Agensi Kelayakan Malaysia
Malaysian Qualifications Agency

GUIDELINES TO GOOD PRACTICES:

MONITORING, REVIEWING AND CONTINUALLY IMPROVING INSTITUTIONAL QUALITY

Consisting of the cyclical processes of 'Plan', 'Implement', 'Monitor and Review', and 'Improve', Continual quality improvement (CQI) is integral to the operations of HEPs that demonstrate quality, integrity and accountability in their systems and academic programmes. Module and programme monitoring and review are vital components of the 'Monitor and Review' stage of the CQI cycle.

While programme monitoring remains important in the on-going maintenance of the quality of modules and programmes, programme review has strong potential to impact heavily on the structure and directions of an academic programme.

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FOREWORD

The substantial impact that Higher Education Providers (HEPs) have on a country's social and economic development means that HEPs need to have in place processes to continually improve quality, so as to sustain the strength of their contribution. Academic programmes are a key way that HEPs contribute to a country's advancement by preparing students for their role in society on graduation. HEPs therefore need to monitor and review the quality of their academic programmes and departments, ensuring that they continue to meet stakeholders' needs, maintain academic standards, and provide a quality experience for students. Programme monitoring and review enable HEPs to make judgements and recommendations about their academic programmes and their ability to continue to contribute positively to the HEP's directions.

This Guidelines to Good Practices: Monitoring, Reviewing and Continually Improving Institutional Quality (GGP: MR-CIIQ) provides guidance for HEPs by suggesting ways to implement a comprehensive and cohesive approach to programme monitoring and review, which in turn, impact on institutional quality.

At the operational level, the Malaysian Qualifications Agencys, Code of Practice for Programme Accreditation (COPPA) and the disciplinary Programme Standards express standards to which academic programmes must comply. Based on good international practice, these documents cover disciplinary areas as well as standards at the levels of institution, education, academic, governance and quality assurance.

A major message permeating this GGP: MR-CIIQ is that programme monitoring and review processes are empowering for academic staff.

This Guidelines to Good Practices: Monitoring, Reviewing and Continually Improving Institutional Quality (GGP: MR-CIIQ) provides guidance for HEPs by suggesting ways to implement a comprehensive and cohesive approach to programme monitoring and review, which in turn, impact on institutional quality. Suitable organisational and departmental structures to facilitate these processes are discussed, as well as

suggestions for the monitoring of modules and programmes to maintain and enhance their quality. Suggestions for effective operation of the broader and more comprehensive periodic review of programmes are put forward. As reviews through which recommendations may be made for minor adjustment or substantive redirection of an academic programme, they ensure that programmes maintain and extend their quality and contribution to their HEP.

A major message permeating this GGP: MR-CIIQ is that programme monitoring and review processes are empowering for academic staff. They enable academic staff to have input into the further development of the modules and programmes in which they work, providing assurance that they continue to meet academic standards and the needs of stakeholders, and that they continue to provide a high quality experience for their students. We wish institutions and academic staff well as they take part in these important processes of programme monitoring and review, and we hope that this GGP: MR-CIIQ is useful for them.

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July 2014

ABBREVIATIONS

COPIA	Code of Practice for Institutional Audit
COPPA	Code of Practice for Programme Accreditation
CQI	Continual Quality Improvement
GGP	Guidelines to Good Practices
HEP	Higher Education Provider
IQA	Internal Quality Assurance
KPI	Key Performance Indicator
LO	Learning Outcome
MLO	Module Learning Outcome
MQA	Malaysian Qualifications Agency
MQF	Malaysian Qualifications Framework
PEO	Programme Educational Objective
PLO	Programme Learning Outcome
PMR	Programme Monitoring and Review
QA	Quality Assurance
QAA	Quality Assurance Agency
QMS	Quality Management System

1.0 INTRODUCTION

The *Guidelines to Good Practices: Monitoring, Reviewing and Continually Improving Institutional Quality* (GGP: MR-CIIQ) is a document developed to assist Higher Education Providers (HEPs) to: i) continually improve their quality, and ii) address the standards of two areas of the Code of Practice for Programme Accreditation (COPPA) and the Code of Practice for Institutional Audit (COPIA), namely:

i. Programme Monitoring and Review, marked as Area 7, and
ii. Continual Quality Improvement (CQI), marked as Area 9.

The document provides guidance for all involved in higher education, including: i) quality assurance agencies and their staff and associates, ii) academic and administrative staff in HEPs, and iii) Ministry of Higher Education staff. The focus is on implementing appropriate CQI and programme monitoring and review. It is not intended to be prescriptive but rather to provide ideas for HEPs to adapt to their particular circumstances.

The document is part of a series of guidelines that are similarly designed to assist HEPs implement the practices and standards listed in COPPA and COPIA (the Codes of Practice). COPPA is concerned with the practices applied by HEPs in CQI and programme monitoring and review, whilst COPIA is primarily concerned with institutional processes that are applied in CQI and programme monitoring and review. Both for programme accreditation and institutional audit, the assessors' concerns are primarily with the procedures and practices adopted by the HEPs in the areas covered by the Codes, and whether these match the provisions of the Codes.

The structure of this GGP is as follows:

<u>Section 2, CQI: The broad process of ensuring and improving quality in HEPs</u>

i. Institutional level;
ii. Departmental level.

<u>Section 3, Programme Monitoring and Review: within the HEP's broader CQI context, the process of ensuring quality at the level of curriculum</u>

i. Module Level;
ii. Programme Level.

1.1 BACKGROUND OF QUALITY ASSURANCE IN HIGHER EDUCATION

Before discussing CQI and programme monitoring and review as part of CQI, which are key elements of quality assurance in higher education, it is important to clarify the key role of higher education in the contemporary world, and the reason why the notions of 'quality' and 'quality assurance' are integral to its provision.

In the highly competitive and globalised world of today, higher education has a significant role to play in the advancement of nations, including Malaysia. Nations need to educate greater numbers of people and to higher levels than in previous times so that they have the skills and understandings to enable the country to keep pace and to further develop its economic competitiveness. Furthermore, from social and cultural perspectives in relation to equity, it is well documented that individuals with higher education qualifications have greater life chances than those who do not, and so nations aim to educate a greater proportion of the population. Through processes of internationalisation, there has been large scale movement of people across countries as they pursue their educational objectives. All these factors have led to the rapid development of higher education globally.

Quality in higher education is a complex, contextualized and multi-dimensional concept (Vlasceanu et al., 2007, p.68; Tam, 2010). However, it can be said that quality is concerned with excellence, perfection, fitness for purpose, value for money and transformation to higher levels of human development (Harvey and Green, 1993). The relationship between quality and HEPs is expressed succinctly in the Malaysian Qualifications Agency, Code of Practice for Programme Accreditation (COPPA), as follows:

Increasingly, society demands greater accountability from HEPs. Needs are constantly changing because of the advancements in science and technology, and the explosive growth in global knowledge, which are rapidly and widely disseminated. In facing these challenges, HEPs have little choice but to become dynamic learning organisations that need to continually and systematically review and monitor the various issues to meet the demands of the constantly changing environment (COPPA, 2008, pp. 30-31).

In the context of such a dynamic environment, HEPs must continually review the achievement of their strategic directions, as well as the suitability of

these directions. Flowing from a broader institutional direction, programmes need to be monitored and reviewed systematically to ensure their suitability in relation to the strategic directions, changing conditions and educational best practices.

Given the broad and significant role of HEPs in today's world, many groups of people in society are higher education stakeholders with an interest and strong investment in the operations and quality of higher education. Stakeholders need to be assured that the academic programmes provided by HEPs are of value, that they reflect the institutional vision, mission and goals, and meet their stated aims and purpose and those of external professional bodies (Harvey and Stensaker, 2008). Such key stakeholders of the Malaysian higher education system, both local and international, include the following:

i. Government: provides funds and needs for educated populace, forms higher education policies and directions;
ii. Private providers: invest funds, often for business sustainability or betterment of the community as well as for enhancement of their reputation;
iii. Higher Education Quality Assurance Agencies and professional bodies: ensure standards and the registration of HEPs' qualifications;
iv. Professional associations: have vested interest in the quality of the educational offerings;
v. Students and prospective students: learners who forgo other activities and perhaps income to undertake studies in HEPs;
vi. Parents and sponsors of students: parties investing financially and personally in higher education;
vii. Staff in HEPs: academic and administrative, whose livelihood is influenced by the quality of the HEP;
viii. Industry/employers: bodies that employ graduates;
ix. Alumni of the HEP: parties interested in the reputation of the awarding HEP;
x. Community in general: citizens who are aware of the social impact of HEPs and of their graduates on the community.

Active involvement of staff, students and other stakeholders should be an integral part of quality assurance processes. Such participation is important to obtain as wide as possible a perspective as to what constitutes quality. As

explained previously, stakeholders have vested interests in sustaining the HEP's quality, at the institutional, departmental and programme levels.

1.2 QUALITY ASSURANCE PROCESSES IN HEPs

The mechanism to effectively implement CQI in a HEP is through the HEP's internal quality assurance (IQA) system. The IQA system addresses the implementation of the HEP's directions and achievement of its goals in the changing world. The more specific aspects of quality and its assurance are demonstrated through the HEP's compliance with the standards in the nine areas of a HEP's operations[1]. These are described in the COPIA, COPPA and the disciplinary Programme Standards.

As part of such an on-going process, all HEPs have processes to ensure the quality of programme design in new programme approval, and existing programme monitoring and review. Once programmes have been established and are operational, programme monitoring and review have a central role in ensuring quality. In fact, the overall aim of programme monitoring and review is to ensure the validity and relevance of programmes; that is, the quality.

It is important to point out that these processes may be interpreted differently across HEPs, which reflect a range of objectives and practices. However, some general definitions for the processes involved are outlined in the Glossary.

[1] The nine areas of evaluation in the current COPIA (2009) and COPPA (2008) are: 1) Vision, Mission, Educational Goals and Learning Outcomes; 2) Curriculum Design and Delivery; 3) Assessment of Students; 4) Student Selection and Support Services; 5) Academic Staff; 6) Educational Resources; 7) Programme Monitoring and Review; 8) Leadership, Governance and Administration; 9) Continual Quality Improvement. (Please note that COPPA is currently under review)

2.0 CONTINUAL QUALITY IMPROVEMENT

The broad process through which HEPs monitor and improve their quality is called Continual Quality Improvement (CQI).

2.1 CONTINUAL QUALITY IMPROVEMENT CYCLE

Maintaining and improving quality in a HEP is a cyclical and continual process, with one step leading to the next in an on-going mode. The stages can be seen in Figure 1, which outlines a commonly used and accepted model based on the Plan-Do-Check-Act (PDCA Cycle) also known as Deming Cycle (1950).

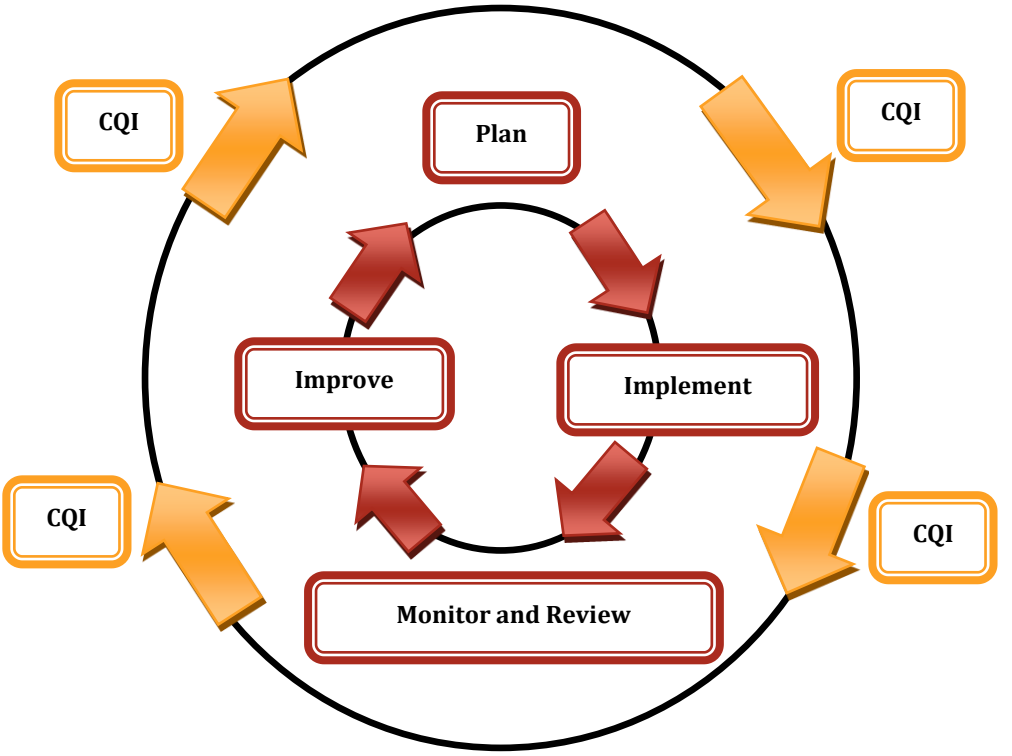

Figure 1 Continual Quality Improvement Cycle[2]

[2]Nomenclature for the stages may vary, e.g. they may be named: 'Plan';'Do';'Check';'Act'.

