knowledgeable and competent**, who possess **high moral standards**, and who are responsible and capable of achieving high level of **personal well-being** as well as being able to contribute to the **harmony and betterment of the family, the society and the nation at large.**

UNDER THE **VUCA**
ENVIRONMENT



THE **BIG PICTURE**
WAS LOST.....

IT BECAME **FRAGMENTED**

CHANGES IN MALAYSIAN HE LANDSCAPE

FLEXIBLE CURRICULUM
(Content; MOOCs; Admission)

LIFE LONG LEARNING

INDUSTRY INPUT
(CEO@Faculty; 3u1i; IAP)

LEARNING BEYOND
CLASSROOMS

MQF 2017 @MQF2.0

COPPA 2017 @COPPA2.0

INDUSTRY4.0

SETARA 2019

SOCIETY5.0

HE4.0

SUSTAINABLE DEVELOPMENT GOALS

EMBRACING DISRUPTIVE
TECHNOLOGIES

ASSESSMENT WITHOUT
EXAMINATIONS

BEYOND PEDAGOGY and
ANDRAGOGY

MORE EMPHASIS ON TVET



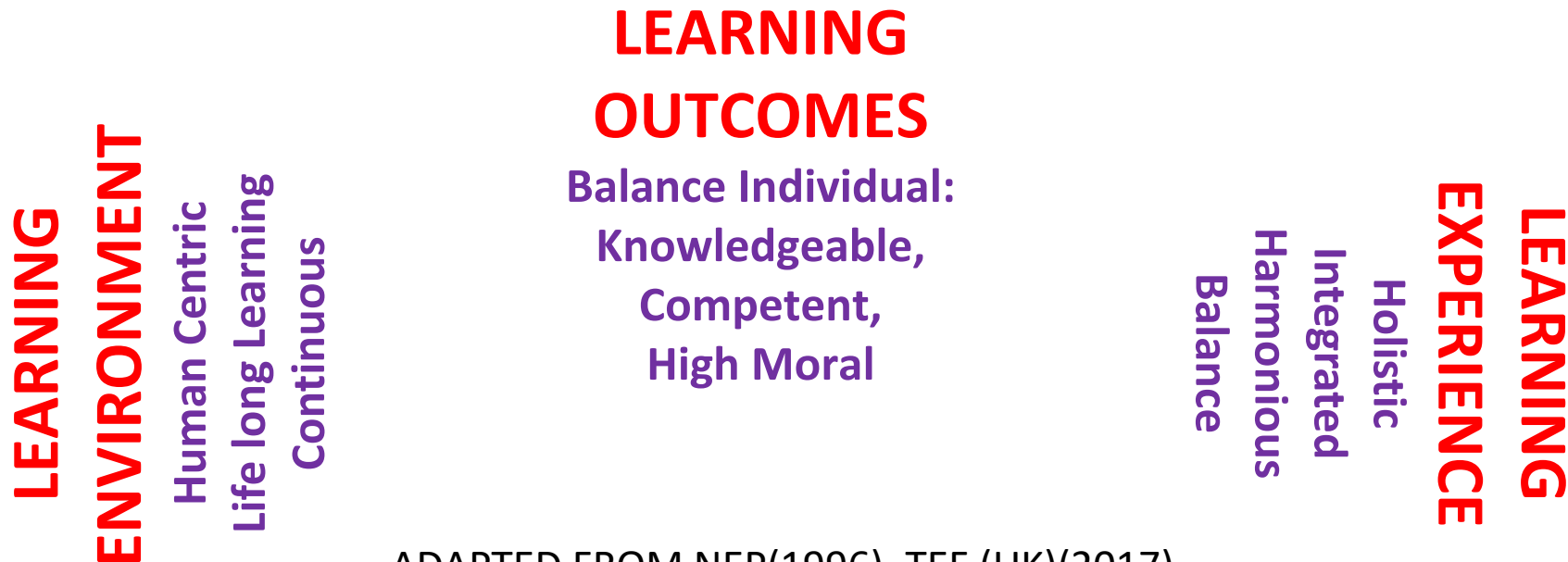
Ministry of Higher Education



TEACHING EXCELLENCE FRAMEWORK

THE REGULATORS HAD ADOPTED THE **OUTCOME-BASED EDUCATION** (OBE) PHILOSOPHY ALIGNED TO NEP (1996).

LEARNING OUTCOMES MUST BE ADDRESSED IN THE FOLLOWING CONTEXT:



ADAPTED FROM NEP(1996), TEF (UK)(2017)

MODULE 2

Future Skillsets

OUTCOMES

At the end of this module participants will be able to:

- Compare future skillsets proposed by various entities.

VARIOUS VIEWS ON SKILLSETS OF THE FUTURE

Employers Rating of Skills/Qualities – (NACE, 2002)

2002

1.	Communication (verbal & written) (3)	4.69
2.	Honesty/Integrity (5)	4.59
3.	Teamwork skills (3)	4.54
4.	Interpersonal skills (3)	4.50
5.	Strong work ethics (5)	4.46
6.	Motivation & initiative (4)	4.42
7.	Flexibility/adaptability (4)	4.41
8.	Analytical skills (2)	4.36
9.	Computer skills (3)	4.21
10.	Organisational skills (3)	4.05
11.	Detail oriented (2)	4.00
12.	Leadership skills (3)	3.97
13.	Self confidence (4)	3.95
14.	Friendly/outgoing personality (4)	3.85
15.	Well mannered / polite (5)	3.82
16.	Tactfulness (3)	3.75
17.	GPA (3.0 or better) (1,2)	3.68
18.	Creativity (2)	3.59
19.	Sense of humour (4)	3.25
20.	Entrepreneurial skills/risk taker (4)	3.23



Five CLUSTERS of MQF2.0

1 Knowledge

2 Cognitive

3 Functional

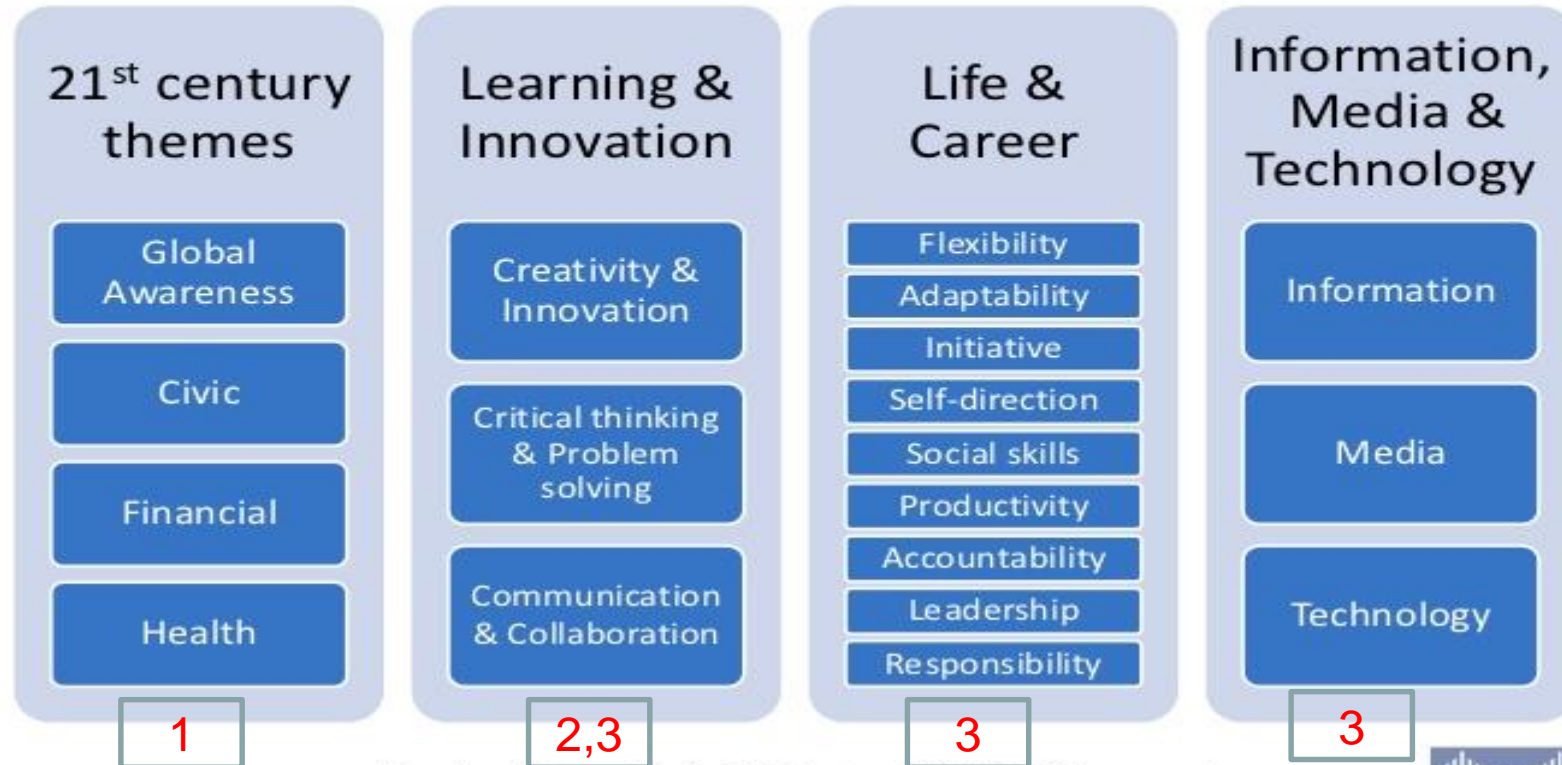
4 Personal/Entrepreneurial

5 Ethics/Professionalism

(National Association of Colleges and Employers, 2002)

