



Guide to AUN-QA Assessment at Programme Level

Version 4.0

เอกสารฉบับนี้จัดทำขึ้นเพื่อใช้ประโยชน์ในการศึกษา
ในมหาวิทยาลัยเทคโนโลยีพระจอมเกล้าพระนครเหนือเท่านั้น

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Version 4.0

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Acknowledgement

This *Guide to AUN-QA Assessment at Programme Level (Version 4.0)* is prepared and edited by Associate Professor Dr Tan Kay Chuan, Chief Quality Officer from the National University of Singapore to the AUN-QA, with input from members of the *AUN-QA Council* and the *Manual Version 4.0 Revision Committee* as listed below.

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Foreword

Over the past year, hundreds of programmes have been assessed, beginning with a large-scale survey of multiple stakeholders including assessors, administrators, and faculty members. The Revision Committee collated the responses and revised the Guide to AUN-QA Assessment at Programme Level (version 4.0). The new Guide is a simplified version of its predecessor and includes eight criteria and 53 requirements (rather than the previous 11 criteria and 62 requirements). There is now a tighter focus on matters under the control of the programme administrator and the factors contributing to graduate outcomes. There is also a clearer separation between the requirements for an AUN-QA Institutional Assessment and those for an AUN-QA Programme Assessment.

Successive versions of the Guide have reflected developments in higher education. Specifically, in the new version, outcome-based education features prominently. Instilling innovation concepts and the need to develop an entrepreneurial mindset in students are new requirements. Overall, there is a greater emphasis on the need to obtain feedback and make improvements for embarking on the next cycle of planning and carrying out educational quality assurance activities.

The Guide also outlines procedures for conducting an assessment and the writing of an assessment report. These have been streamlined and simplified and should be easier to implement or use. The requirements for document submission have been reduced.

On behalf of the entire ASEAN University Network including the Network of AUN-QA, I wish to acknowledge and express my sincere gratitude to Associate Professor Dr Tan Kay Chuan, an AUN-QA Technical Team Member and AUN-QA expert from the National University of Singapore (NUS) for leading the revision of the Guide to AUN-QA Assessment at Programme Level. Special thanks also go to the AUN-QA Council and members of the Revision Committee for their contributions.



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Preface

This book is the fourth version of the *Guide to AUN-QA Assessment at Programme Level*. It documents the revised criteria and the processes of the AUN-QA assessment at the programme level. The guidebook provides also associated resources including templates and sample reports. It is divided into five chapters.

- 1. Introduction to AUN-QA Assessment Models.** This section gives an overview of the AUN-QA assessment models.
- 2. AUN-QA Assessment at Programme Level.** This section describes the AUN-QA model and its criteria for assessment at the programme level.
- 3. Quality Assessment.** This section provides a step-by-step guide for conducting an AUN-QA assessment at the programme level.
- 4. References.** This section lists the references.
- 5. Appendices.** This section contains additional resources including checklists, templates, and sample reports.

1. Introduction to AUN-QA Assessment Models

1.1 Quality Assurance in Higher Education

Quality assurance (QA) in higher education is not a simple one-dimensional notion about academic quality. In view of the varied needs and expectations of a wide range of stakeholders, quality in higher education can be said to be multi-dimensional.

The World Declaration on Higher Education for the Twenty First Century: Vision and Action (October 1998), Article 11, Qualitative Evaluation considers quality in higher education to be:

“A multi-dimensional concept, which should embrace all its functions and activities, teaching and academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community, and the academic environment. Internal self-evaluation and external review, conducted openly by independent specialists, if possible with international expertise, are vital for enhancing quality.”

To develop, implement, sustain, and improve the level of quality in higher education, an institution needs to install a rigorous quality assurance system. The Regional Report of Asia and the Pacific (UNESCO, 2003) defines quality assurance in higher education as “the systematic management and assessment procedures to monitor performance of higher educational institutions.”

1.2 AUN-QA Assessment Models

The ASEAN University Network (AUN) recognises the importance of quality in higher education, and the need to develop a holistic quality assurance system to raise academic standards and enhance education, research, and service among its member universities. In 1998, it mooted the AUN-QA Network which led to the development of the AUN-QA assessment models. Since then, the Network has been promoting, developing, and implementing quality assurance practices based on an empirical approach where quality assurance practices are tested, evaluated, improved, and shared. The evolution of the AUN-QA Network and its development in quality assurance is depicted in Figure 1.1.

The AUN-QA assessment models for higher education comprises of the strategic, systemic, and functional dimensions (see Figure 1.2). These dimensions are subjected to internal and external assessment.

Internal quality assurance ensures that an institution, system, or programme has policies and mechanisms in place to ensure that its objectives and standards are met.

External quality assurance is performed by an organisation or individuals outside the institution. Assessors evaluate the operation of an institution, system, or programme in order to determine whether it meets agreed upon, predetermined standards.