The practice of CQI is significant in the achievement of the HEP's vision, mission, educational goals and learning outcomes. It is also integral to the continual effectiveness and suitability of the HEP's internal quality assurance (IQA) system, and its academic programmes. A common approach to CQI involves a few stages. The HEP's IQA system is the supporting mechanism through which these stages are enacted:

i. Plan: Develop or revise the HEP's strategic and/or improvement plan in relation to the desired improvement;

ii. Implement: Deploy the strategic and/or improvement plan[3];

iii. Monitor and Review: Measure and analyse the achievement of the targets set; reflect on gaps in achievement and on the suitability of the strategic and/or improvement plan;

iv. Improve: Implement improvement or develop an improvement plan based on performance in relation to targets and the suitability of the strategic and/or improvement plan.

Specifically, this GGP: MR-CIIQ is concerned with the overall CQI stages as they apply at the institutional level and as they impact on departmental level operations. Such an overall perspective is addressed in Sections 2.2 and 2.3 of this document. Within the departmental level operations, Section 3 of this document addresses programme-level monitoring and review.

In more detail:

i. CQI at the institutional level is a process of regularly reviewing and updating the HEP's activities to assure and improve quality through applying the CQI stages of 'plan', 'implement', 'monitor and review', and 'improve'. At the institutional level, CQI focuses on the effectiveness of the strategic and/or improvement plan, and of the HEP's IQA system in terms of administrative structure, leadership and governance, planning, and monitoring and review mechanisms;

ii. At the departmental level, this GGP: MR-CIIQ focuses on the effective implementation of the strategic and/or improvement plan, and the alignment of the department's academic programmes to the plan. It is also concerned with supporting the operation of the HEP's IQA system.

[3] A strategic plan normally contains top-down initiatives. However, improvement initiatives may arise from lower levels and are documented as a 'bottom-up' improvement plan.

At the departmental level, CQI considers administrative structure, leadership and governance, planning, and monitoring and review mechanisms;

iii. At the programme level, this GGP: MR-CIIQ refers to the process of regularly reviewing the tools (such as surveys and data collection and their analysis) and activities (for example, improvements in curriculum) used for programme monitoring and review (PMR).

2.2 INSTITUTIONAL LEVEL CONTINUAL QUALITY IMPROVEMENT PRACTICES

At the institutional level, CQI is a systematic and structured mechanism enabling the HEP to achieve its vision, mission and educational goals, as well as to improve continually its IQA system IQA. This process usually emanates from the HEP's strategic plan and involves the whole HEP. However, it may be initiated through more specific improvement plans that involve certain processes.

Institutional level CQI generally covers the four stages of the CQI cycle: 'plan', 'implement', 'monitor and review'; and 'improve'. However, these stages may not always occur sequentially. For instance, unexpected external and internal environmental events, such as governmental policy change and change of the HEP's direction, may mean that the 'plan' stage needs to be revisited. In such a situation, the strategic plan and/or improvement plan would be adjusted so that the HEP can cope under the changed circumstances.

The purpose and rationale (the 'why'), the key activities (the 'what'), the source of information ('data'), the 'output' and the corresponding areas of quality assurance (outlined in COPIA) in relation to the four stages of the CQI cycle at the institutional level, are summarised in the following Table 1. (A representation in flow chart form of the information captured in Table 1 can be seen in Appendix 1.)

Table 1 Institutional Level Continual Quality Improvement (CQI) Practices

Focus/CQI Stages	Plan	Implement	Monitor and Review	Improve
Why? (Purpose and Rationale)	To set direction, priorities, tools (strategic and/or improvement plan).	To deploy and execute the tools (strategic and/or improvement plan) to support the directions and priorities.	To meet effectively the targets, and to ensure relevance and suitability of the strategic and/or improvement plan.	To close the gaps (or to address the opportunities for improvement) and to enhance the strengths.
What? (Key Activities)	Develop or revise HEP's strategic and/or improvement plan: i. Goals; ii. Strategic and/or improvement objectives; iii. Key performance indicators and targets; iv. Strategic and/or improvement initiatives/ activities and budget requirements;	Implement strategic and/or improvement plan. This could involve the development and implementation of action plans (see Figure 2). The implementation should be supported by proper governance/ organization structure	Measure and analyse the achievement of the targets set. Reflect on gaps in achievement and the suitability of the strategic and/or improvement plan, as well as the internal quality assurance system, taking into consideration the	i. Implement improvement to close the gaps (for minor issues). ii. Develop an improvement plan (for more complex issues) using data on performance compared with targets and suitability of the strategic plan.

Focus/CQI Stages	Plan	Implement	Monitor and Review	Improve
	v. Corresponding/ supporting internal quality assurance system.	including physical, financial and human resources.	external reference or benchmark. The review usually consists of internal and external review, which may include benchmarking activity.	This could include updating the strategic or improvement plan, as well as the internal quality assurance system.
Source of Information (Data)	Situational analysis/ environmental scanning, e.g., i. Government policies and directions in higher education; ii. Changes in codes of practice and programme standards; iii. Global and national development in higher education; iv. Global and local market	Strategic and/or improvement plan (new or revised).	Implementation or performance data (quality indicators) from the implementation of strategic and/or improvement plan. Feedback from internal and external stakeholders. Internal and external audit findings. External requirements.	Strengths and opportunities for improvement.

Focus/CQI Stages	Plan	Implement	Monitor and Review	Improve
	trends (such as job market trend and industry needs/expectation); v. Feedback from third party evaluation, such as institutional audit, service delivery audit or quality management system audit; vi. Benchmarking report; vii. Feedback from internal and external stakeholders, including students; viii. Availability of resources; and ix. Improvement plans based on achievement of the implementation of existing		Benchmark information.	

Focus/CQI Stages	Plan	Implement	Monitor and Review	Improve
	strategies or plans.			
Output	Strategic and/or improvement plan, (new or improved) supported by IQA system.	Implementation or performance data.	Strengths and opportunities for improvement.	i. Improvement. ii. Aligned action plan for improvement.
Corresponding COPIA Areas[4]	1. Vision, Mission, Educational Goals and Learning Outcomes. 8. Leadership, Governance and Administration.	2. Curriculum Design and Delivery. 3. Assessment of Students. 4. Student Selection and Support Services. 5. Academic Staff. 6. Educational Resources.	1. Vision, Mission, Educational Goals and Learning Outcomes. 7. Programme Monitoring and Review.	9. CQI (which covers other eight (8) areas)

[4] The various stages of the CQI cycle are linked to the relevant COPIA areas for evaluation. The corresponding COPIA areas for the **planning** stage are: Area 1: Vision, Mission, Educational Goals and Learning Outcomes, and Area 8: Leadership, Governance and Administration. The corresponding COPIA areas for the **implementation** stage are: Area 2: Curriculum Design and Delivery, Area 3: Assessment of Students, Area 4: Student Selection and Support Services, Area 5: Academic Staff, and Area 6: Educational Resources. The corresponding COPIA areas for the **monitoring and review** stage are: Area 1: Vision, Mission, Educational Goals and Learning Outcomes, and Area 7: Programme Monitoring and Review. Finally, the corresponding COPIA area for the **improvement** stage is: Area 9: CQI.

2.2.1 THE CONTINUAL QUALITY IMPROVEMENT STAGES AND INSTITUTIONAL ACTIVITIES

As seen in Table 1, at the institutional level, the purpose of the **planning stage** is to set the direction, the priorities and the relevant tools for achieving the direction. It focuses on formulating the institutional strategic and/or improvement plans, which consist of goals, strategic or improvement objectives, key performance indicators and targets, as well as strategic or improvement initiatives/activities, and budget requirements. The strategic and/or improvement plan should be supported by the HEP's IQA system. For example, one of the educational goals of an HEP may be to produce graduates with global perspectives. To support the achievement of this educational goal, the governance, curriculum, teaching and learning activities, assessment, support services, academic staff and educational resources as well as the programme monitoring and review practices should be aligned accordingly. (These are the nine areas of quality assurance of the COPIA.)

The information for the planning stage is usually collected from analysing the situation or scanning the environment. The information may emanate from the following dimensions:

i. government policies and directions on higher education;
ii. changes in code of practices and programme standards;
iii. global and national development in higher education;
iv. global and local market trends (such as job market trends and industry needs/expectations);
v. feedback from third party evaluation, such as institutional audit, service delivery audit or quality management system audit;
vi. benchmarking reports (refer to Section 2.2.3 for more details);
vii. feedback from internal and external stakeholders, including students;
viii. availability of resources; and
ix. improvement plans based on achievement of the implementation of existing strategies or plans.

The output of the planning stage is a new or improved strategic and/or improvement plan, supported by the HEP's IQA system. The output of the planning stage triggers the next stage, which is the implementation stage.

The focus of the **implementation stage** is to deploy and execute the strategic and/or improvement plan to support the directions and priorities. As

mentioned earlier, the strategic and/or improvement plans should be communicated to the relevant committees, departments and individuals for their effective implementation at the implementation stage (refer to Figure 2). In addition, a more detailed implementation/action plan could be developed and implemented at this stage.

To ensure effective implementation, there should be proper governance or committee structure to support the implementation so that there is a clear platform for decision making. The roles and responsibilities of the committee, department and individual should be clearly communicated and understood. Moreover, there should be sufficient physical, financial and human resources to support the implementation.

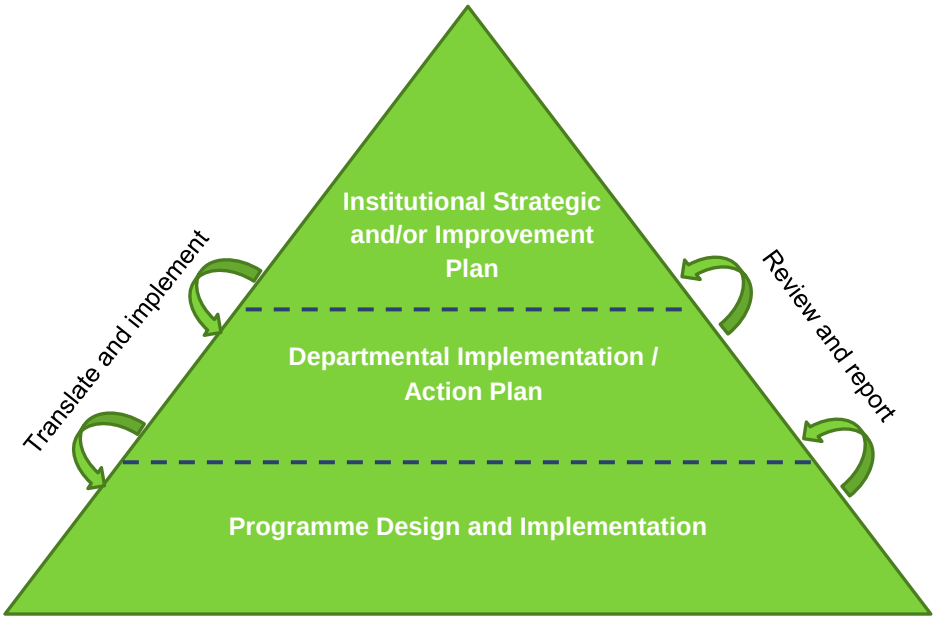

Figure 2 Implementing and Reviewing Institutional Strategic and/or Improvement Plan

The purpose of the **monitoring and review stage** is to understand whether the HEP has effectively met the targets of the strategic and/or improvement plan, as well as to ensure the relevance and suitability of the plan. Hence, at this stage, the HEP measures and analyses the achievement of the targets set (refer to Figure 2). The HEP also reflects on gaps in

achievement. In addition, the HEP reflects on the relevance and suitability of the strategic or improvement plan, as well as the IQA system, taking into consideration the external reference or benchmark.