Definition of 21st century skills

2009



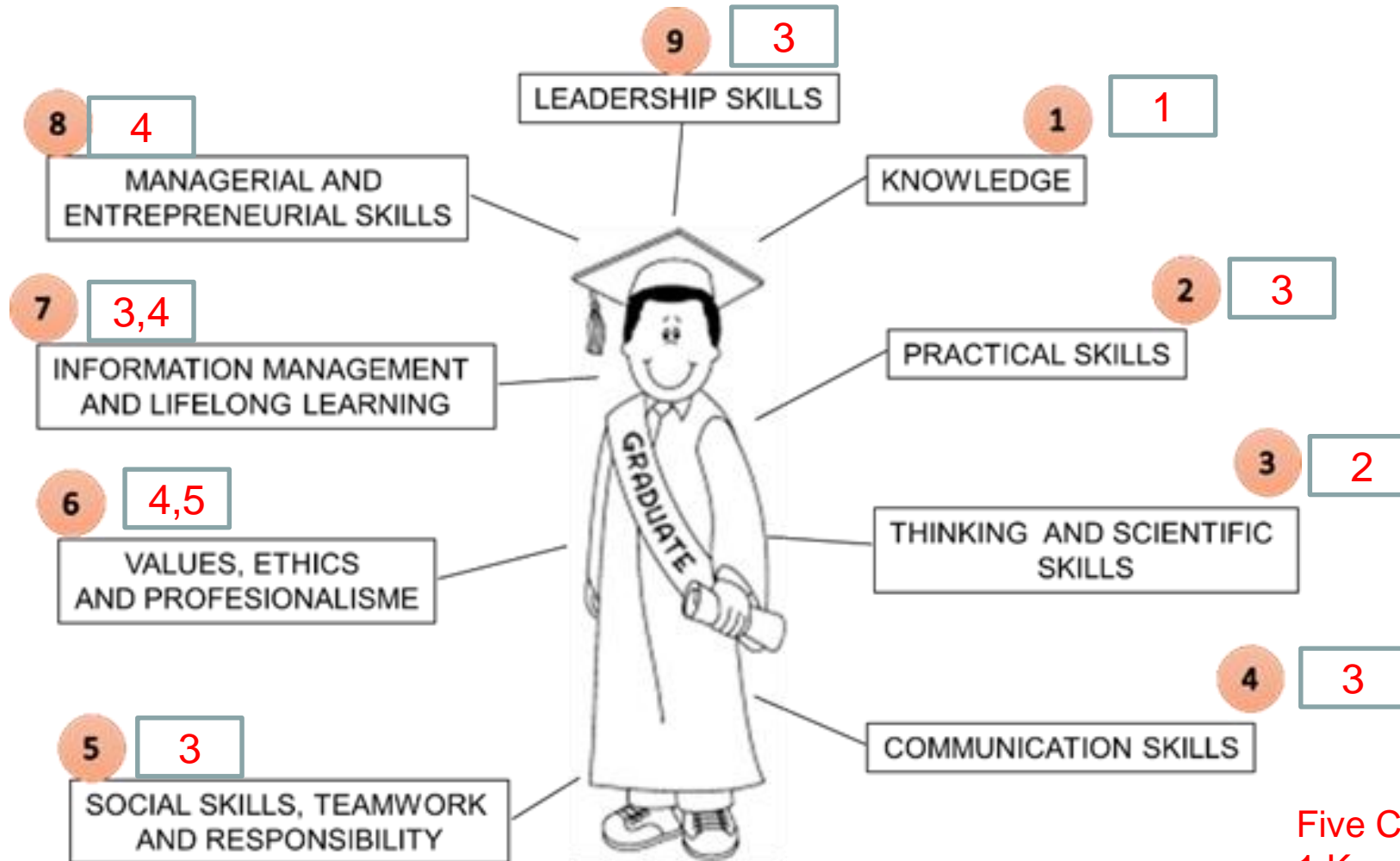
Based on Partnership for 21st Century Skills (P21) Framework

(2009)



HOW DO WE TAKE THESE ON BOARD IN WRITING PLO STATEMENTS?

2011



(MOHE,2011)

Five CLUSTERS of MQF2.0
1 Knowledge
2 Cognitive
3 Functional
4 Personal/Entrepreneurial
5 Ethics/Professionalism



Sense-making

1,2



Social intelligence

3



Novel & adaptive thinking

2



Cross-cultural competency

3



Computational thinking

2,3



New media literacy

3



Transdisciplinarity

2,3



Design mindset

2



Cognitive load management

2



Virtual collaboration

3

Five CLUSTERS of MQF2.0

- 1 Knowledge
- 2 Cognitive
- 3 Functional
- 4 Personal/Entrepreneurial
- 5 Ethics/Professionalism

2019

ATTRIBUTE	% OF RESPONDENTS	
Communication skills (written)	82.0%	3
Problem-solving skills	80.9%	2
Ability to work in a team	78.7%	3
Initiative	74.2%	4
Analytical/quantitative skills	71.9%	2
Strong work ethic	70.8%	5
Communication skills (verbal)	67.4%	3
Leadership	67.4%	3
Detail-oriented	59.6%	2
Technical skills	59.6%	2
Flexibility/adaptability	58.4%	4
Computer skills	55.1%	2,3
Interpersonal skills (relates well to others)	52.8%	3
Organizational ability	43.8%	2
Strategic planning skills	38.2%	2
Tactfulness	25.8%	2
Creativity	23.6%	2
Friendly/outgoing personality	22.5%	4
Entrepreneurial skills/risk-taker	16.9%	4
Fluency in a foreign language	11.2%	3

Attributes Employers Seek on a Candidate's Resume

Source: *Job Outlook 2019*, National Association of Colleges and Employers

- Five CLUSTERS of MQF2.0
- 1 Knowledge
 - 2 Cognitive
 - 3 Functional
 - 4 Personal/Entrepreneurial
 - 5 Ethics/Professionalism

2016

WORK OF THE FUTURE:

- Customise NOT mass services
- Work on demand replacing regular jobs
- Most present jobs replaced by yet to exist jobs

NEED to develop content with the industry

UNIVERSITIES NEED to create NEW Business Model



Top 10 skills in 2020

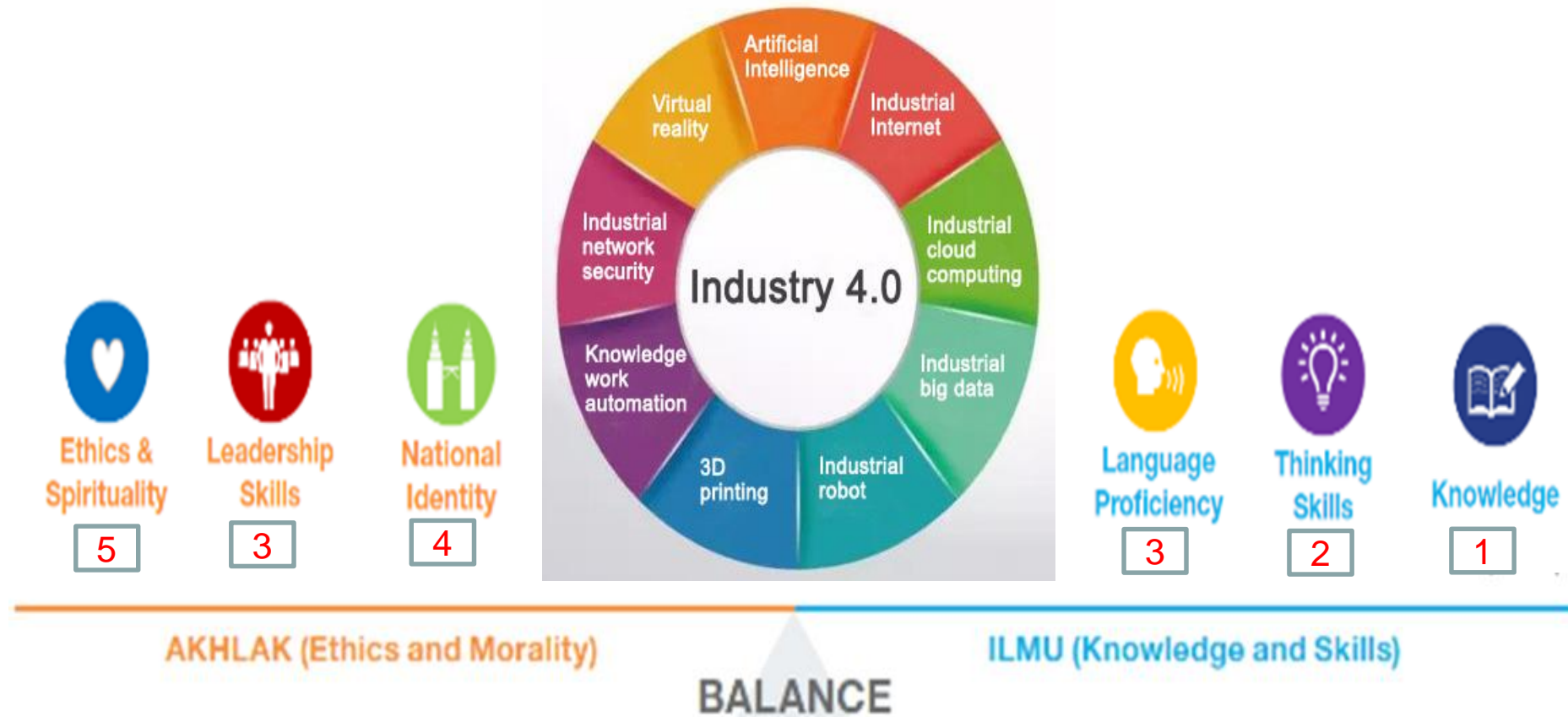
1.	Complex Problem Solving	2	
2.	Critical Thinking	2	
3.	Creativity	2	
4.	People Management		3
5.	Coordinating with Others		3
6.	Emotional Intelligence		3
7.	Judgment and Decision Making	2	
8.	Service Orientation		3
9.	Negotiation		3
10.	Cognitive Flexibility	2	

Source: *Future of Jobs Report*, World Economic Forum 2016

ARE THESE OUTCOMES/SKILLSETS “FUTURE PROOF”?

