

SUSTAINING QUALITY ACADEMIC PROGRAMME FOR GLOBALLY MARKETABLE GRADUATES

Wardah Tahir*, Noraini Seman, Suriyani Ariffin, Muhammad Faizal Samat, Jurina Jaafar, Azhar Abd
Jamil, Norita Sapien

*Unit of Curriculum Affairs, Academic Affairs Division Office of the Deputy
Vice-Chancellor (Academic & International), Universiti Teknologi MARA,
40450 Shah Alam, Selangor, Malaysia
warda053@uitm.edu.my

ABSTRACT

Universiti Teknologi MARA (UiTM) has expanded from an institute to a mega university that offers innovative education with state-of-the-art infrastructure and technology. UiTM provides more than 500 academic programmes at its 34 campuses, 4 colleges of studies, 13 faculties, and 9 academic centres nationwide. It continues to broaden access to higher education, contributing to nation-building by producing professionals and shaping the future. The university has the largest number of academic programmes in the country, covering comprehensively most disciplines. This paper examines the competitiveness of academic programmes, including their popularity, enrolment, and graduate employability. In the evaluation of the programme, an assessment tool named IDSPA (*Indeks Daya Saing Program Akademik*) is utilised. According to the results of the IDSPA analysis, most of the academic programmes are well-maintained, with some requiring curriculum revision. Some programmes require rebranding, while others may be discontinued. How does an institution ensure that its academic programmes are relevant, competitive, and viable? A framework of integrated academic programme sustainability maintenance is proposed to capture the key components in ensuring the viability of an academic programme.

Keywords: Quality education; academic programme; competitiveness; IDSPA; sustainability; curriculum

1. INTRODUCTION

Universities have a very clear noble mission. We produce new knowledge and skills for industry and society. We define future talents and ultimately the society in which we want to thrive. Since society and industry influence how higher education evolves, we continuously strengthen the mutually beneficial connection with the stakeholders. In the past sixty-five years, Universiti Teknologi MARA (UiTM) has expanded from an institute to a massive university with a total of 34 campuses and 523 different academic programmes. Our academic programmes are carefully designed to yield highly sought-after professionals with strong technical skills and knowledge. A recent poll done by Talentbank in collaboration with key businesses around the country resulted in Employability Ratings that were data-driven supported by Malaysia's top graduate employers. The survey results show that UiTM is among the best universities in Malaysia in terms of producing graduates who are in high demand. The Employability Ratings for 19 majors at UiTM are excellent, of which 4 (Arts and Design,

Civil Engineering, Culinary Arts, and Interior Design) are recognised as Exemplary and Champion in employability.

UiTM offers the most academic programmes in the country. Are all the academic programmes competitive and capable of producing globally marketable graduates? Because running an academic programme needs people and financial resources, how can we sustain our academic programmes' competitiveness in order to optimize those resources? The paper describes the use of IDSPA tool to assess the competitiveness of UiTM academic programmes. A framework model of integrated academic programme sustainability maintenance is proposed to capture the key components in ensuring an academic programmes viability.

2. METHOD

The method involves the application of UiTM Index of Academic Programme Competitiveness, IDSPA in the evaluation of academic programmes in UiTM. Next a framework model is proposed to represent the key components involved in ensuring quality education and sustainability.

IDSPA is a mechanism to measure the competitive level of an academic programme in order to meet current and futuristic needs and be able to compete on the global and international stage through the following five (5) indicators:

- i. Programme Popularity (data from Student Recruitment Division)
- ii. Enrolment (data from the Student Recruitment Division)
- iii. Teaching Quality & Learning Experience (data from the Responsibility Center (PTJ))
- iv. Marketability of Graduates (data from the University Transformation Division)
- v. Initial Monthly Income (data from University Transformation Division)

3. RESULTS AND DISCUSSION

[Education5.0@UiTM](#) presents several aspects on quality education and sustaining academic programme competitiveness for globally marketable graduates. A significant element to quality education is curriculum relevance. In terms of curriculum relevance, it is essential to design a curriculum that is contemporary, applicable to the needs of both students and society. This involves integrating essential skills like critical thinking, problem-solving, creativity, and digital literacy into the curriculum. Other aspects that are crucial in ensuring high quality education include accessibility, equity, inclusivity, lecturer's quality, learning outcomes, technology integration, parental and community involvement, also infrastructure and resources. The use of the IDSPA tool will help the management to ensure systematic monitoring of the programme implementation in line with the SDG quality education.