'Monitoring' refers to on-going developmental or formative activities to ensure the effective implementation of the strategic and/or improvement plan to achieve the goals. 'Review' refers to periodic formative and summative activities to ensure the continual effectiveness and suitability of the strategic and/or improvement plan. Review normally consists of internal and external review. Internal review is conducted by the committee, department or individual responsible for the strategic and/or improvement plan implementation, as well as the IQA system. Inputs to internal review normally involve performance data, feedback from internal and external stakeholders, internal and external audit findings, changes in external requirements, and benchmark information. External review is normally conducted by external agencies, such as service delivery audit or quality management system audit conducted by a certification body, as well as external reporting. The output of the monitoring and review stage is statements of the HEP's strengths and opportunities for improvement in regard to the strategic and/or improvement plan.

The purpose of the **improvement stage** is to 'close the gaps' by addressing the opportunities for improvement and to enhance the strengths to ensure the HEP's sustainability. At this stage, improvement initiative is implemented for minor issues and an improvement plan is developed for more complex issues. Performance data is used in relation to targets and the suitability of the strategic plan. This step could lead to updating the strategic and/or improvement plan, as well as the IQA system. The improvement achieved and the improvement plan developed provides input for the next cycle of planning.

2.2.2 IMPLEMENTATION OF INSTITUTIONAL CONTINUAL QUALITY IMPROVEMENT

In summary, to apply CQI effectively at the institutional level, the following entity and related mechanisms are important.

i. An institutional IQA unit that administers and manages the CQI process (this is a COPIA requirement), as discussed in Section 2.2.2.1;

ii. A system to monitor and review the HEP's strategic and/or improvement plan periodically, to consider the review's recommendations and to record the achievements towards continual improvement;

iii. A system to regularly review and improve the HEP's IQA system (which is directed at ensuring continual improvement towards meeting the HEP's strategic and/or improvement plan, as required in COPIA). This is discussed in Section 2.2.2.2;

iv. A culture in the HEP that values and appreciates the importance of quality and CQI.

The following subsections discuss the roles and responsibilities of the IQA unit in an HEP, and CQI of the IQA system itself through the process of review.

2.2.2.1 ROLES AND RESPONSIBILITIES OF AN INSTITUTIONAL INTERNAL QUALITY ASSURANCE UNIT

The HEP's IQA unit[5] has the responsibility and authority to carry out the institutional quality assurance agenda, which includes establishing, reviewing and improving the HEP's IQA system. To ensure independence of authority, the IQA unit should be given prominent status in the HEP, as stated in COPIA. The information about the quality agenda flows upwards as well as downwards from the HEP's management. Sufficient resources, including human, financial and physical, should be provided to the IQA unit.

The IQA unit may be structured in such a way that enables it to carry out the two important functions of:

i. establishing and improving the IQA system, including CQI activities;

ii. reviewing the IQA system, including conducting internal audit and self-review.

[5] A 'unit' maybe called a center, an agency, a department, a committee and so on, depending on the individual HEP's choice of terminology.

While an IQA unit may be effectively structured in a range of ways, one example as seen in Figure 3 demonstrates the inclusion of both the functions outlined.

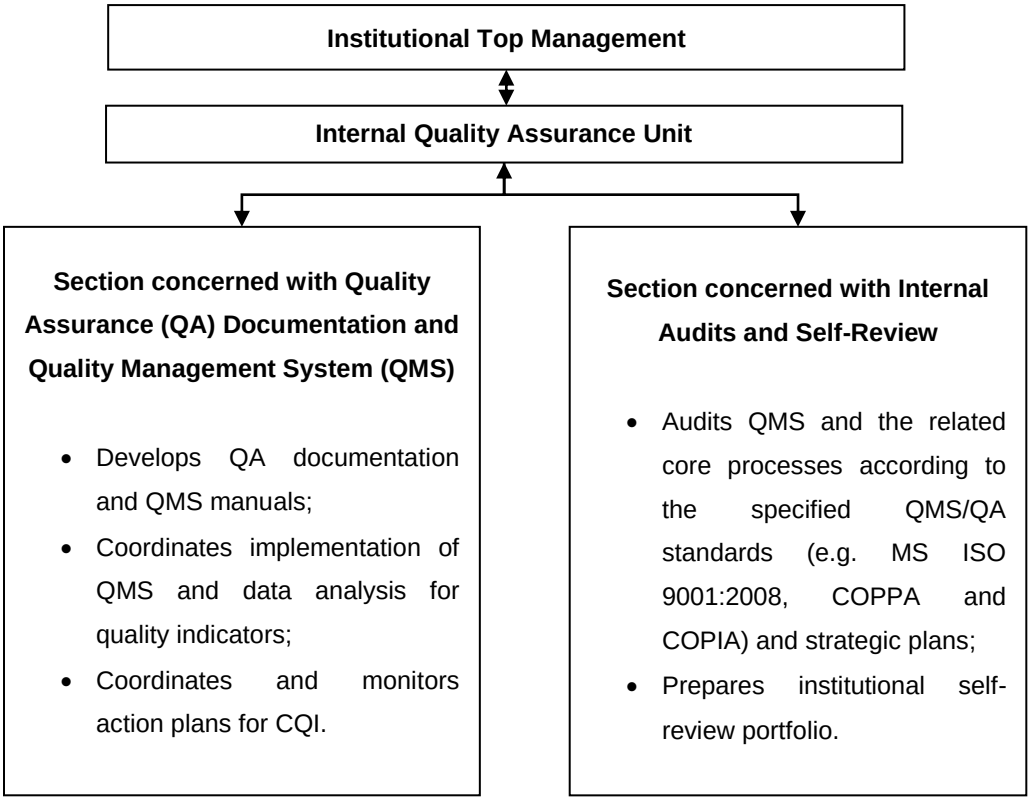

Figure 3 Example of Functional Structure of Institutional Internal Quality Assurance Unit

2.2.2.2 REVIEW OF THE INTERNAL QUALITY ASSURANCE SYSTEM

Regular review of the HEP's IQA system is required to assist the HEP to keep abreast of best practices and maintain relevant standards. The review interval can be decided by the HEP according to its needs. The review is normally coordinated by the HEP's IQA unit with the involvement of relevant stakeholders. Input to the review normally includes system performance data including feedback from internal and external stakeholders, internal and external audit findings, changes in external requirements, and benchmarking information. The

output of the review, which may include the strengths and opportunities for improvement, becomes the input for improving the IQA system. Table 2 exemplifies the process of reviewing the IQA system.

Table 2 Internal Quality Assurance System Review Practices

Focus	Description
Why? (Purpose and Rationale)	To ensure continual effectiveness and suitability.
Source of Information	System performance data, feedback from internal and external stakeholders, internal and external audit findings, changes in external requirements, benchmarking information.
What? (Key Activities)	Review the continued effectiveness and suitability of system.
Output	Strengths and opportunities for improvement.
Corresponding COPIA Areas	All areas.

2.2.3 BENCHMARKING AS A TOOL FOR CONTINUAL QUALITY IMPROVEMENT[6]

Benchmarking may be used as a tool for identifying opportunities for improvement and becoming aware of good practices that can be applied or adapted to improve the HEP's quality. The HEP's goals or performance and practices are compared with those of selected HEPs, which are benchmarked against. The output of the process, which normally includes the strengths and opportunities for improvement, will become the input for improving the institutional goals, strategic plan, as well as the quality assurance system.

The benchmarking process normally involves four stages, as summarised in the following Figure 4.

[6] The explanation provided in this section refers to a general benchmarking technique that applies to all nine areas of COPIA/COPPA and may be implemented across all types of HEPs. Please note that there are a variety of other benchmarking techniques available.

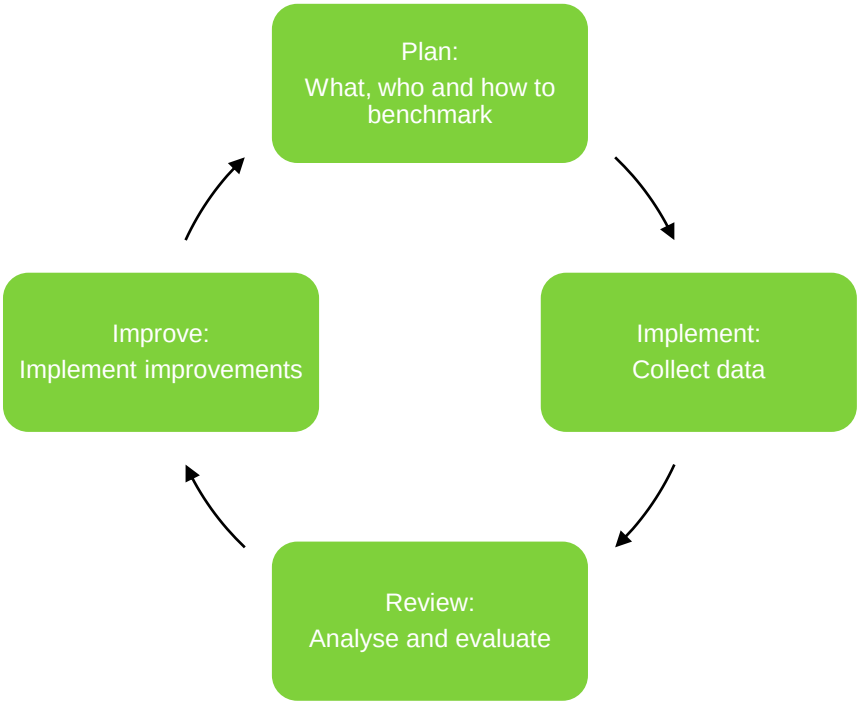

Figure 4 Benchmarking Process

The key activities at the four stages are as follows:

i. Planning stage:

Areas are identified for benchmarking, what to benchmark is defined, benchmarking partners are selected, and agreement is reached on the benchmarking approach;

ii. Implementation stage:

Data are collected according to the agreed plan, which could be performance or good practice-based;

iii. Review stage:

Data collected are analysed to identify comparative strengths and opportunities for improvement. A report (informal or formal) that outlines the findings and recommendations for improvements is prepared and communicated;

iv. Improvement stage:

The recommended improvements are implemented. The output of this benchmarking cycle may become the input of the next benchmarking cycle.

2.3 DEPARTMENTAL LEVEL CONTINUAL QUALITY IMPROVEMENT PRACTICES

The implementation of the institutional strategic and/or improvement plan needs to flow through to the departmental level. Planned activities and related Key Performance Indicators (KPIs) need to be communicated to the relevant parties to ensure successful implementation. This stage also provides feedback from the departmental level about challenges and achievements that occur in the implementation, and consequent readjustments to the strategic and/or improvement plan can be made.

The implementation process is similar to that for the institutional level as described in Section 2.2.2.

2.3.1 INTERNAL QUALITY ASSURANCE UNIT AT THE DEPARTMENTAL[7] LEVEL

In maintaining and extending educational quality in the department, it is useful if there is a particular unit or person who has the responsibility for advancing support for the HEP's policies, procedures and mechanisms for regular review and the updating of the HEP's strategic plans and stated purpose. The unit or person should play a prominent role in departmental policy processes and in managing quality activities, including CQI, within the department. The unit or person should work with the institutional IQA unit to ensure effective activities. An example of such interaction can be seen in Figure 5.

[7] Terminology may differ across HEPs such as 'school', 'faculty', 'centre' and 'support centre'.