Curriculum Content

2015



21st Century Curriculum for MyHE 4.0

(Tapsir, 2017)

2017

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OUTCOMES - MQF

1. Knowledge & understanding
2. Cognitive skill/problem solving
3. Practical-work skills, specialized, technical /organizational skills
Interpersonal skills
Communication skills
Digital skills
Numeracy skills
Leadership & team skills
4. Personal-autonomous, LLL, value, self- development / Entrepreneurial Skills
5. Ethics & Professionalism

LEARNING OUTCOMES BY VARIOUS REGULATORS (Zita, 2018)

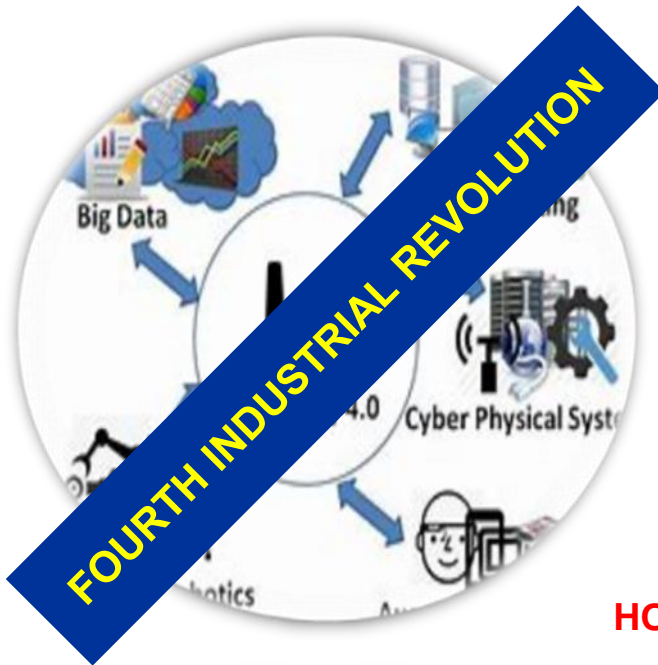
	5 CLUSTERS (AQRF)	MQF 2.0 (2017)	MQF 1.0 (2007)	MOHE (2011)
LO By Malaysian Regulators are to support NEP (1996) & MEB (2015-2025) (HE)	Knowledge	1. Knowledge & understanding	Knowledge	Knowledge
	Cognitive competency	2. Cognitive skills	Problem solving & scientific skill	Critical Thinking and scientific skills
	Functional Work Skills	3. Practical skills	Practical skills	Practical skills
		4. Interpersonal skills	Communication, leadership, team skills	Communication
		5. Communications	Social skills & responsibilities	Social skills, team work and responsibility
		6. Digital skills	Value, attitudes and professionalisms	Value, ethics and professionalism
		7. Numeracy skills	Managerial & entrepreneurship skills	Managerial & Entrepreneurship skill
		8. Leadership, autonomy and responsibility	Information management & LLL skills	Information management & LLL skills
	Personal & Entrepreneurial Skill	9. Personal skills 10. Entrepreneurial Skills		Leadership skills
	Ethics & Professionalism	11. Ethics & professionalism		

2018



HAPPINESS, LOVE & MUTUAL RESPECT
(Maszlee, 2018;2019)

4,5



HIGHER EDUCATION 4.0

KNOWLEDGE INDUSTRY HUMANITY

Humanising the 4IR



To nurture future leaders with a sense of love, care and compassion for others

4,5

(MOHE, 2018)

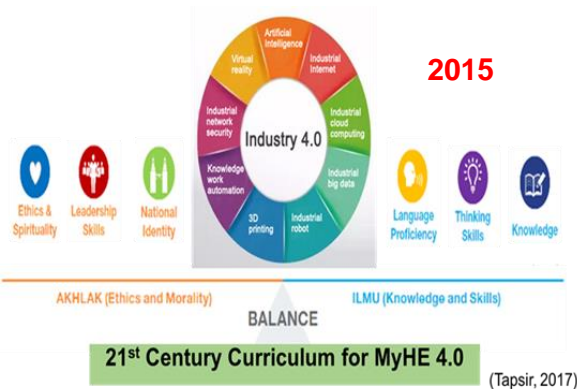
HOW DO WE TAKE THESE ON BOARD IN WRITING PLO STATEMENTS?

SKILLSETS/GRADUATE ATTRIBUTES OF THE FUTURE

Definition of 21st century skills 2009

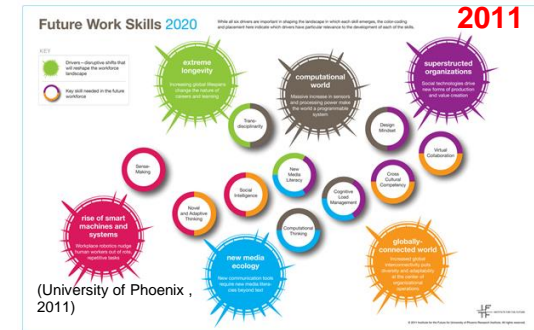


Based on Partnership for 21st Century Skills (P21) Framework



MQF2.0 2017

1. Knowledge & understanding
2. Cognitive skill/problem solving
3. Practical-work skills, specialized, technical /organizational skills
- Interpersonal skills
- Communication skills
- Digital skills
- Numeracy skills
- Leadership & team skills
4. Personal-LLL, value ,self-development /autonomous entrepreneurship
5. Ethics & Professionalism



WORLD ECONOMIC FORUM Top 10 skills 2016 in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

Source: Future of Jobs Report, World Economic Forum 2016

MQF 2.0	OTHER COMPLEMENTING FUTURE SKILLSETS
1. Knowledge & understanding	Sense making;
2. Cognitive skills	Critical Thinking/Creative Thinking; Design mind-set/Novel & Adaptive Thinking; Cognitive Flexibility/Complex Problem Solving; Transdisciplinarity
3. Practical skills	
4. Interpersonal skills	Collaboration; Cross-cultural competency/Social Intelligence; Coordinating with others/People management; Mutual Respect
5. Communications	Language Proficiency;
6. Digital skills	Information/Media-Technology; New-media literacy/Virtual Collaboration;
7. Numeracy skills	Complex problem solving
8. Leadership, autonomy and responsibility	Compassion; Mutual Respect; National identity;
9. Personal skills 10. Entrepreneurial Skills	Negotiation/Service Orientation; Happiness/Love/Care
11. Ethics & professionalism	Spirituality; Accountability;

CHALLENGES IN DEFINING OUTCOMES/SKILLSETS FOR THE FUTURE

- Defining Skillsets for an unknown future (volatile, uncertain, complex, ambiguous) with emerging jobs.
- Should students be trained for skillsets rather than discipline?
- Defining Skillsets for world without borders (**Mutual Respect & Tolerance**).
- Defining Skillsets that applies across multiple disciplines (**4Cs; LLL; programming & ICT**).
- Standards on Skillsets should be ensured through valid and reliable assessment with relevant performance criteria.

MODULE 3

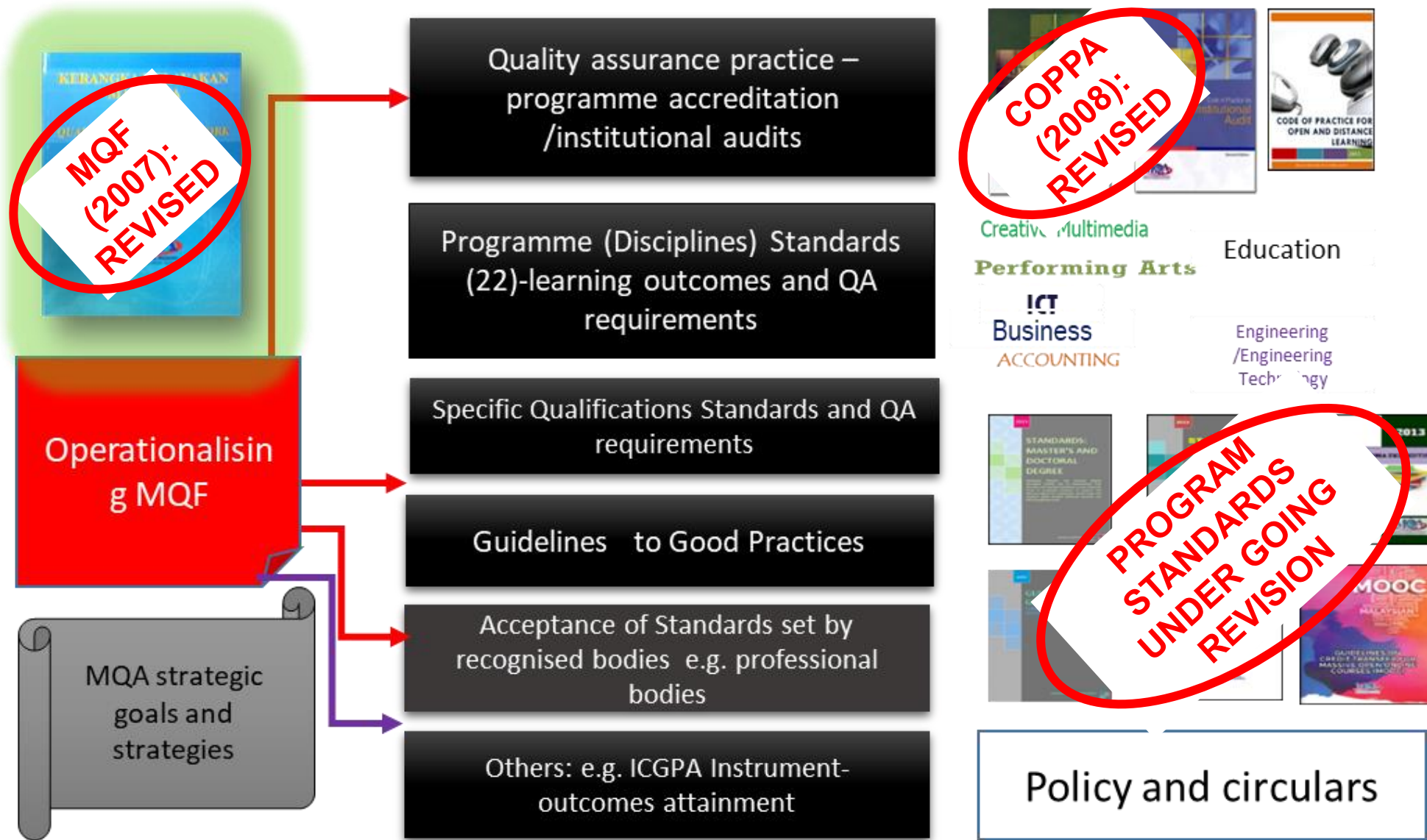
MQF 2.0

OUTCOMES

At the end of this module participants will be able to:

- Incorporate the new requirements in MQF 2.0 into the design, operation and monitoring of academic programmes.