Figure 1.1. Evolution of the AUN-QA Network

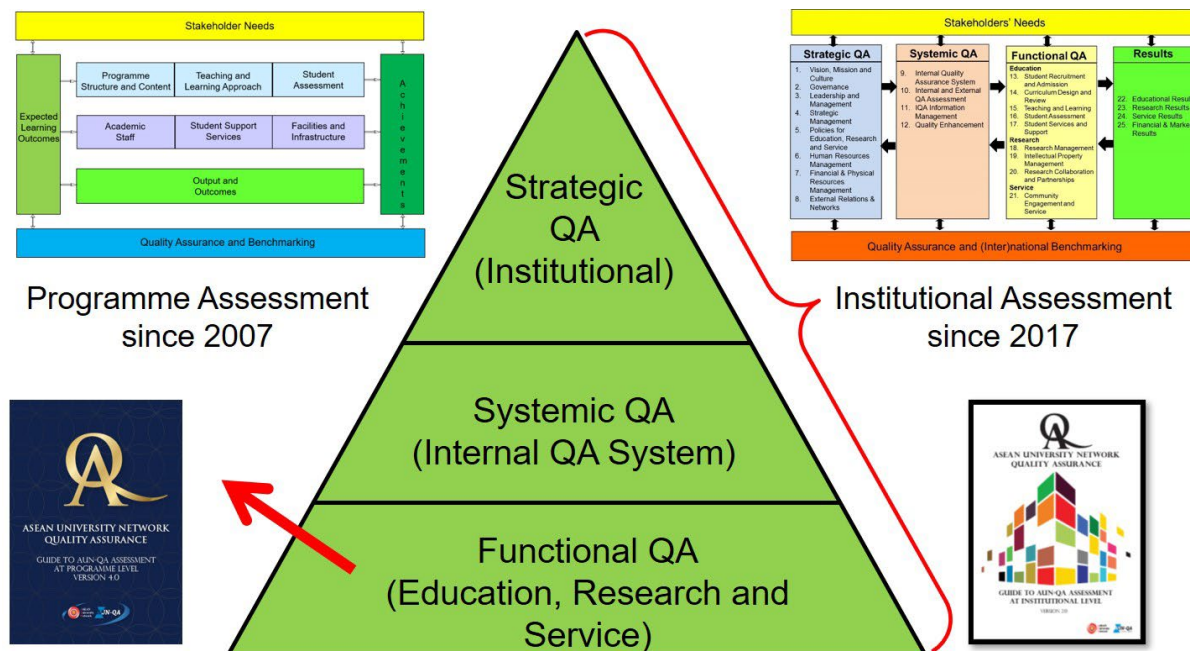


Figure 1.2. AUN-QA Assessment Models for Higher Education

The AUN-QA assessment models are applicable to the diverse universities in ASEAN countries, and are also aligned to both regional and international quality assurance frameworks.

1.2.1 AUN-QA Assessment Model at the Institutional Level

The AUN-QA assessment model at the institutional level (version 2.0) comprises 25 criteria as illustrated in Figure 1.3.

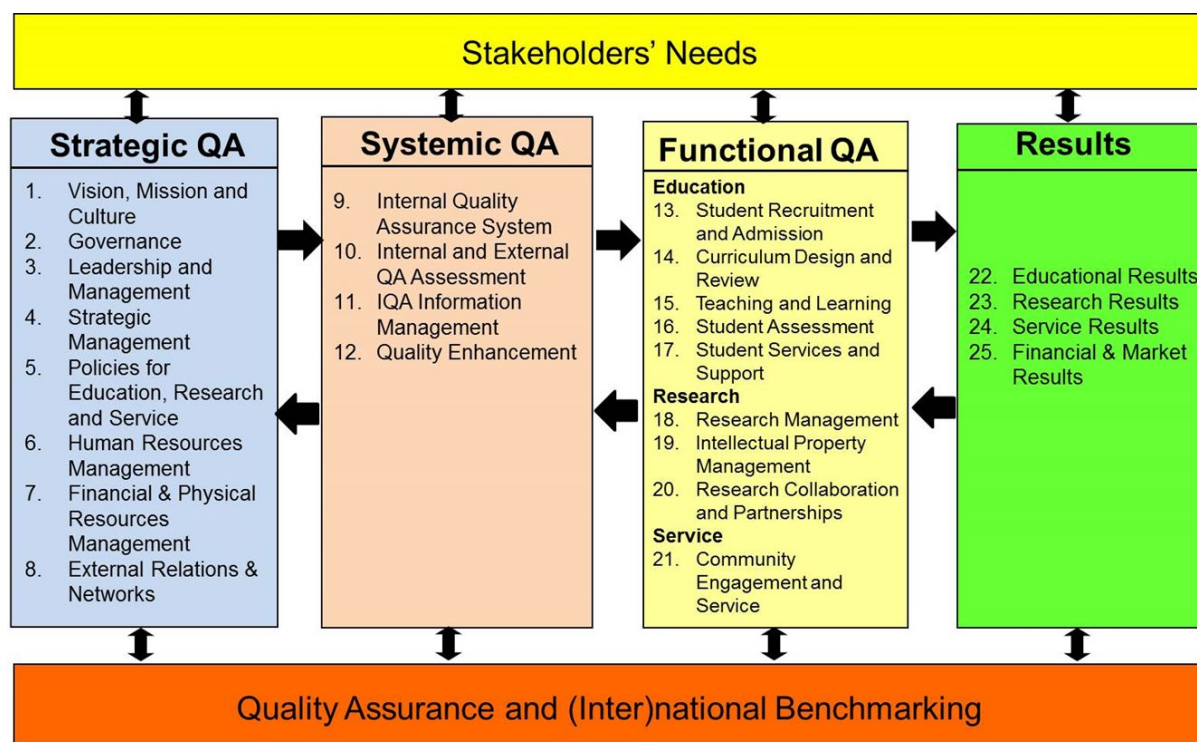


Figure 1.3. The AUN-QA Assessment Model at the Institutional Level (Version 2.0)

Strategic quality assurance begins with knowing the needs of one's stakeholders. These are translated into the university's vision, mission, goals, and aims or objectives. This means that quality assurance and quality assessment always begins with the mission and goals (column 1 of Figure 1.3) and end with the achievements or results that satisfy stakeholder needs (column 4 of Figure 1.3).

Column 2 of Figure 1.3 defines the quality assurance systems and policies that need to be put in place. These include:

- Having a good internal quality assurance system
- Having internal and external quality assurance assessments
- Having a strong internal quality assurance information management system
- Having the ability to enhance one's own quality assurance system.

The third column of Figure 1.3 lists the core activities of a university in:

- Education (curriculum design, teaching and learning, student services, etc)
- Research (publication, intellectual property management, etc)
- Service (community engagement).

For continuous improvement, universities implement effective QA systems and also benchmark their practices to achieve educational excellence.

1.2.2 AUN-QA Model for an Internal Quality Assurance System

The AUN-QA model for an Internal Quality Assurance (IQA) system consists of the following components (see Figure 1.4):

- Internal quality assurance framework
- Monitoring instruments
- Evaluation instruments
- Special QA processes to safeguard specific activities
- Specific QA instruments
- Follow-up activities for making improvements.