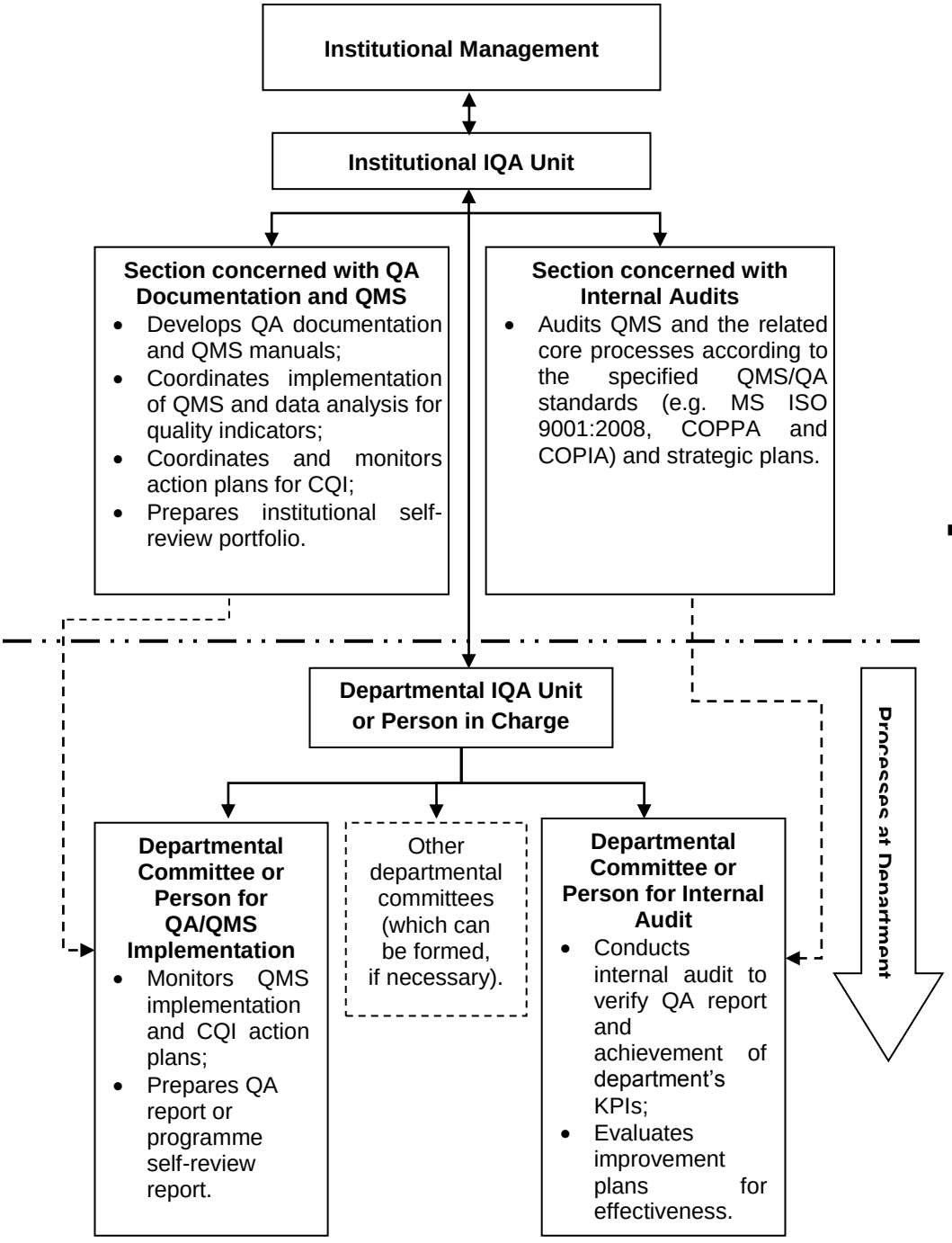

Figure 5 Example of Interaction between Institutional Internal Quality Assurance Unit and Departmental Internal Quality Assurance Unit or Person

It is useful if the departmental IQA structure reflects that of the institutional IQA unit (as discussed in Section 2.2.2.1), so as to facilitate a seamless and integrated interaction. This is seen in the example provided in Figure 5. However, it is important that the unit operates with some level of independence to ensure objectivity in its outcomes.

2.3.2 DEPARTMENTAL LEVEL CONTINUAL QUALITY IMPROVEMENT CYCLE

Table 3 elaborates on the four stages of CQI cycle at the departmental level and their coherence with the basic standards in COPPA and COPIA.

Table 3 Departmental Level Continual Quality Improvement (CQI) Cycle

Stage of CQI Cycle	Examples of Departmental Internal Processes	Examples of Programme Management Processes
Plan – identify goal and strategies as formulated in the HEP's strategic plans, including those for academic programmes.	• Develop departmental strategic initiatives to support the strategic plan; • Undertake situational analysis or environmental scan on stakeholders' expectations and consider relevant national policy and regulatory requirement; • Analyse global landscape and market trends on threats, and opportunities, and conduct Situational Analysis (Global Landscape) and SWOT	• Gather information through consultation with stakeholders on needs of job market and relevant national policies, regulatory requirements and standards; • Develop action plans for recommendations and corrections from audit, accreditation and external examiner reports; • Deploy action plans formulated from the previous CQI cycle.

Stage of CQI Cycle	Examples of Departmental Internal Processes	Examples of Programme Management Processes
	Analysis (Market trend) in relation to these.	
Implement – carry out strategic activities, quality policies and quality assurance (QA)/Quality Management System (QMS) processes.	• Set up appropriate governance, which includes a committee structure to support the implementation, with clear roles, responsibilities and platform for decision making; • Monitor adequacy of resources, covering physical infrastructure, financial and human resource (recruitment, development, training and career advancement).	• Execute the action plans and monitor the implementation in terms of efficiency and effectiveness as stipulated by the plans; • Perform verification, validation and real-time data analysis and make necessary adjustment and alignment to the plans for continuous or continual improvement of the process, guided by the QA/QMS processes procedures.
Review – measure and reflect the achievement/ performance.	• Review the alignment of the strategic initiatives to the HEP's purpose (vision, mission and institutional objectives) as well as to national policies and master plans, if relevant; • Review strategic initiatives through feedback from internal and external stakeholders, guided by	• Align academic programme to the HEP's vision, mission and educational goals; • Review design and delivery of academic programmes through feedback from stakeholders, guided by data and evidence from other sources; • Analyse the attributes, competence and

Stage of CQI Cycle	Examples of Departmental Internal Processes	Examples of Programme Management Processes
	data and evidence gathered from sources such as internal audits and surveys.	performance of every cohort of graduates; • Assess compliance with certification/accreditation standards as stipulated by the external QA parties, such as Malaysian Qualifications Agency and professional bodies.
Improve – identify opportunities for improvement and formulate action plans.	Formulate action plans to fulfil to the HEP's purpose and national policies, to meet stakeholders' expectations and to address areas of concern; develop strategies to sustain strengths.	Formulate action plans to ensure conformance to the stipulated standards and to maintain programme sustainability by addressing areas of concern and implementing strategies to sustain strengths.

The institutional level CQI activities are supported by and feed into the departmental CQI activities. Departmental QA activities include review of administrative structure, leadership and governance, planning, monitoring and review, as well as curriculum monitoring and review (this is the focus of Section 3 of this GGP: MR-CIIQ). The 'plan' and 'implement' stages of CQI at the programme level have been discussed in the MQA *Guidelines to Good Practices: Curriculum Design and Delivery* and the *Guidelines to Good Practice: Assessment of Students*.

3.0 PROGRAMME MONITORING AND REVIEW

3.1 INTRODUCTION

Programme monitoring and review does not occur in isolation but is an aspect of continual quality improvement (CQI) that takes place at the level of curriculum. Figure 6 provides a visual representation of the relationship of programme monitoring and review (PMR) to the larger CQI process and activities.

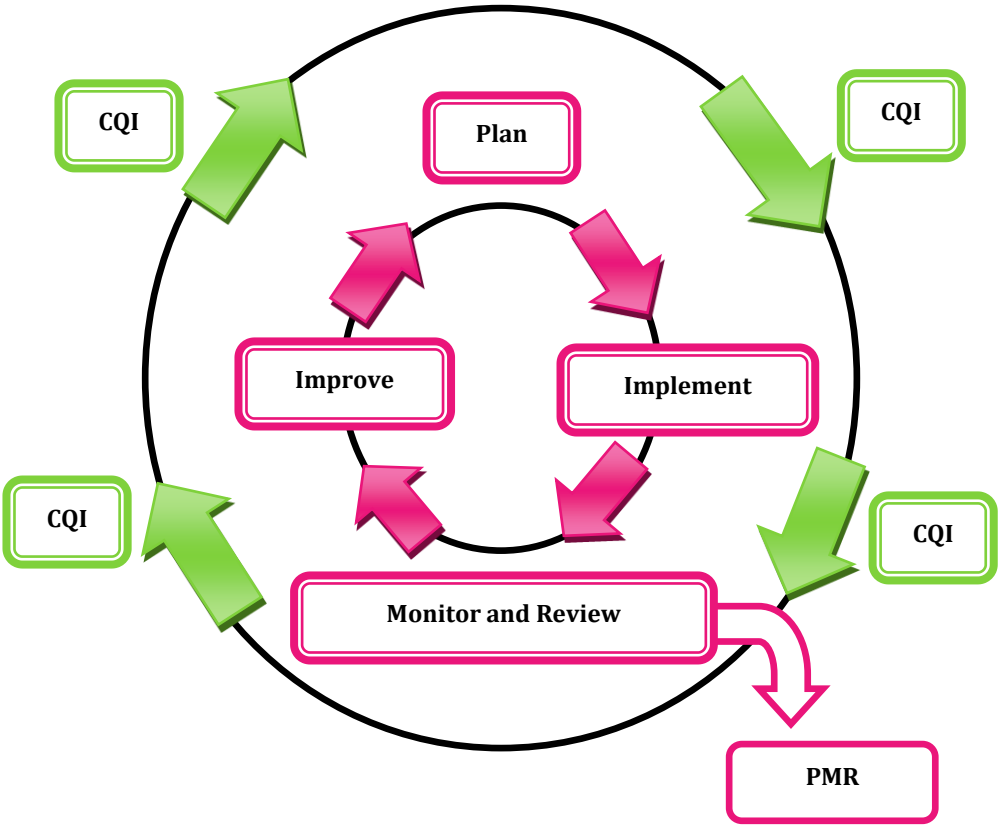

Figure 6 Programme Monitoring and Review (PMR) in Continual Quality Improvement (CQI) Cycle

In essence, PMR processes for modules and academic programmes are self-reflective, self-critical processes concerning the performance and effectiveness of the modules and programmes. These processes are developmental and formative, and lead to actions for improvement. Succinctly, while both programme monitoring and programme review has results, the outcome of monitoring is the maintenance of academic quality. The outcome of review, on the other hand, can lead to large scale changes to the programme. The major differences between programme monitoring and programme review are the scope and the frequency.

PMR are linked processes, as seen in Figure 7.

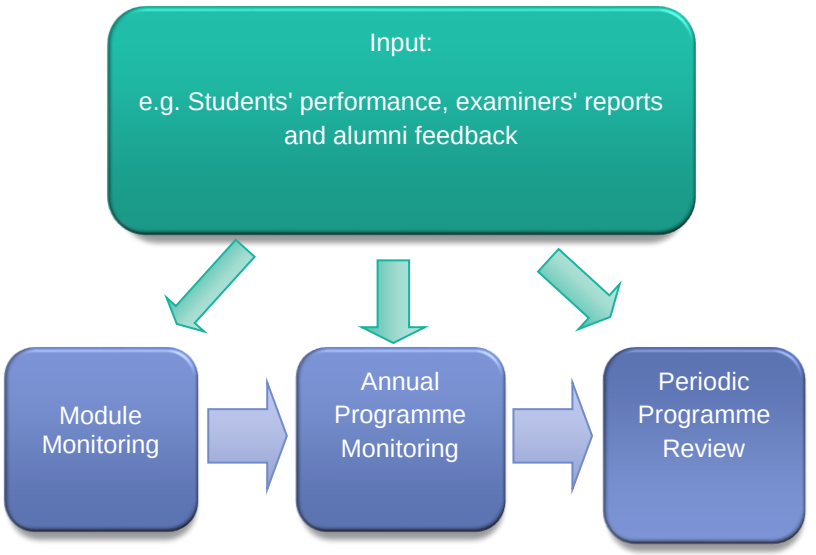

Figure 7 Process of Monitoring and Review

Figure 7 shows that various sources of information are collected for module monitoring. Examples include examiner and benchmarking reports, students' performance, students' evaluation of teaching, alumni and industry feedback, and changes in policy. These are analyzed to identify the strengths and weaknesses of the module and the areas requiring change and improvement. The monitoring is undertaken by the module coordinator in conjunction with the module team. The results of the monitoring are fed into the annual programme monitoring process, and eventually, into the periodic programme review.

Annual programme monitoring focuses on the maintenance of the quality of the students' educational experience and improvement of the programme delivery system. As explained in Section 3.4 the periodic programme review is undertaken less frequently than the module and programme monitoring, and is comprehensive in scope, aims and processes.

Table 4 outlines the major features of module monitoring, programme monitoring and periodic programme review. However, please note that types and frequency of monitoring and review practices differ across HEPs and the following table provides general guidelines only.