DOCUMENTS SUPPORTING MQF



(Zita, 2018)

FROM MQF (2007) TO MQF (2017)

COMPLIANCE FOR PA BY 1 APRIL 2019
COMPLIANCE FOR FA BY 1 APRIL 2020

MQF (2007): AN OVER-ARCHING FRAMEWORK

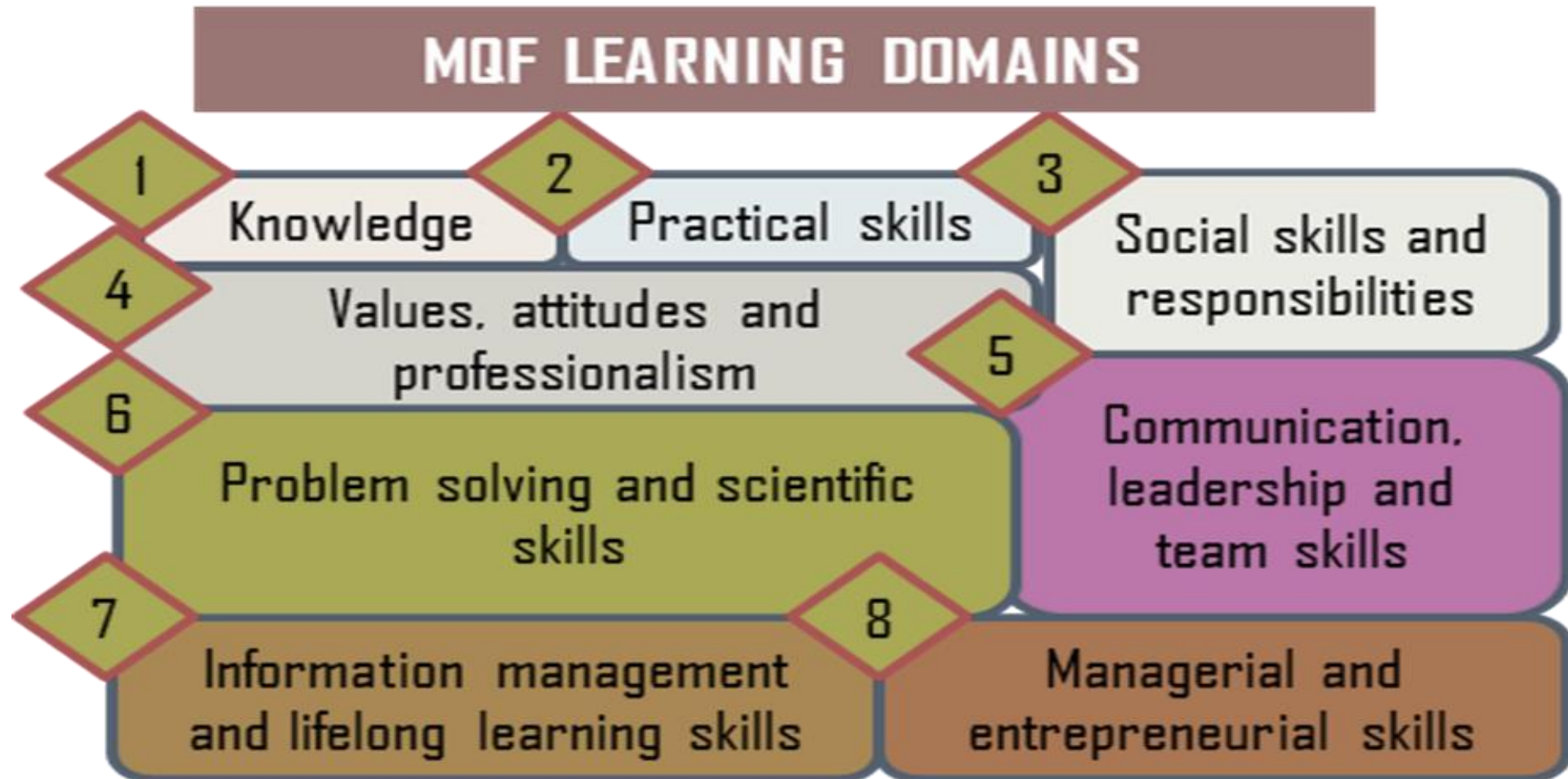
MQF Level	Credits	Sectors			Lifelong Learning			
		Skills	Vocational & Technical	Academic				
8	-				Accredited Prior Experiential Learning			
7	- 40 30 20					Doctoral		
6	120 60 30					Masters Postgraduate Cert & Dip		
5	40	Advanced Diploma	Advanced Diploma	Advanced Diploma				
4	90	Diploma	Diploma	Diploma				
3	60	Skills Cert 3	Certificate	Certificate				
2		Skills Cert 2						
1		Skills Cert 1						

Each level has level descriptors – standards of learning to be achieved

MQF LEVELS

- Depth, complexity and comprehension of knowledge
- Application of knowledge
- Degree of autonomy and creativity
- Communication skill
- Breadth and sophistication of practices

MQF (2007): LEARNING DOMAINS



MALAYSIAN QUALIFICATIONS FRAMEWORK

- 1 A national instrument-8 levels in the grid
- 2 for the development, classification, systematization, and recognition all qualifications and learning achievements;
- 3 based on learning outcomes and generic level descriptors;
- 4 Sets minimum credits requirements linked to student's academic load;
- 5 Qualifications from HE, TVET and Skills sectors
- 6 Which supports access, progress and lifelong learning.

(MQF, 2007)

A MODEST REVISION OF THE MQF (2007)

The revised MQF serves three expectations:

- to enhance **competencies** and **potential** of learner regardless of sectors for themselves and national needs to quality talent and citizen;
- to eliminate as much as possible the perceived divide between academic and Technical and Vocational Education and Training (TVET) qualifications in terms of quality, relevance, standards and rigour;
- to establish a strong relationship between the two and **lifelong learning**.

(MQF, 2017)

A MODEST REVISION OF THE MQF (2007)

- ✓ Main structure remains as a comprehensive national framework;
 - ✓ 8 Qualification Levels & Credits System remains & updated.
 - ✓ Directed to 2 sectors (academic and TVET).
- ✓ Learning Outcomes remained, explained but clustered, clarified and enhanced for better talent-lifelong competencies, education and employment.
- ✓ Improve understanding to learners, programme designers and users of qualifications of **expected capabilities of learners**.

(MQF, 2017; Zita, 2018)

MQF-LEVEL OF QUALIFICATIONS (2007)

MQF Level	Credits	Sectors			Lifelong Learning
		Skills	Vocational & Technical	Academic	
8	-			Doctoral	Accredited Prior Experiential Learning
7	- 40 30 20			Masters Postgraduate Cert & Dip	
6	120 60 30			Bachelor Graduate Dip Graduate Cert	
5	40	Advanced Diploma	Advanced Diploma	Advanced Diploma	
4	90	Diploma	Diploma	Diploma	
3	60	Skills Cert 3	Certificate	Certificate	
2		Skills Cert 2			
1		Skills Cert 1			

MQF-LEVEL OF QUALIFICATIONS (2017)

MQF Level	Minimum Graduating Credit	Academic Sector	TVET Sector
8	No credit rating 80	PhD by Research Doctoral Degree by Mixed Mode & Coursework	
7	No credit rating 40	Master's by Research Master's by Mixed Mode & Coursework	
6	30	Postgraduate Diploma	
	20	Postgraduate Certificate	
5	120	Bachelor's degree	
	66*	Graduate Diploma	
	36*	Graduate Certificate	
4	40	Advanced Diploma	5
3	90	Diploma	4
2	60	Certificate	3
1	30	Certificate	2
1	15	Certificate	1

* Inclusive of 6 credits from general studies subjects.

Changes: Learning Outcomes

General notes:

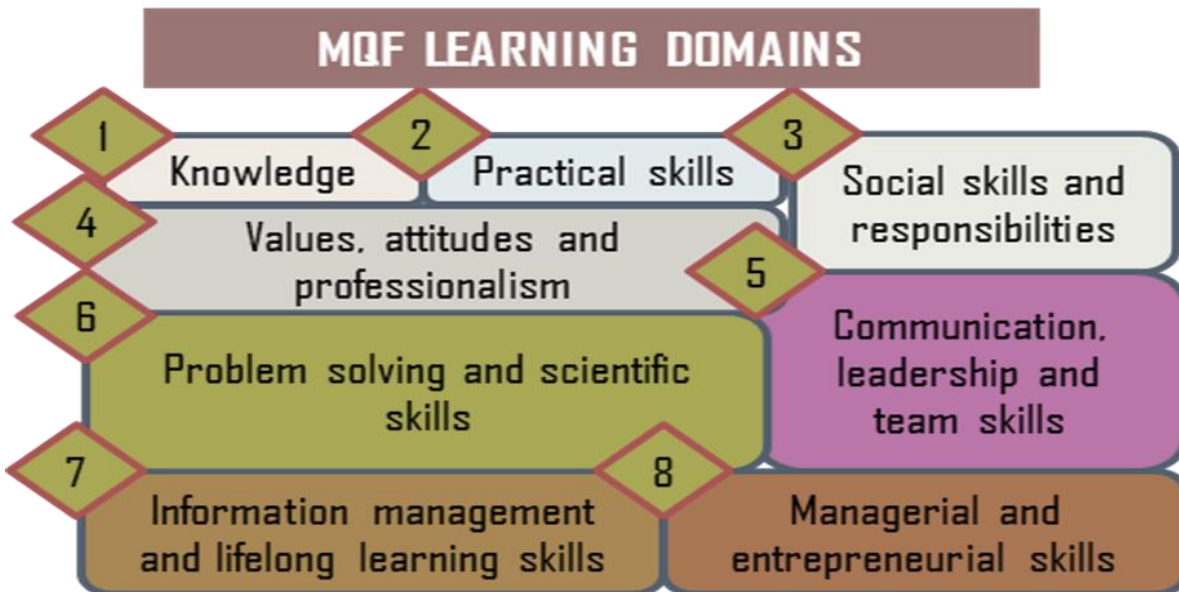
- Generic & contextualised application: academic, professional, technical & vocational and work.
- Action verbs.
- Reflects **continuum of learning**.
- **Progressive complexity**.
- LOs are generally **interconnected** and **integrated** in application.

**VERY MUCH ALIGNED
TO NEP (1996)**

MQF (2017): 5 CLUSTERS OF LEARNING OUTCOMES

.....remained but clustered, explained, clarified and enhanced.....

MQF (2007): LEARNING DOMAINS



<p>1. <u>Knowledge</u> _insights into facts, ideas, theories, skills aspects – technicalities/ specialization (information/ media literacy?)</p>	<p>2. <u>Cognitive skills application</u> (R Blooms) Remember Understanding Applying Analysing Evaluating Creating</p>	<p>3. <u>Functional skills application</u> –cross critical skills includes</p> <ul style="list-style-type: none"> • work skills (practical, technical, specialized) • Interpersonal & communications, • Digital, numeracy • Leadership & team skills
<p>5. <u>Ethic and professionalism</u></p>	<p><u>Application (applied and integrative approach) in context and responsibility</u></p>	<p>4. <u>Personal skill-</u> autonomous lifelong learner, self development, reflective, proactive and values <u>Entrepreneurial skills</u></p>

LEARNING OUTCOMES BY VARIOUS REGULATORS (Zita, 2018)

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	Personal & Entrepreneurial Skill	9. Personal skills 10. Entrepreneurial Skills		Leadership skills
	Ethics & Professionalism	11. Ethics & professionalism		

NEP* (1988;1996)

*1988-Falsafah Pendidikan Kebangsaan; 1996-Falsafah Pendidikan Negara

WHY IS NEP STILL RELEVANT AFTER 30 YEARS?

1. Education ought to be **continuous** (not flip-flop), **holistic** and **integrated** (not sliced or segregated as it is today)
2. **Balance** and **harmonic** to expand the potential of individuals into that of a complete person (insan), meaning education is “**human-centric**”. Not technology-centric. Technology is important but not so if it dehumanises the humans.
3. A complete person: intellectual, physical, emotional and spiritual.

A robust philosophy is good for all season with no “best before” or “expiry date”. It is timeless, comprehensive, forward looking and resilient.