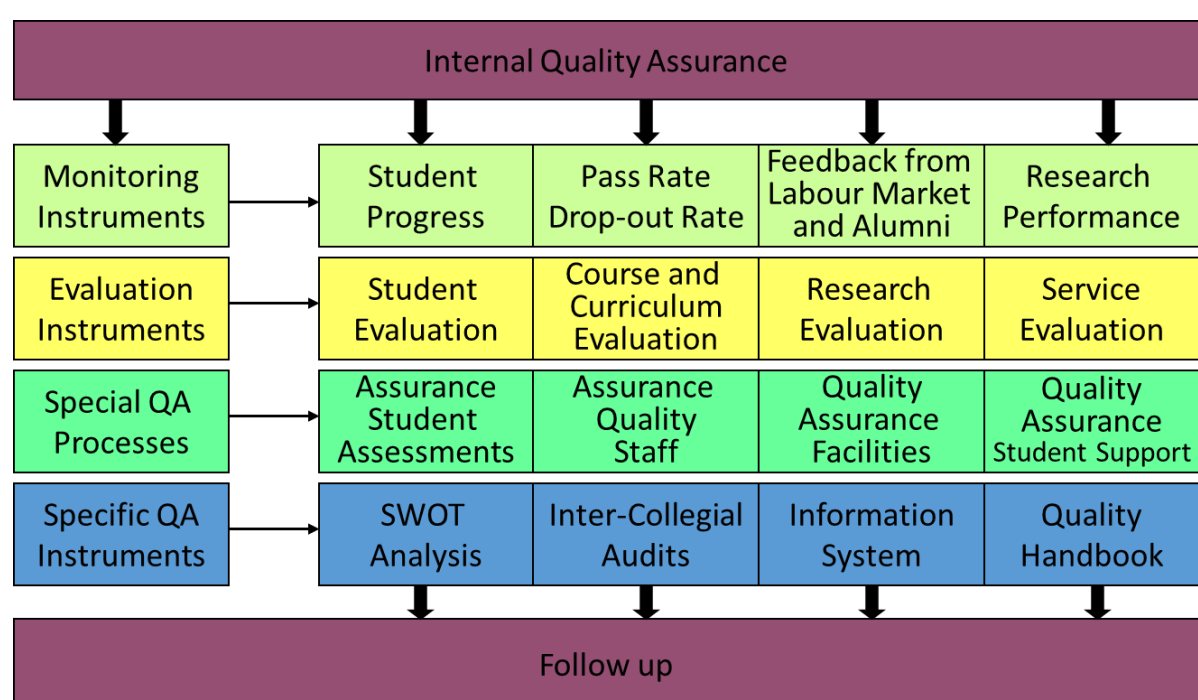


Figure 1.4. AUN-QA Model for an Internal Quality Assurance System

An IQA system is the totality of the resources and information devoted to setting up, maintaining, and improving the quality and standards of teaching, student learning experiences, research, and service to the community. It is a system where the QA mechanisms work to maintain and enhance the level of quality in higher education.

1.2.3 AUN-QA Assessment Model at the Programme Level

The AUN-QA assessment model at the programme level focuses on the quality of educational programmes based on the following dimensions:

- Quality of input
- Quality of processes
- Quality of output.

The progression of the AUN-QA assessment model at the programme level from version 1.0 to version 3.0, is documented in Figures 1.5, 1.6, and 1.7, respectively.

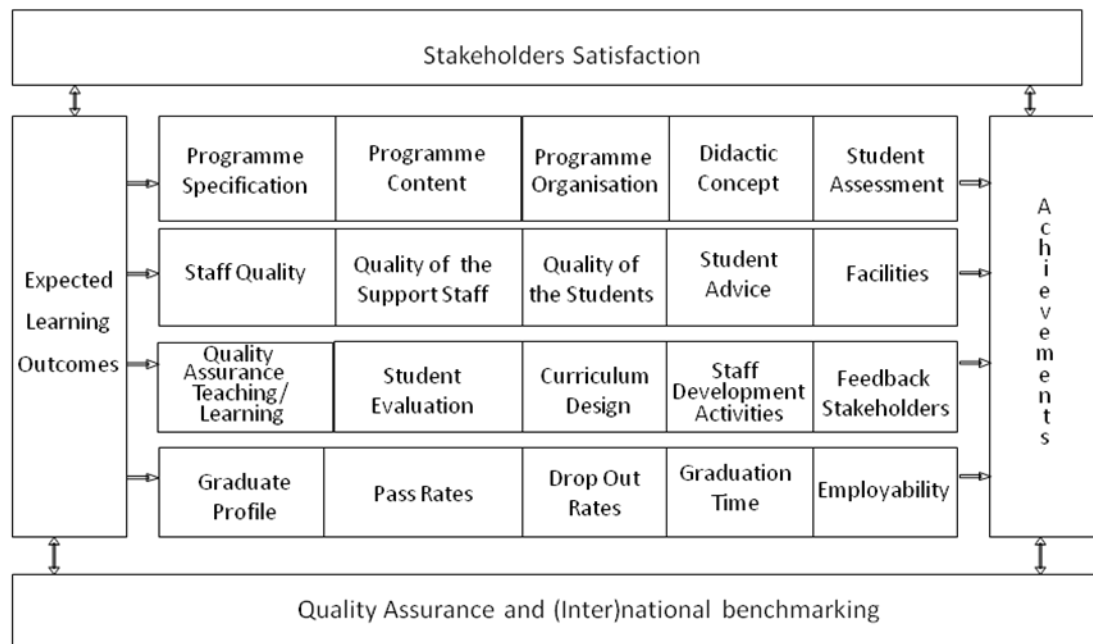


Figure 1.5. AUN-QA Assessment Model at the Programme Level (Version 1.0)

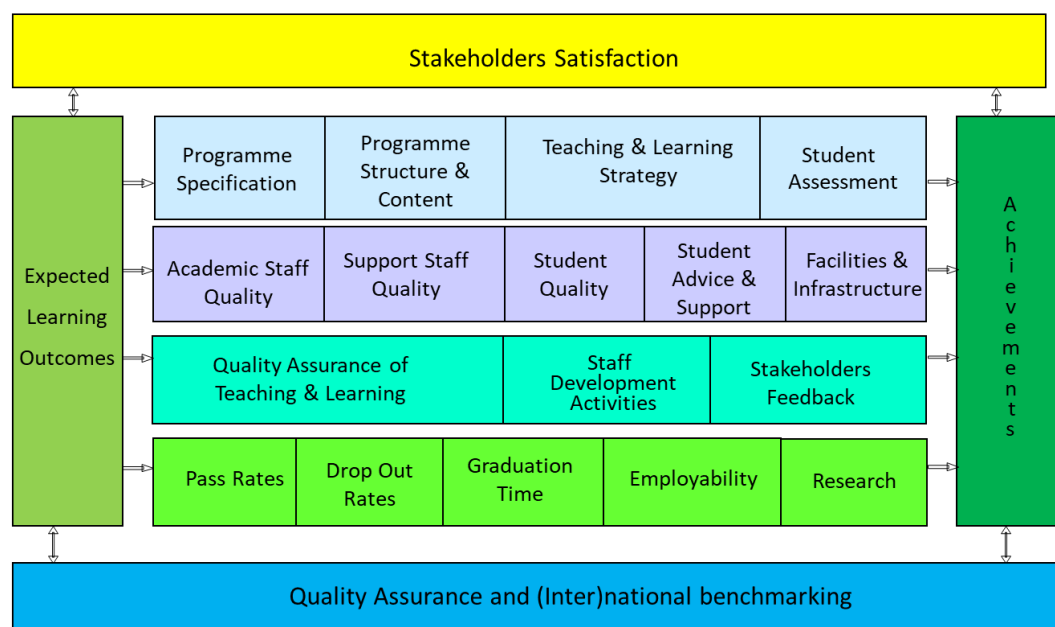


Figure 1.6. AUN-QA Assessment Model at the Programme Level (Version 2.0)