3.1. IDSPA Analysis

Figure 1 illustrates the outcomes from the IDSPA analysis for 442 academic programmes. 148 programmes are in Band 4-Sustain (*Kekal*), 199 programmes are in Band 3- Revise Curriculum (*Semakan kurikulum*), 72 programmes are in Band 2-Rebrand (*Penjenamaan Semula*) and 23 programmes fall in Band 1- Consider to discontinue (*Dipertimbang untuk dijumudkan*). The Master level programme has the highest number of Band 1 (16) followed by PhD (6). The majority of programmes (199) require curriculum revision.

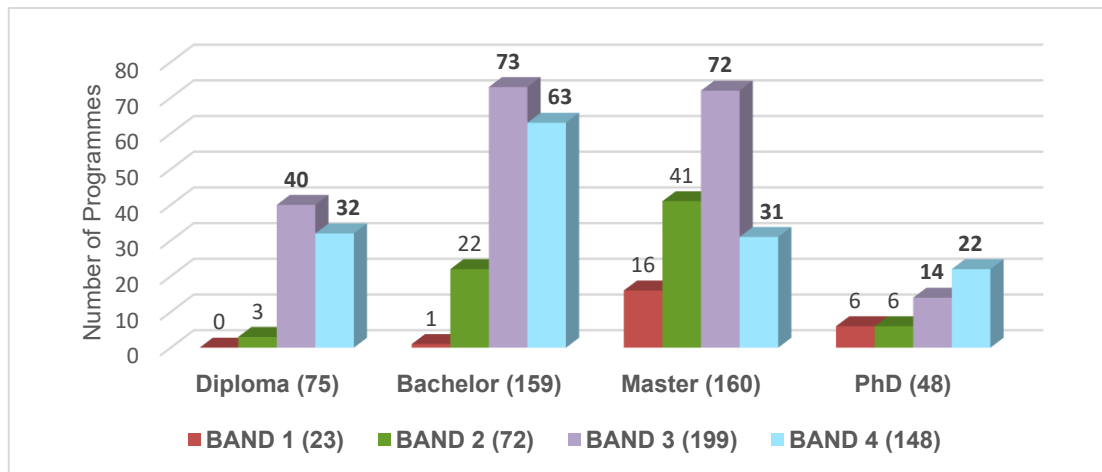


Figure 1. IDSPA overall analysis

Three primary indicators of the IDSPA analysis are the programmes popularity, enrolment, and graduate employability. These metrics indicate whether a programme remains in demand and whether graduates can readily find employment. How can an academic institution ensure that a programme remains relevant and future-proof? An integrated framework for academic curriculum sustainability is proposed which highlights the key component processes as shown in Figure 2 and described in Table 1.

3.2 Framework of Integrated Academic Programme Sustainability Maintenance

3.2.1 New Academic Programme Development

The first key component is comprehensive needs analysis for new programme development. This needs analysis will require the inputs from the potential students, industry collaborators, partner institutions and funding institutes, which will gauge the prospective student enrolment. Effective needs analysis will ensure programme marketability and sustainable student enrolment for years to come.

3.2.2 Academic Programme Implementation

Upon receiving provisional accreditation, the new academic programme is ready to be implemented. The key process includes curriculum constructive alignment, programme delivery and assessment while embracing the ideas of flexible and future-proof academic curriculum preparing for the 21st century skills in the VUCA (volatile, uncertain, complex, and ambiguous) environment. Students need to be prepared for a rapidly changing world by equipping them with adaptable skills, a broad knowledge base, and a forward-thinking mindset, fostering lifelong learning and empowering students to succeed in their chosen careers, regardless of how the future unfolds [2]. Important skill sets include critical thinking and problem-solving, technological literacy, interdisciplinary approach, flexibility and adaptability, ethical and global perspectives, creativity, collaboration, digital literacy, and resiliency. Among framework and guidelines available to be referred to are Malaysian Qualifications Framework (MQF) 2.0, Education5.0@UiTM, IR4.0, SDG, TVET/HETVET, EXCEL, collaborative teaching, and learning, CDIO, HyFlex and Flexible (*Anjal*) Curriculum.

3.2.3 Programme Accreditation

Around five to six months before the first batch of students graduate, the programme will need to be given full accreditation by the regulatory bodies such as the MQA, Engineering Accreditation Council (EAC), Board of Architects Malaysia, MBOT and other professional bodies. Accreditation of programmes helps to ensure that standards and requirements stipulated are complied with, such as the curriculum structures, core and supporting courses need to be taken to complete the programme governing body of knowledge.