WE have neglected this philosophy in favour of the mill of numbers, figures and percentages frequently associated with KPIs.

OUTCOMES – MQF (2017)

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1. Knowledge & understanding

2. Cognitive skill/problem solving

3. Practical-work skills, specialized, technical /organizational skills

Interpersonal skills

Communication skills

Digital skills

Numeracy skills

Leadership & team skills

4. Personal- autonomous,LLL, self-development, value/ Entrepreneurial Skill

5. Ethics & Professionalism

CHANGES: LEARNING OUTCOMES (COGNITIVE COMPETENCE)

- **Knowledge** and understanding/ comprehension/ seeking;
 - Information literacy and insights
 - **Broad range and specialised**
- Context identified : knowledge -study/academic and/or work/TVET
- **Cognitive skills application**
 - Comprehension, critical, analytical ,creative, problem solving –what skill/activities required to solve problems?

(MQF, 2017; Zita, 2018)

CHANGES: LEARNING OUTCOMES (FUNCTIONAL SKILLS-GENERIC AND CROSS CUTTING)

- *Practical/scientific* –work skills generic /specialised-organizational/managerial, processes, practice -variety and levels
- *Interpersonal skills* (people skills)
- *Communications* skills-language skills
- *Leadership* and *team* skills
- *Digital skills*
- *Numeracy skills*

(MQF, 2017; Zita, 2018)

Digital skills/literacy-

(previously relates to Information Management LO)

Digital literacies are those capabilities which fit an individual for living, learning and working in a digital society.

Key points :

- **Tools related to learning, tasks and work**
- **Critical cross functional skills**
- Connected to cognitive, functional, people's skills, personal, ethics and professional skills
- Quality of education –flexibility /innovative
- Employability /high skills in digital economy
- 4th IR

- Academic digital literate.
- Institutional commitment and strategies.
- How? Curriculum design/delivery and generally discipline related.
- Learning skills and ICT literacy-tools?
- Learning outcomes, tasks and assessments.
- Assessing Learners' needs.
- Staff and resources availability.
- PDCA.

HOW MUCH DO YOU KNOW ABOUT

**ARTIFICIAL
INTELLIGENCE**

CROWDFUNDING

CROWDSOURCING

**3-D
PRINTING**

**MICRO-
CREDENTIAL**

**AUGMENTED
REALITY**

BIG DATA

IoT

**DATA
ANALYTICS**

BLOCKCHAIN

Numeracy/ mathematical skills

essential living skills-(quantitative literacy)

Tools –study, tasks or work related

-curriculum-discipline related

- logic thinking?

-e.g.

Ability to interpret

Representation

Calculation

Application

Assumptions

Communication



(MQF, 2017; Zita, 2018)

CHANGES: PERSONAL DEVELOPMENT SKILLS & ETHICS/PROFESSIONALISM

Personal skills managements /self regulated learning-LLL

- Learning to learn, to do, to be and live together
- Overlaps – shaping personal values, social responsibility and skills
- Incorporate in teaching and learning activities



Ethics and Professionalism

Professional attitude and practices
Code of conduct-ethics
Research, Social, economic, technological
and environmental responsibility



CHANGES: ENTREPRENEURIAL

Entrepreneurial skills
-developmental and
incremental
outcomes



UiTM- RESEARCH INTENSIVE ENTREPRENEURIAL UNIVERSITY

ENTRPRENEURIAL CHARACTERISTICS

- INDEPENDENT/SELF-DIRECTED (BERDIKARI)
 - RISK TAKER
 - INQUISITIVE MINDSET
 - INNOVATIVE MINDSET
 - CRITICAL THINKING
 - CREATIVE THINKING
 - GOOD COMMUNICATION SKILLS

CHANGES: APPLICATION CONTEXT & RESPONSIBILITY

(applied competence & affective competence)

- The learning outcomes descriptors are applied in context of study and work/practice
- Context: Simple, highly routine-structured to most complex and novel situation
- The levels also guides on level of responsibilities-autonomy and accountability (degree of independence)

(MQF, 2017; Zita, 2018)

LEVEL DESCRIPTORS AND PURPOSES (MQF2017)

Each level in MQF is provided with **a generic descriptive statement** in qualitative terms, which **describes the learning achievement** at a particular level.

The levels' descriptors define the **expected knowledge, capabilities and/or competencies** of learners on successful completion of the learning programmes (at a particular level) in the context of work and study.

Indicates the expected level of assessment & attainment of Domains

- Vertical – progression/accumulated generally
- Horizontal reading – Holistic and integrated reading

MQF (2017): APPENDIX 2

NO CHANGE ON CREDITS IN MQF

Credit criterion framework

- Policies on credit accumulation, transfers and exemption.
- Volume of learning for learning outcomes /1:40 NLH.
- May differ between academic, TVET and Professional practices.
- LLL – access, progression, APEL-A/C/Q, MOOCs, micro-credentials / qualifications.
- Social, economic and political impact.
- International comparability – internationalization, mobility and exchanges.

NO REVISION ON QUALIFICATION TITLES

Articulation & Pathway: Open access for Levels 1&2

(MQF, 2017; Zita, 2018)

CONCLUSION

Teaching & Learning and assessment will **support personal growth** and **develop broader capabilities or competencies; more knowledge, better cognitive skills, obtaining new work and personal skills.**

Learners are expected to be able to continue to perform and improve these competencies in their working life and further education

(MQF, 2017)

Learning to know...learning to do...learning to live together...learning to be.

(Jacques Delors, Ex- EC President, opening of the Int. Congress on Lifelong Learning, 7/11/2011, San Sebastián, Spain)

MODULE 4

COPPA 2.0 & SRR

OUTCOMES

At the end of this module participants will be able to:

- Incorporate the new requirements in COPPA 2.0 into the design, operation and monitoring of academic programmes.
- Develop a framework for writing the SRR taking into account the 7 Areas of COPPA in relation to the learning environment, the learning experience and the learning outcomes.

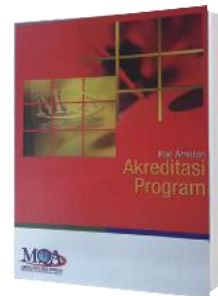
FROM COPPA (2008) TO COPPA (2017)

COMPLIANCE FOR PA & FA/MA BY 1 APRIL 2018

REVISION OF THE COPPA (2017)

STEPPING BACK TO LOOK A HEAD

1. The COPPA approved on 18th January 2008 and first published in September 2008.
2. COPPA guides the higher education providers (HEPs) and MQA **in assuring the quality of educational programmes** offered by HEPs.
3. Section 2, COPPA contains **nine (9) areas of evaluation for quality assurance**, with **two (2) attainment levels**, i.e. basic standards and enhanced standards.



COPPA 2017: THE REVIEW PROCESS

- ✓ **Streamline and strengthen** the standards based on the current Quality Assurance (QA) requirements.
- ✓ **Restructure** the areas of evaluation and reduce redundancy of the standards for better reports of accreditation exercise.
- ✓ **Align** to the regional QA frameworks.

COPPA 2017 @COPPA2.0

- The review primarily **focused on the standards for accreditation in Section 2** COPPA, while the rest of the sections in the COPPA were basically reviewed in terms of updating information about the agency, and related forms and processes.
- Section 1 – About MQA & MQF
- **Section 2 – 98 Standards**
- **Section 3 – Programme submission by HEP**
- **Section 4 – Programme accreditation**
- Section 5 – Panel of Assessors
- Section 6 – Accreditation Report



**COPPA2.0 approved at MQA Council Meeting
No. 7/2016 on 14 November 2016**

KEY CHANGES IN COPPA 2017 & APPLICATIONS

- **SEVEN** areas of evaluation instead of 9 in COPPA 2008. Two areas with close affinity **merged**.
- **NO** enhanced standards. Benchmark standards streamlined into 98 standards (from 100 Benchmark and 59 Enhanced standards).
- **NEW** standards – financial viability, IQA unit, student record & alumni engagement.
- **APPLICATION** for PA and FA – softcopy with evidenced hyperlinked; additional information (attrition; programme details; 3 years financial statement, course info in standard excel format; **self review** of ALL standards using Excel instrument.
- POA will **REPORT** findings & judgement using the same Excel instrument. Report auto generated from the Excel inputs.
- **NEW** requirement for nF2F GUIDED learning.

THE 7 AREAS OF EVALUATION FOR PROGRAMME ACCREDITATION



REVISION: MAPPING SECTIONS 2, 3 & 5

AREA 1: PROGRAMME DEVELOPMENT AND DELIVERY¹

Mapping of COPPA 2 nd Edition 2017		
Section 2: Criteria and Standards for Programme Accreditation	Section 3: Submission for Programme Accreditation	Section 6: Guidelines for Preparing the Programme Accreditation Report
1.1 Statement of Educational Objectives of Academic Programme and Learning Outcomes	1.1 Statement of Educational Objectives of Academic Programme and Learning Outcomes	5.1.1 Statement of Educational Objectives of Academic Programme and Learning Outcomes
1.1.1 The programme must be consistent with, and supportive of, the vision, mission and goals of the HEP.	1.1.1 Explain how the programme is in line with, and supportive of, the vision, mission and goals of the HEP.	5.1.1.1 How does the programme relate to, and is consistent with, the larger institutional goals of the HEP?
1.1.2 The programme must be considered only after a needs assessment has indicated that there is a need for the programme to be offered. <i>(This standard must be read together with standards 1.2.2 in Area 1, page 4 and 6.1.6 in Area 6, page 38)</i>	1.1.2 Provide evidence and explain how the department has considered market and societal demand for the programme. In what way is this proposed programme an enhanced of the other?	5.1.1.2 What are the evidence that show the demand for this programme? How was the needs assessment for the programme conducted?

CHANGES: Table 4- Course Information

Table 4: Course information

1.	Name and Code of Course:																																																																					
2.	Synopsis:																																																																					
3.	Name(s) of academic staff:																																																																					
4.	Semester and Year offered:																																																																					
5.	Credit Value:																																																																					
6.	Prerequisite/co-requisite (if any):																																																																					
7.	Course learning outcomes (CLO): CLO 1 - CLO 2 - CLO 3 -																																																																					
8.	Mapping of the Course Learning Outcomes to the Programme Learning Outcomes, Teaching Methods and Assessment:																																																																					
	<table border="1"> <thead> <tr> <th rowspan="2">Course Learning Outcomes (CLO)</th> <th colspan="9">Programme Learning Outcomes (PLO)</th> <th rowspan="2">Teaching Methods</th> <th rowspan="2">Assessment</th> </tr> <tr> <th>PLO1</th> <th>PLO2</th> <th>PLO3</th> <th>PLO4</th> <th>PLO5</th> <th>PLO6</th> <th>PLO7</th> <th>PLO8</th> <th>PLO9</th> </tr> </thead> <tbody> <tr><td>CLO 1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>CLO 2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>CLO 3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>TOTAL</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	Course Learning Outcomes (CLO)	Programme Learning Outcomes (PLO)									Teaching Methods	Assessment	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	CLO 1												CLO 2												CLO 3												TOTAL											
Course Learning Outcomes (CLO)	Programme Learning Outcomes (PLO)									Teaching Methods	Assessment																																																											
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CLO 3																																																																						
TOTAL																																																																						
	<p>Indicate the primary causal link between CLOs and PLOs in the appropriate box. (This description must be read together with the description in Area 2.)</p>																																																																					
9.	Transferable Skills (if applicable): (Skills learned in the course of study which can be useful and utilised in other settings.)																																																																					

State the pre-, co or anti-requisites

Map CLOs to PLOs – primary link ONLY

Use this to keep record of all changes made to the course.