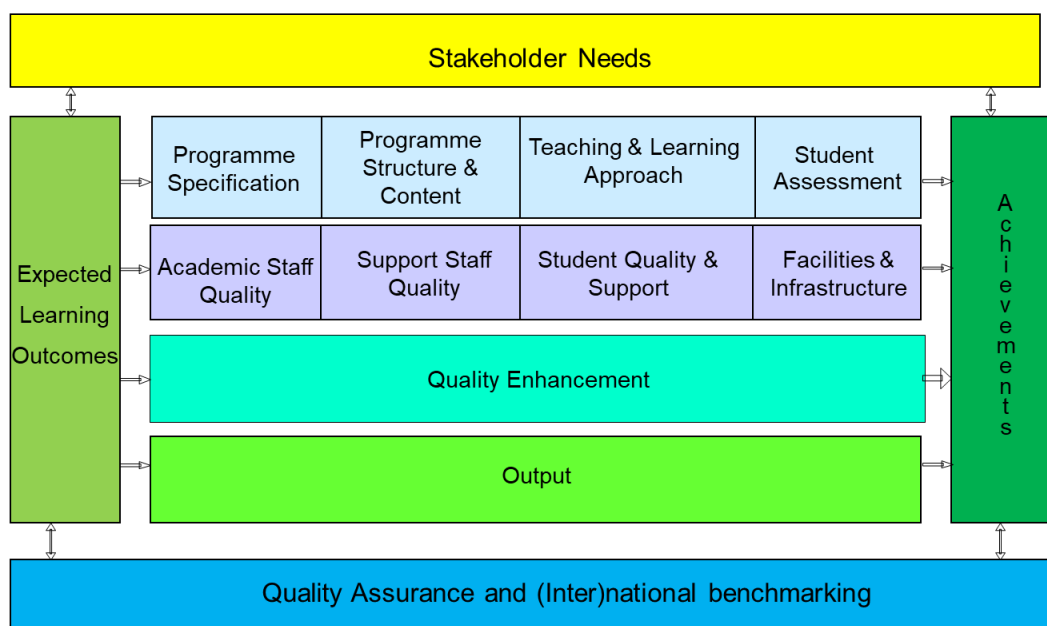


Figure 1.7. AUN-QA Assessment Model at the Programme Level (Version 3.0)

1.2.4 AUN-QA Assessment Model at the Programme Level (Version 4.0)

Version 4.0 of the AUN-QA model for programme level assessment encompasses the following eight criteria (see Figure 1.8):

1. Expected Learning Outcomes
2. Programme Structure and Content
3. Teaching and Learning Approach
4. Student Assessment
5. Academic Staff
6. Student Support Services
7. Facilities and Infrastructure
8. Output and Outcomes.

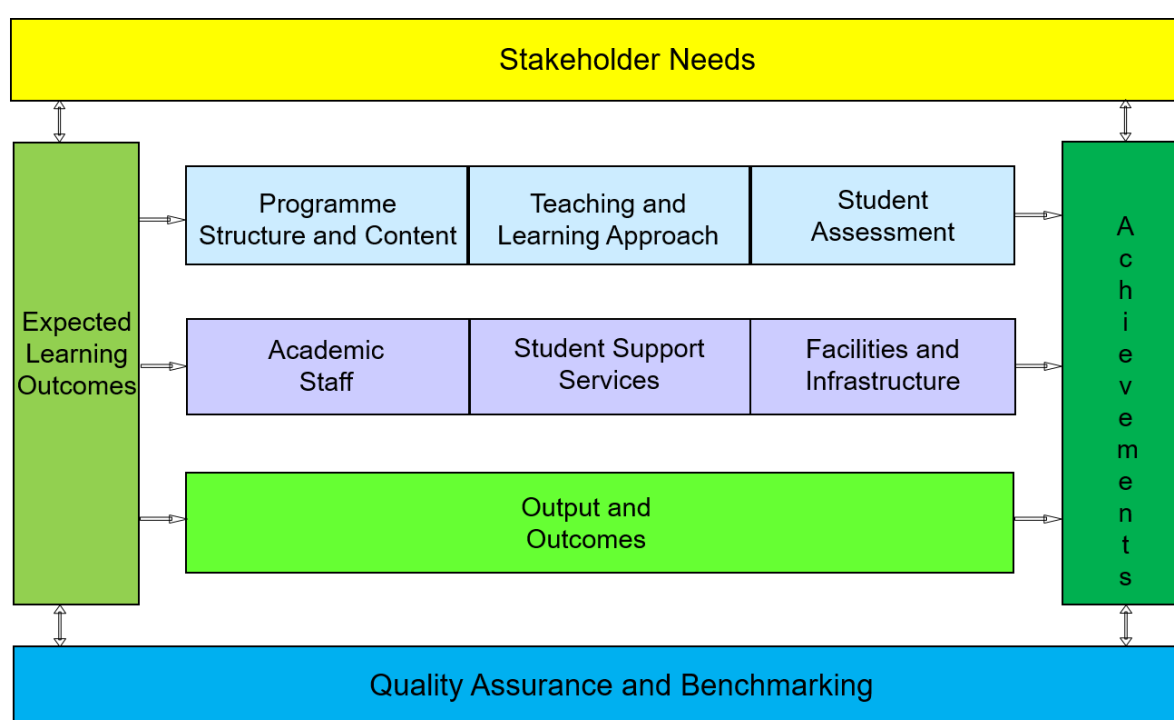


Figure 1.8. AUN-QA Assessment Model at the Programme Level (Version 4.0)

The model begins with understanding the needs of an academic programme's internal and external stakeholders. These needs are formulated into the expected learning outcomes which drive everything that the programme wishes to achieve (the left-most column of Figure 1.8).