Table 4 Overview of Module Monitoring, Programme Monitoring and Periodic Programme Review

Focus	Module Monitoring	Programme Monitoring	Periodic Programme Review[8]
When?	Twice per semester where the subject operates.	Normally is undertaken annually.	At least once every five (5) years or earlier if required (as stated in Programme Standards).
Why?	1. Monitor students' performance. 2. Improve module content, methods of delivery and assessment.	1. Maintain and improve academic standards[9]. 2. Monitor and enhance quality of students' experience.	1. Ensure the programme is consistent with the HEP's strategic directions including stakeholders' expectations, as well as educational priorities and academic standards. 2. Provide confirmation of fitness for purpose of the curriculum. 3. Provide evidence of the effectiveness of annual monitoring processes.

[8] Professional body accreditation reviews takes precedence over HEP monitoring and review reports.
[9] Academic standards are the standards that degree awarding bodies set and maintain for award of their academic credit or qualification. Likewise, threshold academic standards are minimum acceptable level of achievement that a student has to demonstrate to be eligible for an academic award (QAA, 2013).

Focus	Module Monitoring	Programme Monitoring	Periodic Programme Review[8]
What?	1. Student performance 2. Module review (content, teaching and learning, assessment).	1. Academic standards. 2. Students' experience.	1. Fitness for purpose/Module and/or Programme Outcome. 2. Academic standards. 3. Students' experience. 4. Contribution of the programme to industry/profession. 5. Programme currency/cutting edge, relevance, and comprehensiveness; and the level of learning challenge to students.
Source of Information	1. Student performance a) Attainment of learning outcomes. b) Moderation outcomes. c) Student performance at	1. Student Enrolment Numbers. 2. Articulation, pathway and student performance (including progression and attrition). 3. Curriculum changes due to	1. Developments in the discipline, practice and pedagogy. 2. Stakeholders' feedback including students, employers

Focus	Module Monitoring	Programme Monitoring	Periodic Programme Review[8]
	module level. d) Student progression and attrition rates. 2. Curriculum review a) Students' evaluation. b) Academic staff input. c) Stakeholders' feedback.	module monitoring. 4. Graduates' achievement of programme outcomes. 5. Changes in external regulatory and industry requirements: acts, policies, standards, market demand. 6. Academic staff and educational resources review. 7. Where relevant, ethics approval for research activities. 8. External examiner, visiting professor, adjunct professor.	and alumni. 3. Audit reports from internal and external examiners[10]. 4. Benchmarking reports. 5. Job market analysis. 6. Student Enrolment. 7. Articulation, pathway and student performance (including progression and attrition). 8. Curriculum changes due to module monitoring. 9. Graduates' achievement of programme outcomes. 10. Changes of external regulatory and industry requirements: acts, policies, standards, market demand.

[10] The practice of using external examiners is compulsory at Malaysian Qualifications Framework (MQF) qualification Level 6 and above as stated in COPPA Section 2.4.1.

Focus	Module Monitoring	Programme Monitoring	Periodic Programme Review[8]
			11. Academic staff and educational resources review. 12. Where relevant, ethics approval for research activities. 13. Benchmarking reports from offshore partner programmes.
Who?/ Responsibility	1. Examiner committee. 2. Module Coordinator.	1. Head of programme. 2. Chair/Programme director.	Relevant school/department academic committee.
Reporting/ Authority	Relevant school/department academic committee.	Relevant school/department academic committee.	HEP's highest academic body.

3.2 MODULE MONITORING

It is advantageous for the monitoring of modules to take place after the module has been presented, and is often carried out in a one-semester cycle. Module monitoring is an on-going process of collecting information to ensure all planned aspects of a module are meeting the aims and performance targets, and to ensure that the content aligns with the accepted standards or intended learning outcomes. It enables the tracking of students' performance across modules.

Module monitoring includes reflection on the following:

i. Students' performance – identifying trends, making comparisons, knowing about the performance of different groups of students, using benchmarks, setting and reviewing targets, grades achieved including levels and failures;
ii. Curriculum/module content – comparing plans with learning outcomes (LOs), identifying and analysing clarity of intended LOs and analysing gaps in achievements;
iii. Delivery methods – for example face to face and digital; effectiveness in relation to student cohorts;
iv. Teaching – observing, providing feedback, reporting on findings;
v. Assessments – suitability of assessments in relation to learning outcomes.

Module monitoring serves two main purposes. The first is to monitor students' level of performance, through review of assigned marks and grades. It underpins summative assessment, which helps to identify the degree to which a student has met the criteria for the particular module. The module coordinator may monitor students' performance via formative assessments that assist students to learn, deepen their understanding, and develop new attitudes and ideas. Feedback is crucial in the formative side of assessment.

The second purpose is to inform the coordinators/lecturers/instructors of the following based on the information collected through the summative and formative assessments, as well as through student feedback, such as:

i. Students' readiness to cope with the module's academic demand;
ii. Students' understandings of the module materials and learning and teaching methods;
iii. Topics students have grasped and topics that need further attention;

iv. The degree to which students are engaged with module materials;
v. The tasks students find difficult, and those they find interesting and motivating;
vi. Students who need additional support with the module;
vii. The degree to which students are satisfied with the learning and teaching methods.

The above aspects are also useful in improving the module content, the delivery and assessment methods. The module coordinator/lecturer/instructor thus has evidence for future planning and module development concerning the resources and facilities required to deliver the module, and the effectiveness of assessment methods.

Various data are needed in the module monitoring process as it deals with student performance and module-related matters. The following are suitable inputs:

i. Grade distribution reports of a particular student against other students. This provides an aggregation of final grades for each module and includes GPA, cumulative GPA, and percentage distribution grades. It can be used to decide about a student's overall performance (success and failure);
ii. Moderation is a method of monitoring assessments of modules which ensures that assessments and grading are valid and reliable. It also identifies unacceptable variations in assessments and outcomes. Moderation records help in improving module assessment methods;
iii. Students' failure rates: This may include the failure rate in assignments and final examinations. As academic failure creates a major financial and emotional burden for students, it has resource and performance implications for the HEP. Therefore students' failure rates should be monitored, and contributing factors investigated;
iv. Stakeholders' feedback: Feedback from stakeholders including professional bodies, industries, employers and past students comments are valuable in monitoring the modules;
v. Students' feedback: Normally during and after the completion of the module;
vi. Response to research-informed teaching: Teachers implement pedagogic innovation and research findings in their teaching.

For example, the HEP may use the following input for module monitoring at the one semester cycle monitoring:

i. Students' complaints and feedback, gained through online systems, meeting with a department's management team and other media, such as emails.

ii. Feedback from lectures from periodical meetings at department/institute level.

Module monitoring is a collective effort involving many stakeholders. The following Table 5 provides an example of the tasks that need to be performed in module monitoring. Given that there is wide variation in HEP's structures, it is up to the individual HEP to allocate appropriate parties to perform the tasks.

Table 5 Responsibilities in Module Monitoring

	Responsibility/What?
i.	Delivering the curriculum and compiling formative evaluation and assessments on students.
ii.	Planning and maintaining summative evaluations and records, and making these available to relevant parties.
iii.	Assessing student progress.
iv.	Giving support and direction to colleagues with regard to module management, delivery and development. This role is informed by monitoring at a variety of levels, including teaching observation.
v.	Identifying pedagogic issues and arranging professional development programmes where relevant.
vi.	Forwarding the module monitoring reports to the appropriate departmental bodies/committees.
vii.	Leading development and review of curriculum to ensure relevance and cohesion.
viii.	Monitoring planning.
ix.	Overseeing the process of monitoring, supporting and facilitating the process via moral support and financial backing.
x.	Monitoring the quality of the curriculum, including overseeing and reporting to the department.
xi.	Providing governance for evaluating and approving curriculum.

3.3 PROGRAMME MONITORING

Programme monitoring looks at each academic programme in its entirety, including the constituent modules, the curriculum, the learning and teaching, the assessment methods, the learning environment, physical and educational resources (including digital educational resources), the staff, student and industry advisory board input. It is undertaken on a timely basis to track the quality of the programme and to identify areas of risk as they arise. It thus provides information for timely programme improvement.

Programme monitoring is an activity that: clarifies programme objectives; links activities and their resources to objectives; translates objectives into performance indicators and sets targets; routinely collects data on these indicators and compares actual results with targets.

In general, programme monitoring could:

i. Identify the key issues related to academic standards, the quality of the student learning experience; programme design and content;
ii. Analyse issues raised in student performance data (programme performance indicators such as admissions, enrolment, entry qualifications and pathway, retention, progression, completion, exit qualification);
iii. Analyse issues raised in internal student feedback and external surveys such as tracer studies;
iv. Review other issues for example employability issues or generic skills issues and sustainability of the programme.

The department should make sure that threshold academic standards are met in their awards by aligning programme learning outcomes with the relevant qualification descriptors in the national frameworks for higher education qualifications (in Malaysia, this refers to Malaysian Qualifications Framework, MQF). The department is responsible for ensuring its programmes are aligned with academic standards, including the HEP's educational goals and graduate attributes as described in Programme Standards, as well as the requirements of professional bodies.

Programme monitoring provides information on whether the academic standards and threshold standards are maintained. It identifies the issues and shortcomings in maintaining academic standards, so that necessary action can be taken to improve the academic standards.

Programme monitoring enhances the quality of the student experience by the following activities:

i. providing for continuous review;
ii. identifying areas for improvement; and
iii. taking appropriate and timely actions.

Identifying these issues within the programme will guide necessary actions. This helps to enhance the quality of the student experience in the programme.

In addition to the data used in module monitoring outlined earlier in this section, the following data is used in programme monitoring:

i. Student enrolment: Information about students' admission rate, admission requirements and changes in requirements if any, retention rate, completion, progression, proportions in award category, differences in attainment among student sub groups, deferrals, referrals and failure rate in the programme;
ii. Articulation and pathway of enrolled students in relation to the students' performance (including progression and attrition), the strategies used to improve student outcomes, students' enrolment and reduction in dropout rates;
iii. Students' performance: Information or records about the students' performance at the programme level, their enrolment and progression and retention rate. Information about mid-term and final examinations and assignment scores, scores in projects, classwork and homework and attendance reports are also needed to monitor programme through students' performance;
iv. Curriculum changes from module monitoring: Inputs in the module monitoring such as feedback and complaints from students, students' assessments records, academic staff feedback and stakeholders' comments can be utilised to introduce significant changes in the curriculum;
v. Graduates' achievement of the programme outcomes: The information or data from alumni and employers is useful to determine the programme effectiveness and ensure that students achieved the intended learning outcomes/competency of the programme;

vi. Changes of external regulating and industry requirements, acts, policies, standards and market demand;

vii. Academic staff and educational resources review: This includes academic staff review reports which may give information about programme expectations and tasks performed by the academic staff. Likewise, review reports about educational resources are also important in monitoring programmes. Educational resource review reports may include the details of required resources for the programme or for each module, available resources and effectiveness of available resources.

For instance, the University of Edinburgh carries out programme monitoring using the following inputs:

i. Summary and analysis of final marks with comments on grade portfolio;
ii. Summary and analysis of views of all staff involved in teaching the course;
iii. Summary and analysis of positive and negative comments made by external examiners;
iv. Issues that arise or proposals for change;
v. Student feedback.

The programme leader/head/director is responsible for leading the annual programme monitoring process to review, reflect and discuss the monitoring activities with their academic staff. This is undertaken in conjunction with other academic staff in the programme. The report is forwarded to the relevant departmental academic committee.

3.4 PERIODIC PROGRAMME REVIEW

Review of programmes is a process that is more comprehensive than module or programme monitoring, and is undertaken periodically to make judgments about the degree to which the programme:

i. meets the requirements of: (1) Malaysian Qualifications Framework (MQF); (2) Malaysian Qualifications Agency (MQA) Code of Practice for Programme Accreditation (COPPA), and (3) MQA Programme Standards, including standards from professional bodies;
ii. contributes to the HEP's strategic directions and goals;
iii. provides a quality student experience.

It is necessary for HEPs to undertake periodic programme review, as required by COPPA 2.4.1. However, the HEP is able to design their own processes for such review, and this document provides suggestions that HEPs may find useful.

Furthermore, as stated in COPPA, in today's world, HEPs need to be "dynamic learning organisations", continually and systematically reviewing academic programmes to ensure they meet the constantly changing environment (COPPA, 2008, p. 37). In line with this perspective, as well as evaluating the programme's compliance with MQF, COPPA and Programme Standards, the HEP should evaluate the currency, the relevance, the comprehensiveness and the challenge of the programme in the light of latest developments in the external environment and in the particular discipline/s.

However, in taking a broader perspective than programme monitoring, the periodic programme review should be aligned with the development stage and the needs of the particular HEP. This level is most likely reflected in the HEP's strategic plan and goals. All academic programmes must meet MQF, COPPA and Programme Standards, and these may be the focus for the review of a programme in an HEP at its current stage of development. Classified as standards based quality assurance, such an approach is focussed on meeting standards.