10.	Distribution of Student Learning Time (SLT):																																																																																																					
	<table border="1"> <thead> <tr> <th rowspan="3">Course Content Outline</th> <th rowspan="3">CLO*</th> <th colspan="6">Teaching and Learning</th> <th rowspan="3">Total SLT</th> </tr> <tr> <th colspan="4">Guided Learning (F2F)</th> <th rowspan="2">Guided Learning (NF2F) e.g., e-Learning</th> <th rowspan="2">Independent Learning (NF2F)</th> </tr> <tr> <th>L</th> <th>T</th> <th>P</th> <th>O</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2">Continuous Assessment</td> <td colspan="6">Percentage (%)</td> <td>Total SLT</td> </tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2">Final Assessment</td> <td colspan="6">Percentage (%)</td> <td>Total SLT</td> </tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	Course Content Outline	CLO*	Teaching and Learning						Total SLT	Guided Learning (F2F)				Guided Learning (NF2F) e.g., e-Learning	Independent Learning (NF2F)	L	T	P	O	1								2								3								4								Continuous Assessment		Percentage (%)						Total SLT	1								2								Final Assessment		Percentage (%)						Total SLT	1								2							
Course Content Outline	CLO*			Teaching and Learning							Total SLT																																																																																											
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	<p>L = Lecture, T = Tutorial, P = Practical, O = Other F2F = Face to Face, NF2F = Non Face to Face</p> <p>*Indicate the CLO by the CLO's numbering in Item 8.</p>																																																																																																					
11.	Identify special requirement or resources to deliver the course (e.g., software, nursery, computer lab, simulation room)																																																																																																					
12.	<ul style="list-style-type: none"> Main references Additional references <p>(References include required and further readings, and should be the most current)</p>																																																																																																					
13.	Other additional information																																																																																																					

Must list all resources required to deliver course

A photograph of a university building with a crest on its roof. The crest is a shield-shaped emblem with a blue background, a white cross, and a yellow crown on top. The building is white with a dark roofline. The sky is blue with white clouds. In the foreground, there is a paved area and some trees.

HEPs ARE NOT IVORY TOWERS
REGULATORS PLAY A FACILITATING ROLE NOT
POLICING ROLE
INDUSTRY/COMMUNITY MUST BE ACTIVE
PARTNERS IN HIGHER EDUCATION

INTRODUCTION TO SRR

A mere reporting of what has been done is an easy task...

The real challenge is to:

.....reflect on what has been done,

.....critically analyse strengths & weaknesses in order to,

.....identify areas for improvements and

.....prescribe specific measures for interventions.

WHAT IS SRR?

A report that critically assess identified criteria (standards associated with the 7 Areas of COPPA) in terms of;

- ❖ Strengths
- ❖ Strategies for Maintaining and Enhancing Strengths
- ❖ Areas of Concern that Need to be Addressed
- ❖ Steps Taken to Address Areas of Concerns
- ❖ Conclusions and Recommendations for Improvement

Refer: Part C MQA-02 (2017)

WHAT IS SRR?

A good SRR will include honest and critical reflections on **input-process-output-outcomes-impact** in a comprehensive manner.

A good SRR should also account for measures taken to address current and future changes in Higher Education Landscape.

The quality of SRR is an indication of the strength of the IQA practices of the HEP.

The SRR can be used for;

Internal quality management and monitoring by the HEP.

External quality monitoring by Regulators (MQA/MOE).

OBE AND TEACHING EXCELLENCE FRAMEWORK

IT MUST BE HIGHLIGHTED THAT CURRENTLY THE REGULATORS HAD ADOPTED THE OUTCOME-BASED EDUCATION (OBE) PHILOSOPHY.

IN THIS CONTEXT, HEI MUST FOCUS ON THE FOLLOWING.....

- **LEARNING ENVIRONMENT**
- **LEARNING EXPERIENCE**
- **LEARNING OUTCOMES**

COPPA AND TEACHING EXCELLENCE FRAMEWORK

Programme Development, Delivery & Assessment [1,2]

Student Selection & Support Services [3]

Talent & Resources [4,5]

- *Educational Resources*
- *Staff training, reward & retention*
 - *Infrastructure*
 - *Infostructure*

**LEARNING
ENVIRONMENT**

**LEARNING
EXPERIENCE**

LEARNING OUTCOMES

Future Skillsets

Flexible Education

- *Multi disciplinary*
- *Society/industry engagement*
 - *ODL*

Programme Management, Monitoring, Review & CQI [6,7]

COPPA AND TEACHING EXCELLENCE FRAMEWORK

**Programme Monitoring,
Review and CQI**
Quality Enhancement

**Student Selection and
Support Services**

Academic/Skills
/Vocational/APEL
Life-long Learning
Residential/Recreational/
Welfare/Caunselling
Learning Environment
Learning Experience

Educational Resources

Infrastructure
Infostructure
Learning Environment
Learning Experience

Programme Development & Delivery

Future Skillsets (LOs)
Multi-disciplinary (Content)
Flexible Delivery (Ubiquitous)
Outcomes & Domain-based Assessment
Constructive Alignment
Learning Outcomes

Programme Management

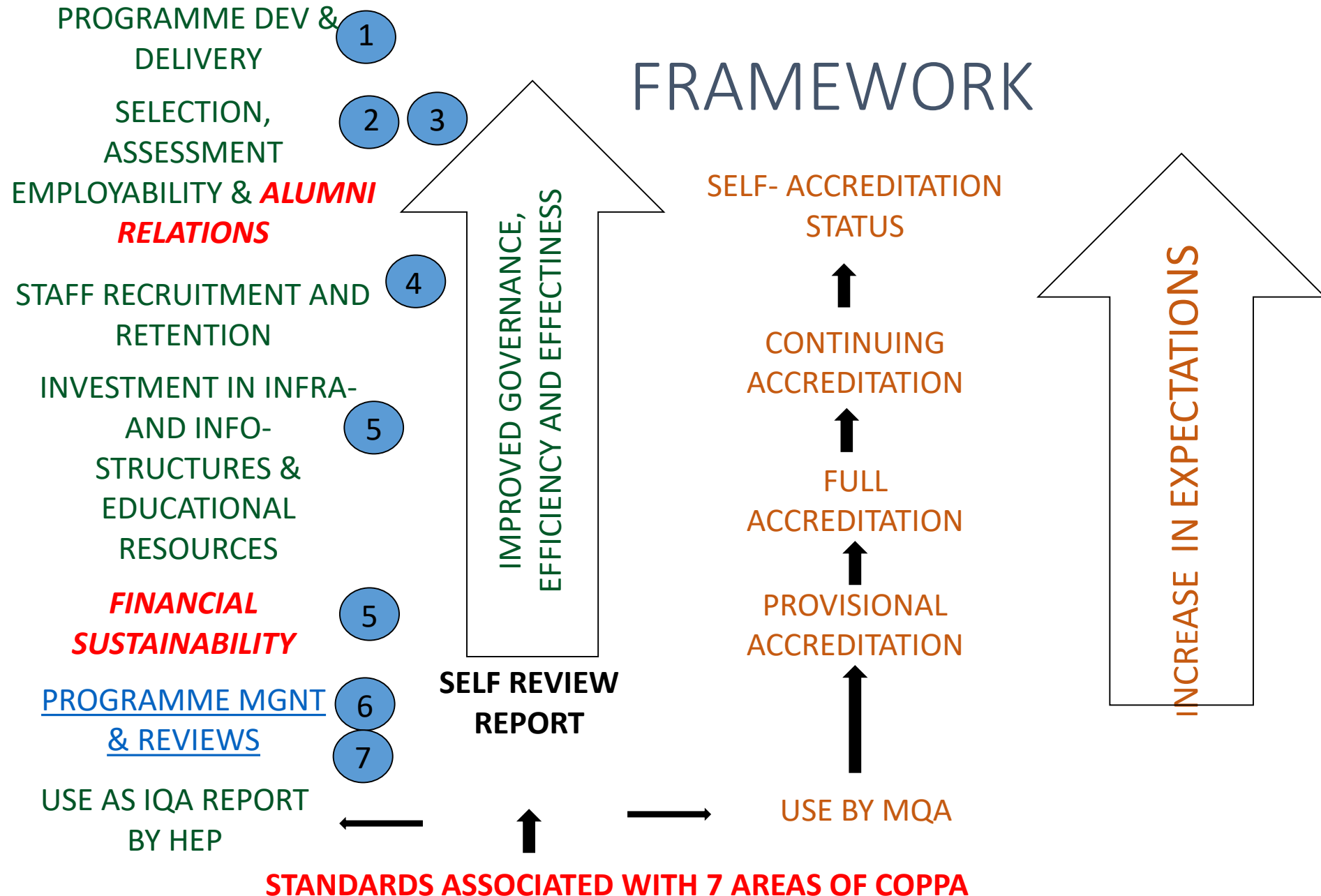
Governance
Resources Allocation
Learning Environment
Learning Experience

Academic Staff

Recruitment/Training
Retention/Reward
Work Environment
Learning Experience

**Assessment of Student
Learning**

Constructive Alignment
Learning Outcomes



STANDARDS ASSOCIATED WITH 7 AREAS OF COPPA

INTRODUCTION

**RELATE THE SEVEN AREAS OF COPPA TO
LEARNING ENVIRONMENT, EXPERIENCE AND
OUTCOMES IN WRITING YOUR SELF REVIEW**

Programme Development, Delivery & Assessment [1,2]

Student Selection & Support Services [3]

-

Talent & Resources [4,5]

- *Educational Resources*

- *Staff training/rewards*

- *Infrastructure*

- *Infrastructure*

Future Skillsets

Flexible Education

- *Multi disciplinary*

- *Society/industry*

engagement

- *ODL*

Programme Management, Monitoring, Review & CQI [6,7]

REVIEW OF AREA 1

Programme Development and Delivery:

1.1 Statement of Educational Objectives of Academic Programmes and Learning Outcomes

1.1.1 The Programme must be **consistent with and supportive of** vision, mission, and goals of the HEP. *(Process*of developing VMG)*

1.1.2 The Programme must be considered only after a **need assessment** has indicated that there is a need for the programme to be offered.
(Process Market survey; Talent Corp; Job Street; Ilmia)

* It is important to show engagement with stakeholders in these processes

REVIEW OF AREA 2

Assessment of Student Learning:

2.1 Relationship between assessment and Learning Outcomes

2.1.1 Assessment principles, methods and practices must be **aligned** to the PLOs, consistent with the levels defined in the MQF. (*CA of Course Assessment Plans (CAP)-Innovative Assessment Methods (IAMs)*)

2.1.2 The alignment between assessment and the PLOs must be **systematically and regularly reviewed** to ensure its effectiveness. (*Training of Acad. Staff-Monitoring Criteria & Mech-CA-LEx-LO*)

REVIEW OF AREA 3

Student Selection and Support Services:

3.1 Student Selection

3.1.2 The criteria and processes for student selection must be **transparent and objective**. (*Academic Regulation & Prospectus- Compliance*)

3.1.3 Student enrolment must be **related** to the capacity of the department to effectively deliver the programme. (*Cross check against Resources & Program Standards – comply to minimum requirement-LEv*)

REVIEW OF AREA 4

Academic Staff:

4.1 Recruitment and Management

4.1.1 The Department must have a **clearly defined plan** for its academic manpower needs consistent with institutional policies and programme requirements. *(HR policies & Implementation; staff workload)*

4.1.2 The Department must have a **clear documented academic staff recruitment policy**, where the criteria for selection are based primarily on academic merit or relevant experience. *(HR policy; Compliance to criteria; Prevention of fraud- LEv- LEx)*

REVIEW OF AREA 5

Educational Resources:

5.1 Physical Facilities

5.1.1 The Programme must have **sufficient and adequate physical facilities and educational resources** to ensure its effective delivery, including facilities for practical-based programmes and those with special needs. *(List & Categories of Facilities; T&L for Edu4.0; Learning Space; - LEv-LEx)*

5.1.2 The physical facilities must **comply with** the relevant laws and regulations. *(Governance; Policies; HSE Committee; Safety Certificates; List of Contracts related to Health & Safety - LEv-LEx)*

REVIEW OF AREA 6

Programme Management:

6.1 Programme Management

6.1.1 The Department must **clarify its management structure and function** and the relationships between them and these must be **communicated** to all parties involved based on the principles of responsibility, accountability and transparency. *(Governance; Org. Chart; Job Description; Minutes of Meetings)*

6.1.2 The Department must **provide accurate, relevant and timely information** about the programme which are easily and publicly accessible, especially to prospective students. *(Apps/Brochures-print or digital; Monitoring of Feedback and CQI)*

REVIEW OF AREA 7

Programme Monitoring, Review and CQI:

7.1.4 The Department's review system must constructively **engage stakeholders** including the alumni and employers as well as the external expertise, whose views are taken into consideration (See also standard 1.2.3). *(Stakeholder Engagement; IAP, Ext. Examiner, Visiting Professors, Adj. Professors; Procedures; MbM-Improvements)*

7.1.6 Various aspects of students performance, progression, attrition, graduation and employment must be **analysed** for the purpose of CQI. *(Results of Analysis; Actions Taken; MbM-improved LEv, LEx & LO)*

MODULE 5

The OBE Curriculum: The Blueprint - Mapping of Courses to Programme Outcomes

OUTCOMES

At the end of this module participants will be able to:

- Mapping of Courses to the MQF 5-Clusters of Attributes
- Mapping of MPU to the MQF 5-Clusters of Attributes
- Incorporating SDG in MPU courses in line with the MQF 5-Clusters of Attributes

TRANSLATING INTO PRACTICE:
ESTABLISHING THE PROGRAMME BLUEPRINT-
MAPPING OF COURSES TO LEARNING OUTCOMES

FALSAFAH PENDIDIKAN KEBANGSAAN
(NATIONAL EDUCATION PHILOSOPHY)

Balance & Harmonious (Physical, Emotion, Spiritual, Intellectual) with
Knowledge, Competency and High Moral Values

MALAYSIAN EDUCATION BLUEPRINT

Balance, Holistic and Entrepreneurial Graduate
Ethics & Spirituality; Leadership Skills; National Identity;
Language Proficiency; Thinking Skills & Knowledge

MALAYSIAN QUALIFICATIONS FRAMEWORK

Knowledge & Understanding; Cognitive Skills; Functional Skills (Practical Skills, Communications Skills, Interpersonal Skills, Numeracy Skills, Digital Skills); Personal & Entrepreneurial Skills and Ethics & Professionalism

VARIOUS SETS OF
FUTURE SKILLSETS
RECOMMENDED BY
VARIOUS ENTITIES

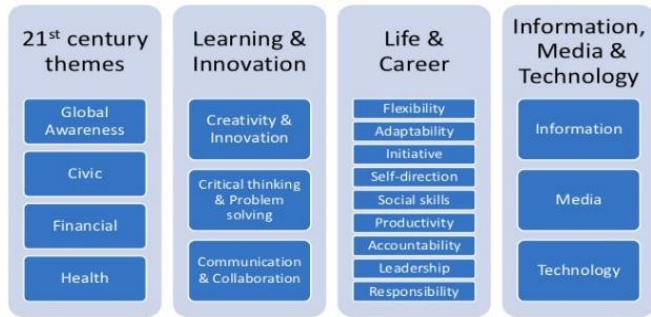
PROGRAM OBJECTIVES
PROGRAM LEARNING OUTCOMES

No.	Major Milestone	Criteria to be satisfied
1.	Establish the PLO statements	<p><u>First Level Check</u></p> <p>Satisfy requirements of Professional Body.</p> <p>Satisfy MQA (5-clusters)/MOHE 9-Learning Domains.</p> <p>Satisfy MQA Programme Standards</p> <p>Aligned to National Education Policy.</p> <p>Account for the 21st Century Skill Sets & SDGs</p>

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SKILLSETS/GRADUATE ATTRIBUTES OF THE FUTURE

Definition of 21st century skills 2009

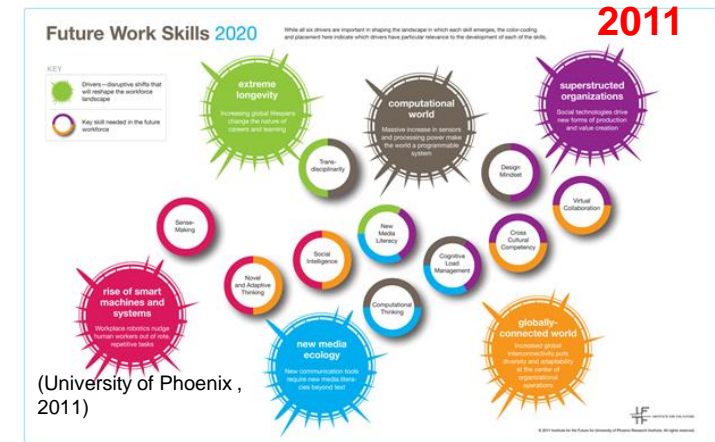


Based on Partnership for 21st Century Skills (P21) Framework



MQF2.0 2017

1. Knowledge & understanding
2. Cognitive skill/problem solving
3. Practical-work skills, specialized, technical /organizational skills
- Interpersonal skills
- Communication skills
- Digital skills
- Numeracy skills
- Leadership & team skills
4. Personal-LLL, value ,self-development /autonomous entrepreneurship
5. Ethics & Professionalism



AKHLAK (Ethics and Morality)

BALANCE

ILMU (Knowledge and Skills)

21st Century Curriculum for MyHE 4.0

(Tapsir, 2017)

WORLD ECONOMIC FORUM Top 10 skills 2016 in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

Source: Future of Jobs Report, World Economic Forum 2016

MQF 2.0	OTHER COMPLEMENTING FUTURE SKILLSETS
1. Knowledge & understanding	Sense making;
2. Cognitive skills	Critical Thinking/Creative Thinking; Design mind-set/Novel & Adaptive Thinking; Cognitive Flexibility/Complex Problem Solving; Transdisciplinarity
3. Practical skills	
4. Interpersonal skills	Collaboration; Cross-cultural competency/Social Intelligence; Coordinating with others/People management; Mutual Respect
5. Communications	Language Proficiency;
6. Digital skills	Information/Media-Technology; New-media literacy/Virtual Collaboration;
7. Numeracy skills	Complex problem solving
8. Leadership, autonomy and responsibility	Compassion; Mutual Respect; National identity;
9. Personal skills 10. Entrepreneurial Skills	Negotiation/Service Orientation; Happiness/Love/Care
11. Ethics & professionalism	Spirituality; Accountability;

MQF 2.0	COURSES
1. Knowledge & understanding	Fundamental
2. Cognitive skills	Analysis/Design/Project/Discipline Electives
3. Practical skills	Laboratory/Studios/Projects/MPU
4. Interpersonal skills	Design/Projects/Management/Laboratory/Studios/MPU
5. Communications	Design/Projects/Management/Generic Electives/Languages
6. Digital skills	Design/Projects/Management/Laboratory/Studios/MPU
7. Numeracy skills	Fundamental/Analysis/Design/Project
8. Leadership, autonomy and responsibility	Design/Projects/Management/Laboratory/Studios/MPU
9. Personal skills 10. Entrepreneurial Skills	Projects/Management/Generic Electives/MPU
11. Ethics & professionalism	Design/Projects/Management/Generic Electives/MPU

No.	Major Milestone	Criteria to be satisfied
2b. © SUHAIMI ABDUL-TALIB	<u>Pre-Mapping Stage:</u> Agreement on which PLO can be supported by specific groups of courses.	MPU: decision by faculty or department on the number of and which C-,P-, A- and generic-based PLO to support. Fundamental/Basic (Non-Culminating): To support cognitive and discipline-based PLOs Analysis (Non-Culminating): To support cognitive and discipline-based PLOs

No.	Major Milestone	Criteria to be satisfied
3. © SUHAIMI ABDUL-TALIB	<u>Constructing The Blueprint:</u> Mapping of Courses to PLOs	A. For each course in the following categories, <u>faculty must decide</u> HOW MANY PLOs should the course be mapped to for the following categories; <ol style="list-style-type: none"> 1. MPU (Focus on Generic PLOs) 2. Non-culminating Discipline Courses 3. Non-culminating non-Discipline Courses 4. Culmination Courses (FYP, Capstone, Internship <i>etc.</i>) – Ensure that most PLOs can be assessed by these courses.