There are three rows in the middle of the model (Figure 1.8). The first row addresses the issues of programme structure and content (hierarchy of courses throughout the degree programme), the teaching and learning approach used, and how students are assessed.

The second row considers the resources needed to run the programme. These are academic staffing (promotion, performance management, research management,

etc), student support services (support staff, library, clinic, social spaces, etc), and hardware (classrooms, IT facilities, recreational facilities, etc).

The third row concerns the output of the programme. These are the quality of the graduates, employment information, research output, stakeholder satisfaction, etc.

The right-most column addresses the achievements of the expected learning outcomes and the programme.

The model encompasses also the fulfillment of stakeholder needs and a focus on continuous improvement of the quality assurance system. Furthermore, benchmarking is employed to seek best-in-class practices, as supported by Gyll and Ragland (2018).

Unlike the previous versions, version 4.0 embeds the quality enhancement requirements into the criteria themselves. For example, the quality enhancement requirement for criterion 1, the Expected Learning Outcomes, would be to see that students are able to achieve them by the time of graduation. Similarly, the quality enhancement requirements for criterion 2, Programme Structure and Content, would be to ensure that the curriculum is reviewed periodically, remains up-to-date, and is relevant to the needs of industry.

Quality enhancement requirements are a way of getting feedback to measure improvement, or a cycle of planning, doing, checking the output against pre-defined requirements, then acting or adjusting the requirements for the next iteration of improvement. Thus, the PDCA concept is built into all eight criteria.

The eight criteria of the model are grouped as shown in Table 1.1.

| Programme | Resources | Results |
|---|---|-------------------------|
| 1.0 Expected Learning Outcomes 2.0 Programme Structure and Content 3.0 Teaching and Learning Approach 4.0 Student Assessment | 5.0 Academic Staff 6.0 Student Support Services 7.0 Facilities and Infrastructure | 8.0 Output and Outcomes |

Table 1.1. AUN-QA Assessment at Programme Level Version 4.0 Criteria Grouping

The changes from version 1.0 to version 4.0 are documented in Table 1.2 below.

| Version 1.0 | Version 2.0 | Version 3.0 | Version 4.0 |
|--|--|---|------------------------------------|
| 1. Goals and Objectives; Expected Learning Outcomes | 1. Expected Learning Outcomes | 1. Expected Learning Outcomes | 1. Expected Learning Outcomes |
| 2. Programme Specification | 2. Programme Specification | 2. Programme Specification | 2. Programme Structure and Content |
| 3. Programme Content | 3. Programme Structure and Content | 3. Programme Structure and Content | |
| 4. Programme Organisation | | | |
| 5. Didactic Concept and Teaching/ Learning Strategy | 4. Teaching and Learning Strategy | 4. Teaching and Learning Approach | 3. Teaching and Learning Approach |
| 6. Student Assessment | 5. Student Assessment | 5. Student Assessment | 4. Student Assessment |
| 7. Staff Quality | 6. Academic Staff Quality | 6. Academic Staff Quality | 5. Academic Staff |
| 8. Quality of Support Staff | 7. Support Staff Quality | 7. Support Staff Quality | 6. Student Support Services |
| 9. Student Quality | 8. Student Quality | 8. Student Quality and Support | |
| 10. Student Advice and Support | 9. Student Advice and Support | | |
| 11. Facilities and Infrastructure | 10. Facilities and Infrastructure | 9. Facilities and Infrastructure | 7. Facilities and Infrastructure |
| 12. Quality Assurance of Teaching/ Learning Process | 11. Quality Assurance of Teaching and Learning Process | 10. Quality Enhancement | <merged into the other criteria> |
| 13. Student Evaluation | | | |
| 14. Curriculum Design | | | |
| 15. Staff Development Activities | 12. Staff Development Activities | 6. Academic Staff Quality 7. Support Staff Quality | 5. Academic Staff |
| 16. Feedback Stakeholders | 13. Stakeholders Feedback | 10. Quality Enhancement | <merged into the other criteria> |
| 17. Output | 14. Output | 11. Output | 8. Output and Outcomes |
| 18. Stakeholders Satisfaction | 15. Stakeholders Satisfaction | | |

Table 1.2. Changes to AUN-QA Assessment Criteria at Programme Level

The relationship among the eight criteria of version 4.0 is shown in Table 1.3 below.

| AUN-QA Criterion | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------------|---------------------------------|---|--|---|--|--|---|---------------------------------|
| 1 | 1.1 1.2 1.3 1.4 1.5 | 2.1 2.2 2.3 2.4 | 3.2 3.3 3.4 | 4.1 4.4 4.5 | 5.3 | 6.3 6.4 | | 8.4 8.5 |
| 2 | 1.1 1.2 1.3 | 2.1 2.2 2.3 2.4 2.5 2.6 2.7 | 3.2 3.3 3.4 3.6 | 4.1 4.2 4.3 4.4 | 5.3 | 6.3 6.4 | | 8.4 8.5 |
| 3 | 1.1 1.2 1.3 | 2.1 2.2 2.4 | 3.1 3.2 3.3 3.4 3.5 3.6 | 4.1 | 5.3 | | 7.1 7.2 7.3 7.4 7.5 7.7 | 8.5 |
| 4 | 1.1 1.2 1.3 | 2.1 2.2 2.4 2.5 | 3.1 3.2 3.3 3.6 | 4.1 4.2 4.3 4.4 4.5 4.6 4.7 | 5.3 | 6.3 6.4 | 7.7 | 8.5 |
| 5 | 1.1 1.2 1.3 1.4 | 2.1 2.2 2.3 2.4 2.5 2.6 2.7 | 3.1 3.2 3.3 3.4 3.5 3.6 | 4.1 4.2 4.3 4.4 4.5 4.6 | 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 | 6.3 6.4 | 7.1 7.2 7.3 7.4 7.5 | 8.3 8.4 8.5 |
| 6 | | 2.1 | 3.1 3.2 3.3 3.4 | 4.1 4.2 4.3 | 5.3 | 6.1 6.2 6.3 6.4 6.5 6.6 | 7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8 7.9 | 8.3 8.4 8.5 |
| 7 | 1.4 | | 3.2 3.3 3.4 | | | 6.2 6.5 6.6 | 7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8 7.9 | 8.3 |
| 8 | 1.4 1.5 | 2.1 2.5 2.6 | 3.2 3.3 3.4 | 4.2 4.3 4.6 | 5.2 5.3 5.7 | 6.3 6.4 | 7.1 7.2 7.3 7.4 7.5 | 8.1 8.2 8.3 8.4 8.5 |