Additionally, a programme in a well-established HEP may meet all MQF requirements, all basic as well as enhanced COPPA standards and Programme Standards, and thus be positioned to address more directly the HEP's particular objectives that are embedded in the HEP's mission, educational goals and strategic plan. Such an approach combines a standards based with a fitness for purpose approach, where the programme's achievements in terms of the HEP's strategic directions are evaluated.

For instance, an established HEP may aim to develop in its students the ability to take multidisciplinary perspectives. The review panel may emphasise investigation of the programme's curriculum structure in terms of the potential for students to develop multidisciplinary views as they undertake their studies. The panel may assess such a requirement as it addresses MQF compliance and COPPA Area 2, 'Curriculum Design and Delivery'. Using an objective, evidence/data based approach, the review panel may note an opportunity for improvement and recommend curriculum development, which could, as an

example, refer to the introduction of cross disciplinary degrees, the availability of cross disciplinary elective modules, or cross disciplinary study projects in the assessment protocol for particular modules.

The review should aim for the participation in the panel of personnel from a range of backgrounds, so that the programme is evaluated from multiple perspectives. The panel can include personnel from outside the department and from other HEPs. It may also include personnel from industry and the relevant profession. Please note that for review panels for programmes at Bachelor's level (Level 6, MQF) and above, the panel must include external representation (COPPA Section 2.4.1).

3.4.1 PROGRAMME REVIEW AND SELF-ACCREDITING HEPS

Periodic review of programmes is necessary for all HEPs in higher education globally. In Malaysia, it is a key and necessary activity for HEPs that hold self-accrediting status. These HEPs can accredit their own programmes internally, without referring to the Malaysian Qualifications Agency as the accrediting body. A key regulatory condition of the ability to accredit their own programmes is that the programmes must comply with the MQF, COPPA and Programme Standards. However, professional body reviews and accreditations receive priority, and these are accepted in place of the HEP's accreditation process.

For self-accrediting HEPs, along with clear and appropriate processes for the provisional accreditation of proposed new programmes, programme review is the means through which self-accrediting HEPs can perform full accreditation on their programmes in the final year of the programme's first offering. Programme review is also used in accreditation renewal or maintenance, usually occurring at least every three to five years or earlier if required, as stated in Programme Standards. However, relevant programmes must still undergo professional body accreditation, as discussed previously. The outcomes of these programme accreditation processes in self-accrediting HEP's must be reported to the Senate, or to the HEP's

highest academic committee, so that the accreditation results can be finalised.

Table 6 illustrates the points where programme review occurs in self-accrediting HEPs. COPPA (2008) provides information regarding new programme approval as well as provisional and full accreditation.

Table 6 Programme Review in Self-Accrediting HEPs: The Programme Lifecycle

Programme Accreditation		
Six months before the graduation of the first intake of students, department convenes process for accreditation.	The review on which the Accreditation is based includes checking compliance with MQF, COPPA and Programme Standards.	The outcomes of the Accreditation review are passed through to the HEP's highest academic body, which then accredits the programme.
Periodic Programme Review/Reassessment		
At least every three to five years, department conducts programme review by external panel according to HEP's programme review policy and procedure.	Review includes MQF, COPPA and programme standards compliance.	Outcomes of the review are passed to the HEP's highest academic body, which then approves the outcomes of the review.

3.4.2 PROGRAMME REVIEW SCHEDULE AND PERSONNEL

Periodic programme review is significant in enhancing the quality in a HEP's educational programmes, providing impetus for programme redesign and modification. Such importance is indicated by the fact that HEPs should have a clear schedule for the review of all programmes. A list of all the HEP's academic programmes, the year of the programme review (past and future) can be placed on the HEP's website, and also on the website of the programme's department. The schedule is usually developed by the HEP's quality assurance (QA) unit, which also notifies the relevant department of the need for the review, and develops a clear plan of the process for the department to follow.

A schedule on a website can indicate to stakeholders the active nature of the HEP's quality assurance activities and the dynamic nature of academic programmes, where reviews ensure their relevance, effectiveness and overall quality. This is an important aspect for the general public and other stakeholders such as industry, academic staff, parents and students to understand so that they can provide effective feedback for programme improvement.

To ensure the seamless implementation of periodic programme reviews, the HEP, most likely through the IQA Unit, should clarify the roles and responsibilities of the parties involved in the review. A suggested arrangement is in Table 7 as follows:

Table 7 Suggested Responsibilities in Programme Review Procedure

Body	Responsibilities
Internal Quality Assurance (IQA) Unit	• Prepares and notifies department of the review timeline; • Undertakes administration for the review.
Programme Leader and Programme Team	Prepares self-review report.

The external panel (meaning external to the department in which the programme operates) usually includes a range of personnel from within and outside the HEP and the department. The panel could include industry or professional body representatives, and representatives from other HEPs. Such diversity brings multiple perspectives to bear on the evaluation of the programme. The panel composition, however, is subject to the practices of the individual HEP.

3.4.3 CRITERIA AND DATA FOR PROGRAMME REVIEW

As already discussed, MQF, COPPA and Programme Standards are integral to programme review processes. Whether self-reviewed by the department or reviewed by an external panel, data is used in determining the programme's strengths and opportunities for improvement. Table 8 provides suggestions of relevant data for review

purposes. Furthermore, HEPs with partnerships and close relationships with overseas HEPs may need to address additional criteria to ensure the programme is compliant with the partner HEP's programme quality standards. For instance, links with a university in the United Kingdom may require that the HEP comply with United Kingdom Quality Assurance Agency (QAA) requirements, as well as those for Malaysia. Another example is foreign branch campuses of Australian HEP's in Malaysia that must comply with the Australian Qualifications Framework and their home university's quality standards, as well as MQF, COPPA and Programme Standards.

Well-established HEPs may require that their programmes clearly address the HEP's strategic objectives that are laid out in the strategic plan, as discussed earlier in this section. This situation presents another layer of criteria to be addressed in a programme review, in addition to MQF, COPPA and Programme Standards compliance.

In addressing these multiple layers, the HEP may wish to integrate the criteria, to avoid repetition in the review process.

Table 8 uses the COPPA areas as an example of the types of questions that can guide reviewers in evaluating quality, whether for self or external review, and the type of data that can be drawn on in making judgements. (Please note: COPPA provides an extended list of suitable questions.)

Table 8 Some Criteria for Programme Review

COPPA AREA	QUESTIONS	RELEVANT INFORMATION/DATA
1. Vision, Mission, Educational Goals and Learning Outcomes	• Is the programme aligned with the strategic objectives? • Do the programme's educational goals flow from the strategic objectives? • How are these reflected in the programme educational outcomes?	• HEP Strategic Plan; • Statement of Educational Goals
2. Curriculum Design and Delivery	• Are programme and modules up to date with latest disciplinary knowledge? • Is the flow of the modules across the curriculum coherent? • What changes have been made since the last review and reasons for these? • Are the learning outcomes aligned: Programme Educational Objectives (PEOs), Programme Learning Outcomes (PLOs), Module Learning Outcomes (MLOs), and with the assessment and teaching and	• Outcomes Based Education (OBE) mapping of the curriculum; • Mapping of programme to MQF graduate outcomes; • Programme and module credit and academic load mapping; • Data on students' progression, attrition, average grades.

COPPA AREA	QUESTIONS	RELEVANT INFORMATION/DATA
	learning approach? • Are the MLOs and PLOs achieved? • Is the programme compliant with MQF and MQA graduate attributes?	
3. Assessment of Students	• Is there alignment of MLOs and assessment? • Are the assessment tasks appropriate? • What feedback is provided to students? • Are there department assessment committee/operation processes? • Is there a variety of assessment tasks to cater for student diversity? • Are there processes in place to deal with suspected student plagiarism? • Are the assessment standards comparable with those for other HEPs?	• Curriculum mapping, chart of department committee structure and terms of reference, tables of assessment grades in the department; • Data on percentages of students in department, programmes and modules achieving at various grade levels; • Department procedures for dealing with cases of plagiarism; • Procedures for moderation of assessment grades; • External examiner reports.
4. Student Selection and Support	• How does the programme attract appropriate students;	• Details of student progress/attrition/average grades;

COPPA AREA	QUESTIONS	RELEVANT INFORMATION/DATA
Services	what are the marketing strategies? • Are the entrance scores in alignment with HEP policies and English language scores? • What are the student demographics: percentages of local/international students, ages, etc.? • What are the credit/articulation arrangements and processes? • What is the nature of support/academic support for students?	• Data relevant to questions provided in COPPA Area 4; • Graphs of achievement levels of students from different pathways.
5. Academic staff	• What is the staffing profile, including numbers? • What are their development opportunities? • How do academic staff keep up to date with disciplinary knowledge?	• Data on staff-student ratio; • Table of staff qualification levels; • Percentage of staff with completed/in progress PhDs.
6. Educational Resources	• Are there sufficient and adequate rooms/equipment/ technology? • What resources are	• List of resources.

COPPA AREA	QUESTIONS	RELEVANT INFORMATION/DATA
	available?	
7. Programme Monitoring and Review	• Is module and programme monitoring done? • Are recommendations from monitoring and reviews followed up on? • Are there processes in place for student evaluation of teaching and modules? • How is feedback from students collected and used? • What is the input of stakeholders such as alumni/industry used in educational development? • Is there graduate tracer study/graduate feedback?	• Action plans and follow up to programme monitoring and periodic programme review; • Summary of outcomes of student evaluation of teachers and modules; • Minutes of meetings with alumni and industry representatives.
8. Leadership, Governance and Administration	• What is the organisation at the department/programme levels? • What is the process for curriculum amendments?	• Organisation and committee charts; • Terms of reference and minutes of meetings.
9. CQI	• How is CQI organised in academic programmes?	• Process of CQI.

3.4.4 STAGES IN A PERIODIC PROGRAMME REVIEW

Comprehensive programme review involves several stages and personnel and requires a clear process. A suitable process is indicated in Figure 8.

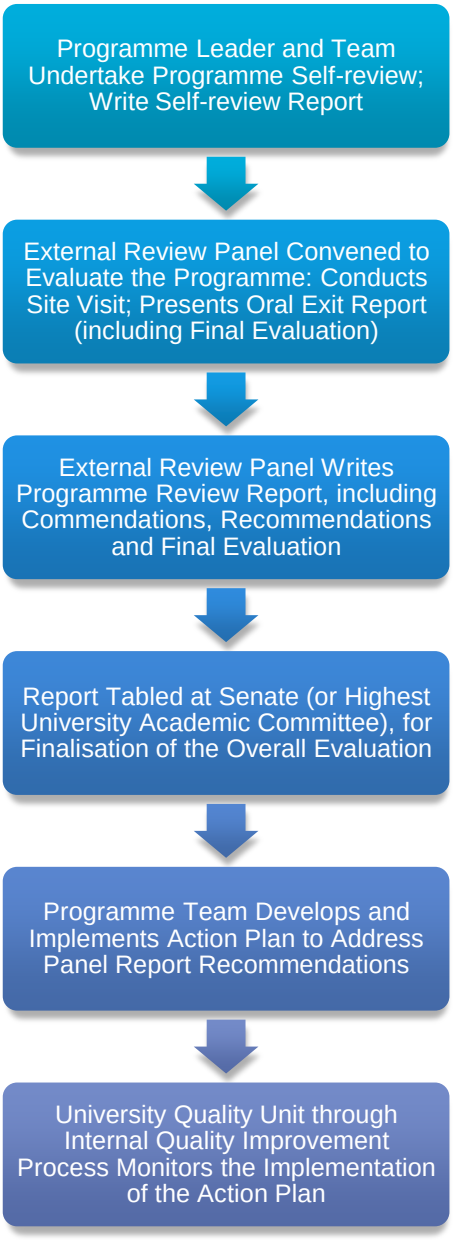

Figure 8 Suggested Process for Programme Review

As shown in the Figure 8, the process involves the following:

i. The programme leader and the programme team review and reflect on their programme using set criteria, which includes the MQF standards, the standards in COPPA, and Programme Standards. The team also evaluates the programme's contribution to the HEP's strategic directions. (COPIA and COPPA provide additional information on the questions a department can ask of itself in preparing the self-review report.)

ii. Additional criteria may be set by the HEP. For example, an HEP with links to a foreign HEP may be required to comply with the foreign HEP's programme quality standards. All these criteria need to be integrated so that a coherent and manageable review can be undertaken.