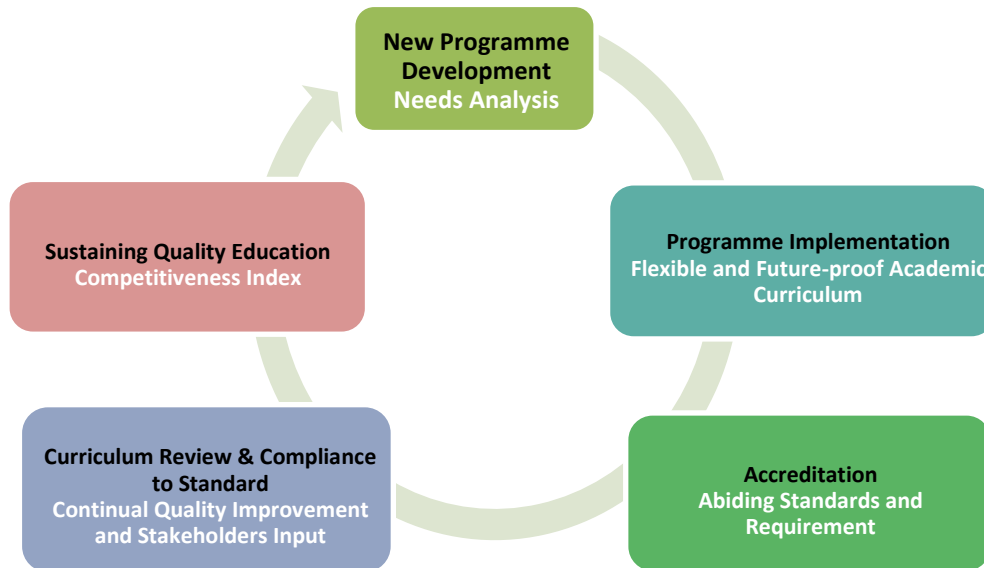


Figure 2. A Model Framework of Integrated Academic Programme Sustainability Maintenance

3.2.4 Curriculum Review and CQI

Curriculum needs to be revised from time to time as required and necessary. While revising the curriculum, learning outcomes, learning activities, and assessment are often seen as a priority in education [3]. Certain disciplines are more prone to curriculum change than others, such as in Computer and Information while others are less flexible. Curriculum flexibility is especially important to keep pace with the rapid development of new technologies, systems, and resources [4].

The attainment of Programme Educational Objectives (PEO) and Learning Outcomes (PLO) should be analyzed for Continual Quality Improvement (CQI) along with stakeholders' input such as from the alumni, industry, examiners.

3.2.5 Sustaining Quality Education

The relevancy and the competitiveness of the academic programme can be regularly analysed using the IDSPA tool as mentioned in the previous section. Metrics such as student enrolment and employability of the programmes indicate further actions such as rebranding or discontinuing may be considered. Graduates' employment in international level companies can be used as an indicator of global marketability.

Table 2. Criteria for Integrated Academic Programme Sustainability Maintenance Framework

Main Process	Key Component	Scope	Impact
New Programme Development	Needs Analysis	Inputs from stakeholders: potential students, industry, funding institutes, partners & collaborators	Ensuring sustainable programme marketability/student enrolment
Programme Implementation	Flexible and Future-proof Academic Curriculum	Guidelines and references from MQF2.0, Education5.0@UiTM , IR4.0, SDG, TVET/HETVET, EXCEL, HyFlex, Anjal	Effective constructive alignment, programme delivery and assessment. Future-proof flexible, dynamic and fluid academic curriculum preparing for the 21 st century skills
Accreditation	Abiding Standards and Requirement	MQA, AQA, Professional bodies	Meeting the standard of regulatory and professional bodies (national and international)
Curriculum Review & Compliance to Standard	Continual Quality Improvement and Stakeholders Input	Indirect (alumni, industry, examiners) and direct measurement and analysis of education objectives and learning outcomes attainment and CQI	In line with regulatory body requirement, keeping pace with industry needs ensuring programme performance and continual improvement
Sustaining Quality Education	Competitiveness Index	Programme Popularity, Enrolment and Graduate Marketability (national and international)	Improved graduate employability rating and university ranking, globally renowned university

4. CONCLUSION

Five key components for an integrated academic programme sustainability have been proposed to ensure quality education is maintained. The expected impacts are sustainable programme marketability, flexible and dynamic academic curriculum preparing for the 21st century skills which meets the standard of regulatory and professional bodies (national and international) and keeping pace with industry needs. Through these processes, we hope to sustain quality education, continue improving graduate marketability and university ranking towards globally renowned universities.

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