Table 1.3. Relationship among the eight AUN-QA Criteria of Version 4.0

2. AUN-QA Assessment at Programme Level

2.1 AUN-QA Criterion 1 – Expected Learning Outcomes

Requirements

- 1.1. *The programme to show that the expected learning outcomes are appropriately formulated in accordance with an established learning taxonomy, are aligned to the vision and mission of the university, and are known to all stakeholders.*
- 1.2. *The programme to show that the expected learning outcomes for all courses are appropriately formulated and are aligned to the expected learning outcomes of the programme.*
- 1.3. *The programme to show that the expected learning outcomes consist of both generic outcomes (related to written and oral communication, problem-solving, information technology, teambuilding skills, etc) and subject specific outcomes (related to knowledge and skills of the study discipline).*
- 1.4. *The programme to show that the requirements of the stakeholders, especially the external stakeholders, are gathered, and that these are reflected in the expected learning outcomes.*
- 1.5. *The programme to show that the expected learning outcomes are achieved by the students by the time they graduate.*

Explanation

An outcome-based education (OBE) can be described as a way in which a curriculum is defined, organised, and directed based on all the things that learners would learn and demonstrate successfully when they complete a study programme. The focus of OBE is on the results of learning, where the knowledge, skills, and attitudes that learners are expected to master, are clearly identified and expressed as expected learning outcomes.

Expected learning outcomes, which are formulated from the needs of stakeholders, form the starting point in the design of an academic programme. They are concerned with the achievement of the learner rather than the intention of the teacher, which are often written as aims, goals, or objectives of the programme. Learning outcomes should be written in a way where learning is translated into observable and measurable results which can be demonstrated and assessed.

Table 2.1 shows measurement of the extent to which programme learning outcomes (PLOs) have been achieved by students at the time of graduation. It is important that the data for the table are provided by the students. This gives a more reliable measure of PLO achievement. It makes less sense for the data to be provided by the programme administrators or the academic staff since these stakeholders would have a vested interest in seeing good achievement of the learning outcomes. Alternatively, the data can be provided by alumni and employers within 6-24 months after graduation.

As shown in Table 2.1, the use of an “X” and a percentage is one means of denoting the achievement. Other schemes can be used also. For example, use “I” to denote an Introductory achievement of a particular LO; “M” to denote Moderate achievement; and “F” to denote Full achievement.

| Programme Learning Outcome | Achievement of LO | | | |
|----------------------------|-------------------|-----|-----|------|
| | 25% | 50% | 75% | 100% |
| PLO1 | | X | X | |
| PLO2 | | | | X |
| PLO3 | X | X | X | |
| PLO4 | | | X | |
| PLO5 | | X | X | X |
| ... | | | | |
| ... | | | | |

Table 2.1. Extent of Achievement of Programme Learning Outcomes by the Time that Students Graduate

Diagnostic Questions

- What is the purpose of the study programme?
- What are the expected learning outcomes?
- How are the expected learning outcomes formulated?
- Do the expected learning outcomes reflect the vision and mission of the university, the faculty, and the department?
- Does the labour market set specific requirements for the graduates to meet?
- To what extent is the content of the programme tuned to the needs of the labour market?
- Are there well-defined job profiles?
- How are the expected learning outcomes made known to staff and students?
- Are the expected learning outcomes measurable? If Yes, how are they measured?
- To what extent have the expected learning outcomes been achieved?
- Are the expected learning outcomes reviewed periodically?
- How are the expected learning outcomes translated into concrete requirements (i.e., the knowledge, skills, and attitude requirements) of the graduates?

Sources of Evidence

- Programme and course specifications
- Course brochure, prospectus, bulletin
- Skills matrix
- Stakeholder input
- University and faculty websites
- Curriculum review minutes and documents
- Accreditation and benchmarking reports.

2.2 AUN-QA Criterion 2 – Programme Structure and Content

Requirements

- 2.1. *The specifications of the programme and all its courses are shown to be comprehensive, up-to-date, and made available and communicated to all stakeholders.*
- 2.2. *The design of the curriculum is shown to be constructively aligned with achieving the expected learning outcomes.*
- 2.3. *The design of the curriculum is shown to include feedback from stakeholders, especially external stakeholders.*
- 2.4. *The contribution made by each course in achieving the expected learning outcomes is shown to be clear.*
- 2.5. *The curriculum to show that all its courses are logically structured, properly sequenced (progression from basic to intermediate to specialised courses), and are integrated.*
- 2.6. *The curriculum to have option(s) for students to pursue major and/or minor specialisations.*
- 2.7. *The programme to show that its curriculum is reviewed periodically following an established procedure and that it remains up-to-date and relevant to industry.*

Explanation

The specifications of an academic programme, which include the courses specifications, describe the expected learning outcomes in terms of knowledge, skills, and attitudes. They help students to understand the teaching and learning methods that enable the outcomes to be achieved. Also explained are the assessment methods.

The programme specifications is a set of documents that describes the study programme. It usually includes the following items:

- A summary of the programme aims and intended learning outcomes
- An outline of the course structure
- A matrix that shows how the programme learning outcomes are achieved through the courses
- A set of course specifications.

The programme specifications serve the following purposes:

- As a source of information for potential and current students seeking to understand the programme or in deciding whether to enroll in it.
- As a source of information for employers, particularly on the knowledge and transferable skills developed by the programme.
- As a source of information for professional and statutory bodies that accredit higher education programmes, which can lead to a profession or regulated

occupation. Programme specifications should identify those aspects of a programme that are designed to meet the requirements of relevant bodies.

- As a source of information for institutional and teaching teams to promote discussion and reflection on new and existing programmes, and to ensure that there is common understanding of the expected learning outcomes. The programme specifications should enable the programme to satisfy themselves that the expected learning outcomes can be achieved and demonstrated. The programme specifications can serve as a reference point for internal review and monitoring of its performance.
- As a source of information for academic reviewers and external examiners who need to understand the aims and intended outcomes of the programme.
- As a basis for gaining feedback from students or recent graduates on the extent to which the expected learning outcomes of the programme have been achieved.