The programme team establishes the current state of the programme in the light of the evaluation criteria, considering the programme's strengths, and opportunities for improvement, including adjustments to better fit the external and internal HEP environment. The evaluation should be made based on data/evidence, and be presented in the self-review report as evidence-based judgements, rather than as unsupported opinions. Relevant evidence includes data on student progress, achievement and average grades, and the outcomes of surveys, academic staff statistics, and the like.

i. The outcomes of the reflective but evidence-based self-review are recorded in a self-review report. The report makes judgements about the areas of strength and improvement, with the rationale underlying these judgements, and recommendations for improvement.

ii. An external review panel is established to review the programme, based on the self-review report. Typical membership of a programme external review panel has been discussed on page 40.

iii. A pre-determined time is set aside for the panel to review the programme, usually over two days, where the self-

review report and other relevant programme information are reviewed. (See Table 8 for examples of other relevant material.) Interviews are held with groups of academic and administrative staff, as well as present students and alumni. The dean may present to the panel on the organisational structure surrounding the programme, and the programme leader may present on the programme's structure and contents, and other relevant issues. At the end of the review, the external panel orally reports the findings to the programme leaders and dean.

The external review panel's findings on the programme are recorded in an external panel report. The panel makes a summative or overall judgement, on the degree of confidence that the HEP can take in the quality and integrity of the academic programme. The report also includes comments on areas of good practice, recorded as commendations, and areas for improvement, recorded as recommendations.

3.4.5 PROGRAMME SELF-REVIEW REPORT AND EXTERNAL PANEL REPORT

The following sample from a programme Self-review Report (completed by the programme team for the consideration of the External Review Panel) demonstrates evaluative as well as descriptive and reflective emphases. As can be seen below, the first paragraph explains the process for the development of the educational objectives. The second paragraph is evaluative, making a judgement on the rationale about the current suitability of these objectives, and future action. While it is not included in the example below, a recommendation for improvement would flow from the excerpt, stating that the recommendation is that the programme objectives be reviewed.

Example 1: Excerpt from Self-review Report

Programme Objectives

The programme objectives were reviewed in 2010 as part of a department wide review of all programme objectives in terms of the newly developed University educational aims. A common set of objectives was developed for all departmental programmes, and these were then adjusted for the programme under review. In this way, there is coherence and alignment from the University objectives to the programme objectives.

The self-review team notes that this approach has provided a common platform for all of the department's programmes and resulted in sharing of resources and expertise for the betterment of all the educational programmes. However, in the light of the recent changes in the University's external environment with the entrance of strong local competitor HEPs and the development in the HEPs strategic direction, it will be necessary to review the programme objectives to ensure alignment and to strengthen the focus of the programme to ensure its sustainability.

Example 2: Excerpt from External Panel Report

The following example from External Panel Report following the periodic review of a programme makes evaluative statements, and provides the reasons for the evaluations made. Also included in the excerpt below is a description of the activity on which the evaluation is made.

1.1.1 Management

The review team was very impressed by the vision and leadership of the programme's management team and the well-resourced support they receive from the School. Management is delegated by the Head of School to the Head of Subject Area, who manages agreed budgets, staff workloads, provision of courses and classes, planning and review processes, communications with students and the further delegation of specific tasks to other colleagues. The Head of Subject Area works closely with the subject area Undergraduate Teaching Director, who is responsible for overseeing individual student issues and assisting in the planning and implementation of curricular changes and reforms. The Undergraduate Teaching

Director is also a member of the School Undergraduate Studies Committee (SUGSC), and is responsible for ensuring that College and School priorities and initiatives are taken up at subject area level where necessary.

In addition, specific aspects of management are delegated to other members of staff: the subject area has a Quality Assurance and Enhancement (QAE) officer (responsible for the annual Teaching Review process, serves on the School QAE committee, and is currently also Director of Quality Assurance of the School); a Disability Liaison Officer (responsible for addressing teachability issues); a Postgraduate Director (responsible for the recruitment, induction, training and mentoring arrangements of Postgraduate Tutors); a Convenor of Exam Boards (responsible for assessment, progression and classification processes).

It was clear to the review team that the Subject Area had worked diligently to respond to the recommendations made in the previous TPR and had taken bold and original approach to the issues raised.

The review team **commends** the thorough, considered, and timely response by the Subject Area and School to the previous TPR.

Source: University of Edinburgh website: http://www.ed.ac.uk/schools-departments/academic-services/quality-unit/quality-assurance/internal-review/teaching-programme-review/reports

4.0 CONCLUSION

Continual quality improvement (CQI) is integral to the operations of HEPs that demonstrate quality, integrity and accountability in their systems and academic programmes. Consisting of the cyclical processes of 'Plan', 'Implement', 'Monitor and Review', and 'Improve', CQI underpins the continuing sustainability of HEPs as it enables constant upgrade to meet changing needs and circumstances. Module and programme monitoring and review are vital components of the 'Monitor and Review' stage of the CQI cycle. It is at this stage that strengths and weaknesses, challenges and opportunities for academic programmes are identified, so that programmes and modules can be adjusted to improve their quality and better meet changing and changed circumstances, locally and globally.

While programme monitoring is less pervasive in its impact compared with review, it remains important in the on-going maintenance of the quality of modules and programmes. Programme review, on the other hand, has strong potential to impact heavily on the structure and directions of an academic programme, as one of its concerns is the dynamic and changing higher education environment as it is reflected in the respective HEP strategic plans. Outcomes of the programme review have the potential to recommend adjustments and the refocusing of academic programmes that will better enable them to meet developing and emerging requirements.

Given the significant role of programme monitoring and review in academic activities, it is incumbent on HEPs and their staff to understand and implement appropriate processes in a conscientious mode. Furthermore, these processes are empowering for HEPs and the staff as they provide the means to have input and even exercise control over the future academic climate of their HEP.

This GGP provides **guidance** for HEPs in the operation of CQI and Programme Monitoring and Review. We reiterate the **guiding rather than prescriptive** nature of the ideas put forward and look forward to HEPs and their staff working proactively with these ideas and suggestions.

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QAA: The Quality Assurance Agency for Higher Education, http://www.qaa.ac.uk/Pages/default.aspx

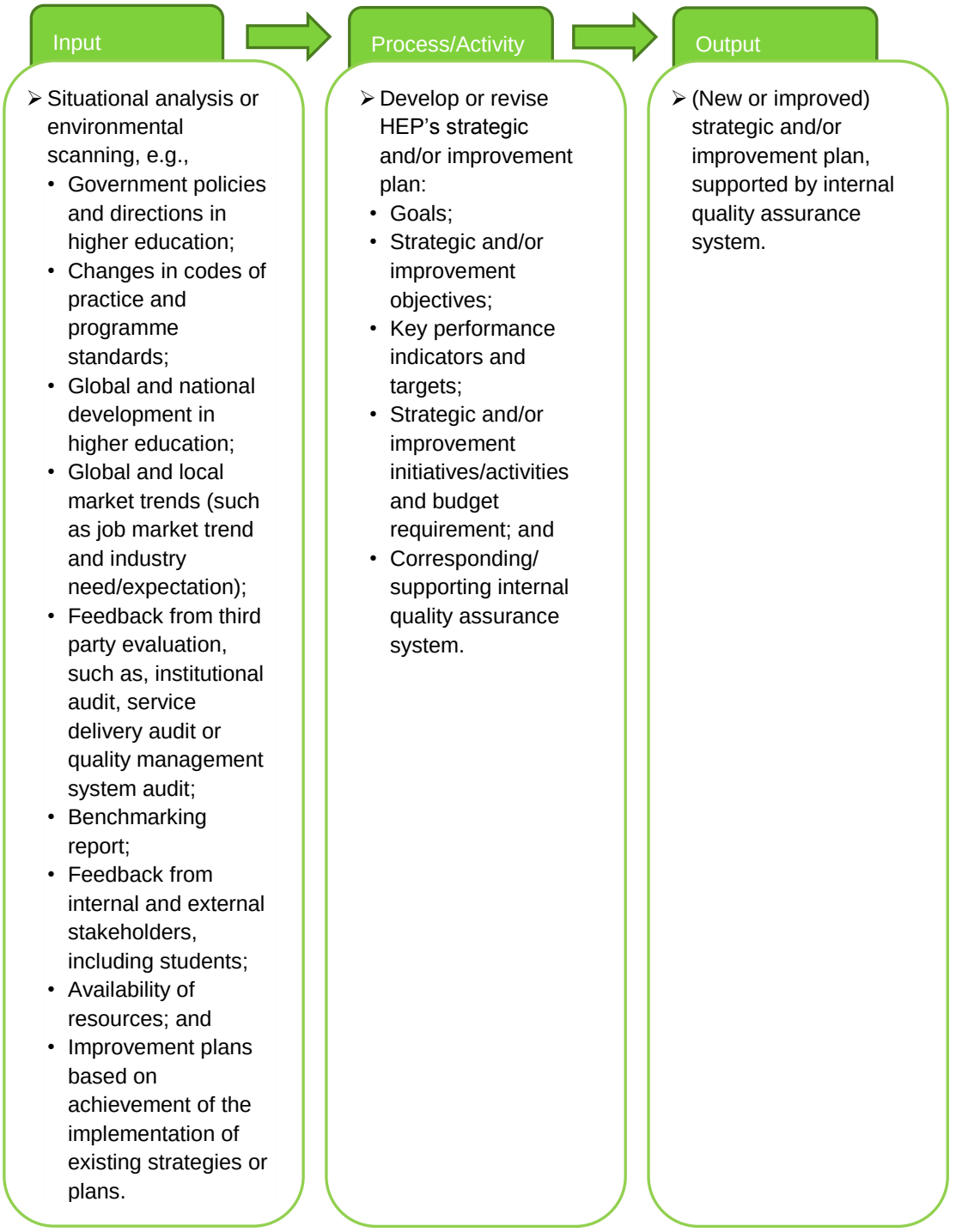
APPENDIX 1

PANEL MEMBERS

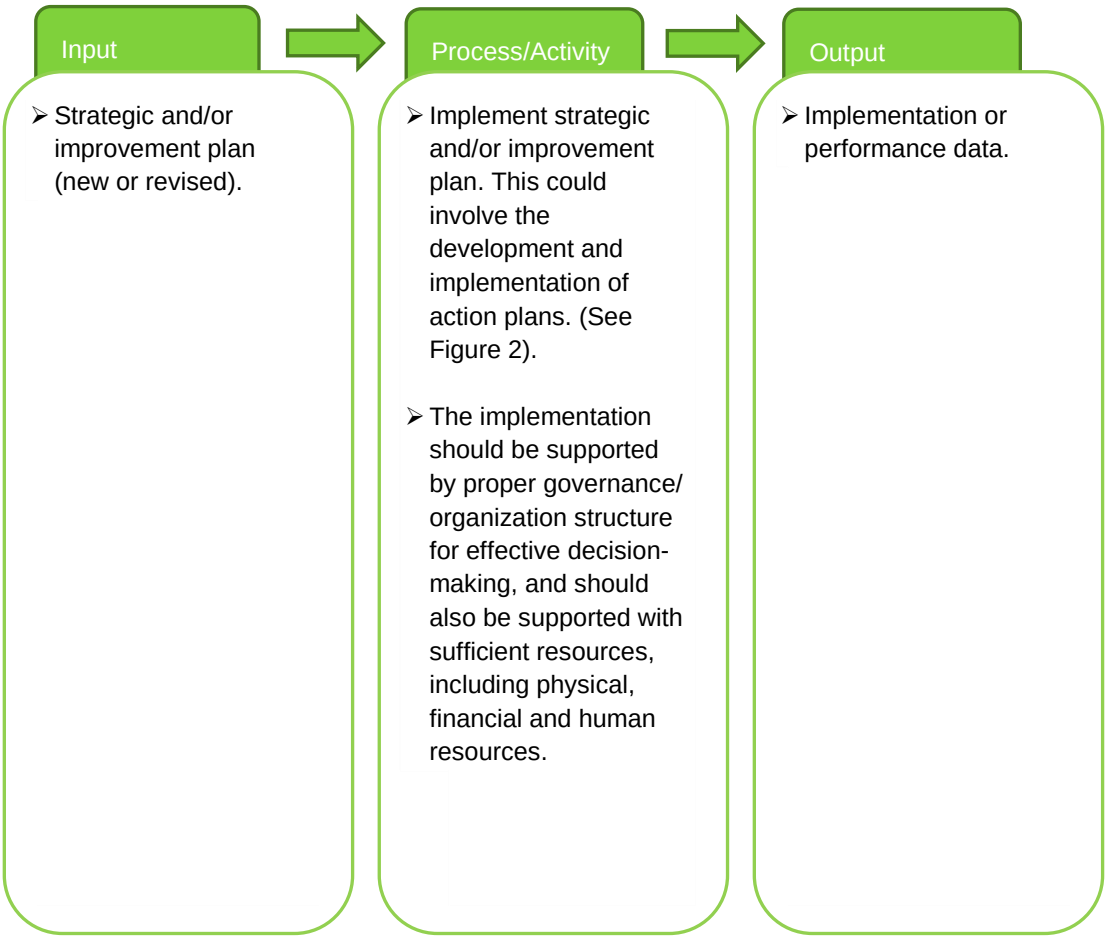
NO.	NAME	ORGANISATION
1.	Glenda Marian Crosling (Prof. Dr.) -Chairperson	Sunway University
2.	Fauziah Binti Sulaiman	SIRIM QAS International Sdn. Bhd
3.	Lilia Halim (Prof. Dr.)	Universiti Kebangsaan Malaysia
4.	Shahrir bin Abdullah (Prof. Ir. Dr.)	Universiti Kebangsaan Malaysia
5.	Thian Lok Boon (Dr.)	Taylor's University

Miss Mahfiza Mohd Nasir assisted the development process and can be contacted for further information or query through email: mahfiza@mqa.gov.my.