No.	Major Milestone	Criteria to be satisfied
© SUHAIMI ABDUL-TALIB	<p>3. <u>Constructing The Blueprint:</u> Mapping of Courses to PLOs</p>	<p>B. For each PLO (going down the column) – <u>ensure that there are enough courses distributed over the semester accordingly;</u></p> <ol style="list-style-type: none"> 1. Generic PLOs – spread over the entire program so that students can gradually acquire the outcomes 2. PLOs related to Fundamentals/Mechanics –concentrated in the first three semesters 3. PLOs related to analysis – to introduced mainly after fundamental/mechanics (semester 3-4) 4. PLOs related to Design & Management (semesters 4-8) <p>C. <u>Check that 65-70% of the courses are supporting discipline related PLOs</u></p>

TRANSLATING INTO PRACTICE:
MAPPING OF MPU COURSES
TO LEARNING OUTCOMES

	MQF 2.0	COURSES
U1- Appreciating philosophy, values & history (Ethnic Relations, TITAS, Malaysian Studies)	1. Knowledge & understanding	Content of all MPU courses are able to address these outcomes BUT they should be kept to a minimum. NOTE: MOHE/MOE does NOT allow these domains to be assessed.
	2. Cognitive skills	
	3. Practical skills	
U2- Mastering Humanity skills (Leadership, Interpersonal skills, Entrepreneurial skills)	4. Interpersonal skills	Addressed with U1 , U2, U3 through learning activities
	5. Communications	Addressed with U1, U2 , U3 through learning activities
	6. Digital skills	Addressed with U1 & U3 through learning activities
	7. Numeracy skills	Should be left to Programme Core and Elective.
U3- Broadening knowledge about Malaysia (Malaysian Economic, Malaysian Government and Public Policy)	8. Leadership, autonomy and responsibility	Addressed with U1 & U3 through learning activities
	9. Personal skills 10. Entrepreneurial Skills	Mainly addressed through U2
U4- Developing practical community-minded skills (Co-curriculum, Community Services)	11. Ethics & professionalism	Mainly addressed through U1 , U2 , U3 through learning activities

TRANSLATING INTO PRACTICE:
MAPPING OF CO CURRICULUM
TO LEARNING OUTCOMES

Bil.	TERAS	KLUSTER HASIL PEMBELAJARAN
1	KESUKARELAWANAN	Knowledge & Understanding OR/AND Cognitive Skills / Problem Solving (upto 20%) Practical-work skills, specialized, technical /organizational skills Ethics & Professionalism Interpersonal skills
2	KEBUDAYAAN	
3	SUKAN	
4	KHIDMAT KOMUNITI	
5	KEUSAHAWANAN	Knowledge & Understanding OR/AND Cognitive Skills / Problem Solving (upto 20%) Personal-LLL, value ,self- development /autonomous and entrepreneurship Digital Skills
6	DAYA USAHA & INOVASI	
7	PENGUCAPAN AWAM	Knowledge & Understanding (upto 25%) Interpersonal skills Communication skills Digital Skills
8	KEPIMPINAN	Knowledge & Understanding OR/AND Cognitive Skills / Problem Solving (upto 20%) Leadership & team skills Ethics & Professionalism

TRANSLATING INTO PRACTICE: MAPPING OF CO CURRICULUM TO CONTENT (SDG)

Note: This should also be carried out for U1, U2, U3 courses

SUSTAINABLE DEVELOPMENT GOALS



Bil.	TERAS	SUSTAINABLE DEVELOPMENT GOALS
1	KESUKARELAWANAN	Clean Energy; Clean Water & Sanitation; Protect the Planet; Life below Water; Life on Land; Sustainable Cities; No Hunger; No Poverty; Quality Education
2	KEBUDAYAAN	Good Health; Peace & Justice
3	SUKAN	Good Health; Peace & Justice
4	KHIDMAT KOMUNITI	No Hunger; No Poverty; Quality Education
5	KEUSAHAWANAN	Gender Equality; Reduced Inequalities
6	DAYA USAHA & INOVASI	Innovation & Infrastructure; Sustainable Cities & Communities; Responsible Consumption
7	PENGUCAPAN AWAM	Clean Energy; Clean Water & Sanitation
8	KELESTARIAN/ KEPIMPINAN	Protect the Planet; Life below Water; Life on Land; Sustainable Cities

CONCLUDING REMARKS

- BUYING IN FROM STAKEHOLDERS (especially academics and assessors) – moving from content delivery to outcomes development.
- ENSURING CONSTRUCTIVE ALIGNMENT – Thorough thinking in developing the Programme Blueprint
- TRANSFORMING THE CURRICULUM STRUCTURE- moving from rigid to flexible and cross discipline.
- BRINGING TO LIFE WHAT IS DOCUMENTED – from accreditation documents to classroom practices.
- DEVELOPING INNOVATIVE DELIVERY METHODS- moving from education 2.0 to education 3.0.
- DEVELOPING VALID AND RELIABLE ASSESSMENT TOOLS – measuring C-, P- and A-domains.
- QUALITY ASSURANCE – from conventional to APEL, MOOCS, WBL.

CONCLUDING REMARKS

A good SRR will only result from a team that is honest and have high integrity with a sincere intention of improving the quality of the Programme.

Quality enhancement at the both programmes and HEP will lead to self accreditation status.

Terimakasih!

*Prof Sr Ir Dr Suhaimi Abdul Talib
Chairman, UiTM Private Education Sdn. Bhd.
suhaimi.talib@intec.edu.my*

"...ku sempurnakan seikhlas hati..."

MQF (2017): LEVEL DESCRIPTORS

Level	Summary of Learner Profile
1	<p>Learners will have basic, foundational or general knowledge & skills. Perform basic and/or highly routine tasks under guidance, Prepare for further learning and being responsible ethical workers. Awareness of community as well as local and national institutions Curiosity of the world beyond self.</p>
2	<p>Learners will have factual knowledge and skills to carry out work in a well- defined environment as responsible and ethical workers. Demonstrate interest to undertake further studies as well as make a commitment to lifelong learning. Develop skills to engage with local communities. Develop basic proficiency in one other language [eg. English]</p>
3	<p>Learners will have the fundamental, theoretical and technical knowledge of facts and principles at an intermediate level. Demonstrate balanced operational skills as required. Show an interest in pursuing further studies in specific subjects or disciplines pertaining to their field of interest or work. Acquired elementary proficiency in one additional language [e.g. English]. Demonstrate age-appropriate local civic engagement and awareness of global issues.</p>

MQF (2017): LEVEL DESCRIPTORS

Level	Summary of Learner Profile
4	<p>Learners will have a broad knowledge of the general theories, principles and demonstrate skills in a focused area of study/discipline enabling them to undertake specialized work leading to a career path in technical, professional or management fields.</p> <p>Learners express interest in pursuing further education.</p> <p>Learners will have a commitment for appropriate ethical behavior and express an appreciation of national aspirations within global perspectives.</p>
5	<p>Learners have significant theoretical and technical knowledge.</p> <p>Can deal with complex situations at work and show an ability to understand and comply with, organizational and professional demands.</p> <p>Learners will have an ability to apply sustainable practices ethically and in the context of local and global work and social environment.</p>
6	<p>Learners will demonstrate a thorough comprehension of broad based and coherent body of knowledge and skills for para and full professional work embedding research, innovation and creativity in specialized areas.</p> <p>Demonstrate professionalism, resilience commitment to an ethical work culture, sustainability issues and an awareness of global citizenship in alignment with national aspirations.</p>

MQF (2017): LEVEL DESCRIPTORS

Level	Summary of Learner Profile
7	<p>Learners at this level will demonstrate a mastery of knowledge in specific field/fields of study/work and through further learning, research, and/or professional practice; and Buttressed by a comprehension of strong theoretical knowledge, critical thinking, creative and innovative skills.</p> <p>They will also be able to generate new solutions to problems.</p> <p>They operate with confidence, knowledge and skills both in Malaysia/ASEAN as well as the wider world.</p>
8	<p>Learners will demonstrate critical understanding of the most advanced knowledge at the frontiers of a field of study or professional practice.</p> <p>Independently conduct, manage, and lead advanced research which contributes to substantial, new and original knowledge, and/or professional practice.</p> <p>Produce research outputs in the form of a thesis, patents, products, new advanced professional practice or advanced technologies, creative models or works of art, or music.</p> <p>Demonstrate capacities to present and defend points of view, thesis and ideas in area(s) of expertise with knowledge and confidence.</p>

MQF (2017): LEVEL DESCRIPTORS

MQF LEVEL	Summary of Learners' Profile	CLUSTER 1: Knowledge and Understanding	CLUSTER 2: Cognitive skills	CLUSTER 3: FUNCTIONAL WORK SKILLS				CLUSTER 4: Personal and entrepreneurial skills	CLUSTER 5: Ethics and Professionalism
				Practical skills	Interpersonal and Communication Skills	Digital and Numeracy Skills	Leadership, Autonomy and Responsibility		
Level 6 BACHELOR GRADUATE CERTIFICATE/ DIPLOMA	Learners will demonstrate a thorough comprehension of broad based and coherent body of knowledge and skills for para and full professional work embedding research, innovation and creativity in specialized areas. Demonstrate professionalism, resilience commitment to an ethical work culture, sustainability issues and an awareness of global citizenship in alignment with national aspirations.	Describe advanced and comprehensive, theoretical and technical knowledge and demonstrate relevant skills in a specialized field, or of a multidisciplinary nature related to the field of study, work and/or practice	Demonstrate intellectual independence in the application of knowledge within specific field(s) by applying critical, analytical and evaluation skills in the field of study/work/practice. Manage, resolve complex applications and handle unpredictable issues with creative and innovative solution(s). Apply skill/knowledge to a range of approaches in the field of study/work/practice.	Apply a range of essential methods and procedures to solving a broad range of complex problems. Review, make adjustments and supervise related practices and processes concerning field of specialization.	Convey ideas both in written or oral forms using appropriate and different forms of presentation, confidently, accurately and coherently in appropriate context in a well-structured manner to a diversity of audiences. Work together with different people in diverse learning and working communities as well as other groups locally and internationally.	Use a broad range of information, media and technology applications to support study and/or work. Use and combine numerical and graphical/visual data for study/work.	Work autonomously, and show leadership and professionalism in managing responsibilities within broad organizational parameters. Undertake significant levels of work related responsibilities of others as well as self. Demonstrate decision making capacities and professionalism by working towards pre-determined goals and outcomes Demonstrate accountabilities, especially in professional fields.	Engage effectively in self-directed lifelong learning and professional pathways. Demonstrate entrepreneurial competency with selected project(s). Demonstrate an appreciation of broader socio-political economic and cultural issues at local/national and regional level.	Demonstrate adherence, and ability to identify ethical issues, make decision ethically, and act professionally within the varied social and professional environment and practice. Demonstrate a deep familiarity and knowledge of local and global issues relating to science, technology, business, social and environmental issues.