The information in the programme specifications include the below:

- Awarding body/institution
- Teaching institution (if different)
- Details of accreditation by professional or statutory bodies
- Name of the final award
- Programme title
- Expected learning outcomes of the programme
- Admission criteria or requirements
- Relevant benchmark reports, external and internal reference points, that may be used to provide information on programme learning outcomes
- Programme structure and requirements including levels, courses, credits, etc
- The date of writing the programme specifications.

The information to be included in the courses specifications include the below:

- Course title
- Course requirements such as pre-requisites, credits, etc
- Expected learning outcomes of the course in terms of knowledge, skills, and attitude
- Teaching, learning, and assessment methods that enable the expected learning outcomes to be achieved
- Course description, outline, or syllabus
- Details of student assessment
- Date on which the course specification was written or revised.

The curriculum should be designed so that the teaching and learning methods and student assessment, support the achievement of the expected learning outcomes (Lam and Tsui, 2013). Important is the concept of *constructive alignment* (Biggs, 2003). Constructive refers to the concept that students construct meaning through relevant learning activities. Alignment refers to the situation when teaching and learning activities and student assessment are aligned to achieve the expected learning outcomes.

Constructive alignment in any course of study involves:

- Defining expected learning outcomes that are measurable
- Selecting teaching and learning methods that are likely to ensure that the expected learning outcomes are achieved
- Assessing how well the students have achieved the expected learning outcomes as intended.

Diagnostic Questions (Programme Information)

- Are the expected learning outcomes translated into the programme and its courses?
- What information is documented in the programme and course specifications?
- Are the courses specifications standardised throughout the entire programme?
- Are the programme specifications published and made available to stakeholders?
- Are the programme and courses specifications published online?
- What is the process for reviewing the programme and courses specifications?
- Does the content of the programme reflect the expected learning outcomes?
- How are the courses in the programme structured so that there is coherence and a seamless relationship from the basic to the specialised courses?
- Is there is a proper balance between the specific and the general courses?
- Is the content of the programme up-to-date?
- What is the explanation for the programme structure?
- Has the programme changed structurally over the last five to ten years? If so, why?
- Does the programme promote diversity, student mobility, and/or cross-border education?
- Is there a logical relationship among the basic courses, intermediate courses, and specialised courses?
- What is the duration of the programme?
- What is the duration and sequence of each course? Is it sequencing logical?
- What benchmarks are used in designing the programme and its courses?
- How are the teaching and learning methods and student assessment selected to align with the expected learning outcomes?

Diagnostic Questions (Curriculum Design and Evaluation)

- Who is responsible for designing the curriculum?
- How are the academic staff and students involved in the curriculum design?
- What are the roles of the stakeholders in the design and review of the curriculum?
- How does curriculum innovation come about? Who takes the initiative? On the basis of what signals?
- Who is responsible for implementing the curriculum?
- When designing the curriculum, is benchmarking with other institutions done?
- In which international networks does the programme participate?
- With which institutions abroad do student exchanges take place?
- Is the programme recognised abroad?

- Is a structured quality assurance procedure in place?
- Who are involved in the internal and external quality assurance activities?
- Is there a curriculum committee? What is its role?
- Is there an examination committee? What is its role?
- How is the programme and its courses evaluated?
- Is the evaluation done systematically?
- How is research used to improve teaching and learning?
- How are students involved in evaluating the curriculum and its courses?
- How and to whom are the evaluation results made known?
- What actions are taken to improve the curriculum and its design process?

Sources of Evidence

- Programme and courses specifications
- Course brochure, prospectus, bulletin
- Skills matrix
- Stakeholder input and feedback
- University and faculty websites
- Curriculum review minutes and documents
- Accreditation and benchmarking reports
- Curriculum map
- Curriculum review minutes and documents

2.3. AUN-QA Criterion 3 – Teaching and Learning Approach

Requirements

- 3.1. *The educational philosophy is shown to be articulated and communicated to all stakeholders. It is also shown to be reflected in the teaching and learning activities.*
- 3.2. *The teaching and learning activities are shown to allow students to participate responsibly in the learning process.*
- 3.3. *The teaching and learning activities are shown to involve active learning by the students.*
- 3.4. *The teaching and learning activities are shown to promote learning, learning how to learn, and instilling in students a commitment for life-long learning (e.g., commitment to critical inquiry, information-processing skills, and a willingness to experiment with new ideas and practices).*
- 3.5. *The teaching and learning activities are shown to inculcate in students, new ideas, creative thought, innovation, and an entrepreneurial mindset.*
- 3.6. *The teaching and learning processes are shown to be continuously improved to ensure their relevance to the needs of industry and are aligned to the expected learning outcomes.*

Explanation

The approach to teaching and learning is often dictated by the educational philosophy of the university. Educational philosophy can be defined as a set of related beliefs that influence what and how students are taught. It defines the purpose of education, the role of teachers and students, what should be taught, and using what methods.

Quality learning is understood as involving the active construction of meaning by students, and not just something that is imparted by the teacher. It is a deep approach to learning that seeks to make meaning and to achieve understanding. Quality learning is also dependent on the approach that learners take when learning. This in turn is dependent on the concepts that learners hold of learning, what they know about their own learning, and the learning strategies that they use.

Quality learning embraces the principles of learning. Students learn best in a relaxed, supportive, and cooperative learning environment. In promoting responsibility in learning, teachers should:

- Create a teaching-learning environment that enables individuals to participate responsibly in the learning process.
- Provide curricula that are flexible and enable learners to make meaningful choices in terms of subject content, programme routes, approaches to assessment, and modes and duration of study.

The teaching and learning approach should promote learning, learning how to learn, and instill in students a commitment to lifelong learning (e.g., commitment to critical

inquiry, information processing skills, a willingness to experiment with new ideas and practices, etc).

In line with the overarching purpose of higher education in fostering holistic education, quality learning results when students acquire the following skills:

- *The ability to discover knowledge for oneself.* Learners have research skills and the ability to analyse and synthesize the material that they gather. Learners understand various learning strategies and can choose the most appropriate strategy for the task at hand.
- *The ability to retain knowledge long term.* An approach to learning that emphasizes the construction of meaning rather than memorising facts for retention.
- *The ability to perceive relations between old and new knowledge.* Quality learning is always trying to bring information from various resources together.
- *The ability to create new knowledge.* Quality learners discover what others have learnt and documented. They connect that knowledge and their own experiences in order to develop new insights.
- *The ability to apply one's knowledge to solve problems.* Quality learning is always about figuring out how to apply knowledge gained to solve real-world problems.
- *The ability to communicate one's knowledge to others.* Quality learners form and substantiate independent thought and action in a coherent and articulate manner.
- *An eagerness to know more.* Quality learners are life-long learners.