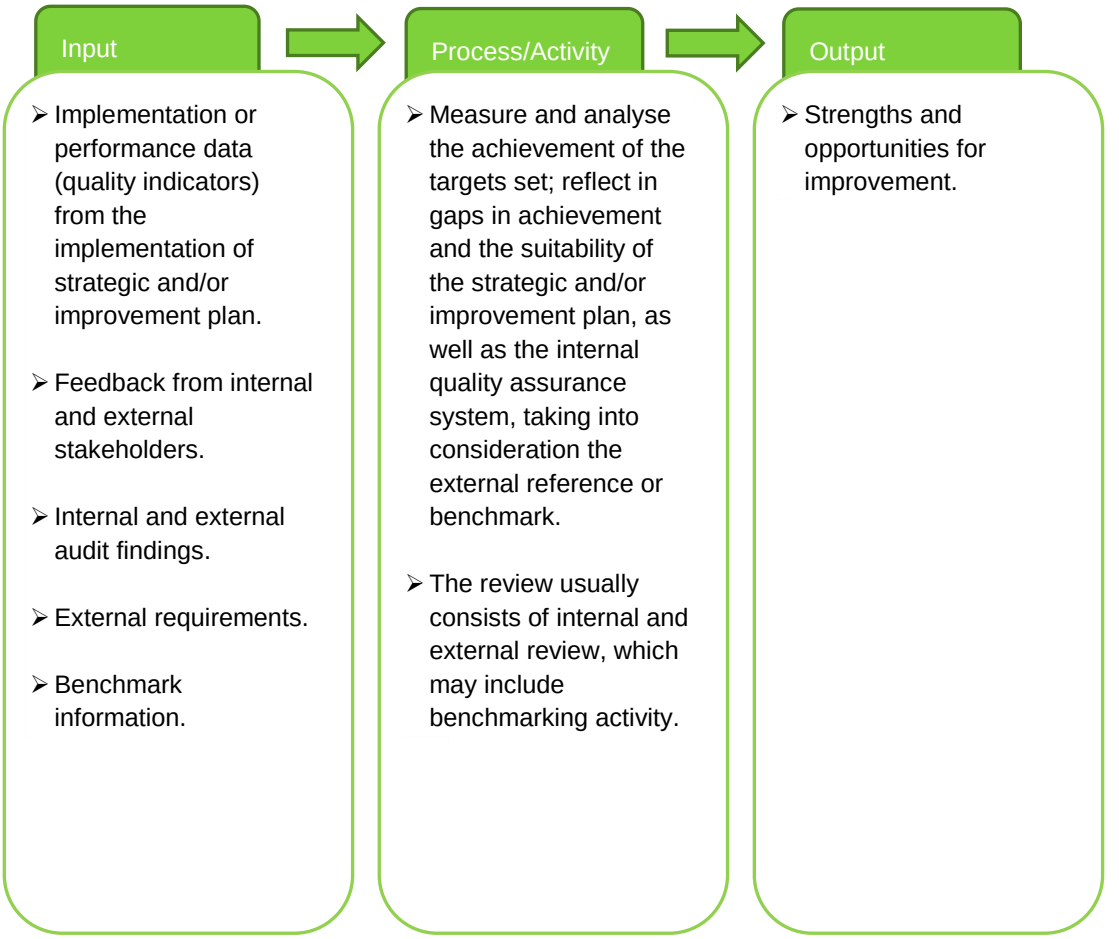
(a): Continual Quality Improvement (CQI) Planning Stage



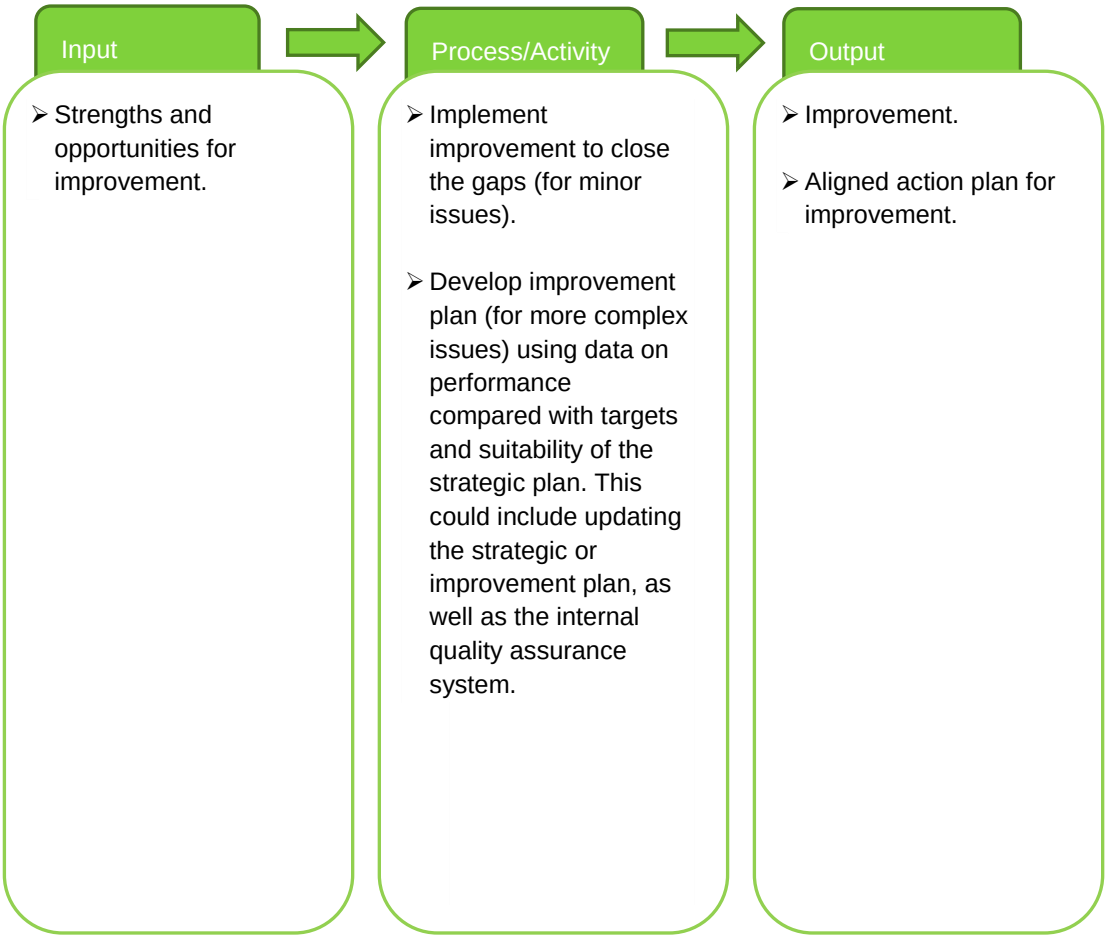
(b): Continual Quality Improvement (CQI) Implementation Stage



(c): Continual Quality Improvement (CQI) Monitoring and Review Stage



(d): Continual Quality Improvement (CQI) Improvement Stage



GLOSSARY

1)	Articulation	A process whereby a student or a group of students progresses from one qualification to the study of a higher level qualification. Usually, this process involves credit transfer from the initial study to the new, higher level qualification.
2)	Benchmarking	A tool to identify good practices and opportunities for improvement through comparison of performance and practices with those of purposefully selected HEPs.
3)	Continual Quality Improvement Process	A cyclical and continual process to bring about the enhancement of quality.
4)	Department	A functional unit of an HEP. The term may varies according to HEP own practice including 'school', 'unit', and 'centre'.
5)	External Examiner	An 'expert' in the discipline that is external to the HEP. The external examiner is concerned with the moderation of the grading of students' work in a subject or subjects. This is most often done to ensure that the grading complies with grading standards that are external to the HEP, and that there is consistency in the grading.
6)	External Review Panel	Members who are external to the department in which the programme operates. Members may represent departments, faculties, and disciplines external to the programme from within or outside the HEP, and could include representatives of bodies that are external to the programme's HEP, at national, regional or international levels.

7)	Improvement Plan	A plan that outlines actions to achieve a goal. It does not necessarily arise from, or be connected to, the HEP's strategic plan.
8)	Institutional Audit	An external evaluation of an HEP to determine whether it is achieving its mission and goals, to identify strengths and areas of concern, and to enhance quality.
9)	Key Performance Indicator	These are the main representations (usually numeric) of the state of, or outcome from, an education organisation or its programmes or processes. They are a set of tangible measures designed to provide public accountability and are subject to informed interpretation and judgment. Often included as key performance indicators are admission and graduate data, research records, graduate employment rates, cost per student, student/staff ratios, staff workloads, student relevance, class size, laboratory and other equipment, equity, libraries, information technology and other learning resources.
10)	Moderation	Moderation is the process of sharing expectations and understandings of standards with/among coordinators/lecturers/instructors in order to improve the consistency of their decisions about student learning and achievement.
11)	Module	Component of a programme. The term 'module' is used interchangeably with the terms 'subject', 'unit', or 'course' (MQA, 2008 and MQA, 2009).
12)	Module Monitoring	Module monitoring is an on-going process of collecting information to ensure all planned aspects of a module are meeting the aims and performance

		targets, and to ensure that the content aligns with the accepted standards or intended learning outcomes.
13)	Educational Pathway	The 'pathway' or route taken by students to enter higher education. The pathway may be termed 'traditional', whereby students enter higher education as school leavers, or it may be termed 'non-traditional' in that students have gained credit to enter higher education studies through a previously-completed study.
14)	Progression	The process of a student moving from one developmental year to the next, usually at the end of the academic year. To progress a student must pass modules, or any specified core module, towards meeting programme requirements.
15)	Programme Monitoring	A regular and systematic process of collection and analysis of information to track the quality of the programme against set plans, and to identify areas of risk as they arise. Monitoring allows adaptation of the programme as needed to ensure that set programme objectives are achieved.
16)	Programme Review (includes evaluation)	A two-phased process, where: (1) the programme team provides a report that reviews facts and includes self-reflections about the current status of an academic programme in relation to its goals and to established markers of academic quality; (2) The external panel reviews the report, undertakes a site visit to evaluate the status of the programme, and makes recommendations for improvement.
17)	Quality Assurance	Quality assurance comprises planned and systematic actions (policies, strategies, attitudes, procedures and

		activities) to provide adequate demonstration that quality is being achieved, maintained and enhanced, and meets the specified standards of teaching, scholarship and research as well as of the student learning experience. (MQA, 2008 and MQA, 2009)
18)	Quality Assurance System	A system within an education organisation that plans and performs a systematic review of an HEP or programme to determine that acceptable standards of education, scholarship and infrastructure are being maintained and enhanced.
19)	Quality Enhancement	Steps taken to bring about continual improvement in quality. (MQA, 2008 and MQA, 2009)
20)	Quality Indicators	A set of established measures to determine the achievement of a prescribed outcome. HEPs may establish quality indicators that reflect their particular context and strategic directions.
21)	Quality Management System (QMS)	A set of interrelated or interacting processes that organisations implement to achieve quality objectives.
22)	Strategic Plan	A plan that outlines an HEP's direction, priorities and goals that guide the allocation of resources as the strategic plan is implemented.

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