The conditions necessary for quality learning are:

- Quality learning occurs when learners are ready – in cognitive and emotional terms – to meet the demands of the learning task.
- Quality learning occurs when learners have a reason for learning.
- Quality learning occurs when learners explicitly relate previous knowledge to new knowledge.
- Quality learning occurs when learners are active participants in the learning process.
- Quality learning occurs when the learning environment offers good support.

There is no single teaching and learning method that is valid for all situations. Thought must be given to the teaching and learning approach behind the curriculum.

Diagnostic Questions (Teaching)

- Is there an explicit educational philosophy shared by all the teaching staff?
- Is diversity of the learning environment promoted, including student exchanges?
- Is the teaching provided by other departments (e.g., for general courses) satisfactory?
- Are the teaching and learning methods used aligned with the expected learning outcomes?

- How is technology used in the teaching and learning activities?
- How is the teaching and learning approach evaluated? Do the chosen methods fit into the learning outcomes of the courses? Is there sufficient variety in the methods?
- Are there any circumstances that prevent the desired teaching and learning methods from being used (number of students, infrastructure, teaching skills, etc.)?
- Do the teaching and learning activities enhance life-long learning and help develop an entrepreneurial mindset?

Diagnostic Questions (Research)

- When do students come into contact with research for the first time?
- How are research methodologies introduced to students?
- How is the relationship between education and research expressed in the programme?
- How are research findings applied in the programme?
- How do students/ staff collaborate with industry for research?

Diagnostic Questions (Practical Training)

- Is practical training a compulsory or optional part of the programme?
- How many credits are allocated to these activities?
- Is the level of the practical training and/or community service satisfactory?
- What benefits do communities gain from the service provided by the programme?
- What benefits do employers and students gain from the practical training?
- Are there any bottlenecks in the practical training? If so, what are the causes?
- How are students coached to do well in their practical training?
- How is the assessment for practical training done?

Sources of Evidence

- Educational philosophy
- Evidence of action learning such as project, practical training, assignment, industrial attachment, etc
- Student feedback
- Online learning portal
- Programme and courses specifications
- Internship reports
- Community involvement
- Memorandum of Understanding (MOU).

2.4 AUN-QA Criterion 4 – Student Assessment

Requirements

- 4.1. *A variety of assessment methods are shown to be used and are shown to be constructively aligned to achieving the expected learning outcomes and the teaching and learning objectives.*
- 4.2. *The assessment and assessment-appeal policies are shown to be explicit, communicated to students, and applied consistently.*
- 4.3. *The assessment standards and procedures for student progression and degree completion, are shown to be explicit, communicated to students, and applied consistently.*
- 4.4. *The assessments methods are shown to include rubrics, marking schemes, timelines, and regulations, and these are shown to ensure validity, reliability, and fairness in assessment.*
- 4.5. *The assessment methods are shown to measure the achievement of the expected learning outcomes of the programme and its courses.*
- 4.6. *Feedback of student assessment is shown to be provided in a timely manner.*
- 4.7. *The student assessment and its processes are shown to be continuously reviewed and improved to ensure their relevance to the needs of industry and alignment to the expected learning outcomes.*

Explanation

Student assessment is one of the most important element in higher education. The outcome has a profound effect on student career. It is, therefore, important that assessment be carried out professionally at all times and take into account the extensive knowledge that exists on testing and examination processes. Assessment also provides valuable information for universities about the efficiency of teaching and learner support. Student assessment is expected to:

- Be designed to measure the achievement of the expected learning outcomes.
- Be fit for purpose, whether diagnostic, formative, or summative; have clear and published grading and marking criteria.
- Be undertaken by people who understand the role of assessment in the students' progression towards achieving the knowledge and skills associated with their intended qualification; where possible, not relying on the evaluation of just one examiner.
- Take account of all the possible consequences of examination regulations.
- Have clear regulations covering student absence, illness, and other mitigating circumstances.
- Ensure that assessment is conducted securely in accordance with the university's stated procedures.
- Be subjected to administrative verification in ensuring the effectiveness of the procedures.
- Inform students about the assessment being used for their programme, what examinations or other assessment methods they will be subjected to, what

will be expected of them, and the criteria that will be applied to assess their performance.

Diagnostic Questions

- Is entry assessment carried out on new and transfer students?
- Is exit assessment carried out on departing (graduating) students?
- To what extent do the assessments and examinations cover the content of the courses and the programme (content validity)?
- To what extent do the assessments and examinations cover the objectives of the courses and of the programme as a whole (construct validity)?
- Is the assessment criterion-referenced?
- Are a variety of assessment methods used? What are they?
- Are the pass/fail criteria clear?
- Are the assessment/examination regulations clear?
- Are there safeguards in place to ensure objectivity?
- Are the students satisfied with the assessment procedures? What about complaints from students?
- Do clear rules exist for re-assessment and are students satisfied with these?

A special form of student assessment is the final project (dissertation, thesis, or project). This requires students to demonstrate their knowledge and skills and their ability to manipulate the knowledge in a new situation. The following considerations are important:

- Do clear regulations exist for the final project?
- What criteria have been formulated to assess the final project?
- What does the preparation for producing the final project involve (in terms of content, methods, and skills)?
- Is the level of the final project satisfactory?
- Do any bottlenecks exist for producing the final projects? If so, why?
- How are students coached to do well in their final projects?

Sources of Evidence

- Sample of in-course assessment, project work, thesis, final examination, etc
- Assessment/Marking rubrics
- Moderation process
- Appeal procedure
- Programme and courses specifications
- Examination regulations.

2.5 AUN-QA Criterion 5 – Academic Staff

Requirements

- 5.1. *The programme to show that academic staff planning (including succession, promotion, re-deployment, termination, and retirement plans) is carried out to ensure that the quality and quantity of the academic staff fulfil the needs for education, research, and service.*
- 5.2. *The programme to show that staff workload is measured and monitored to improve the quality of education, research, and service.*
- 5.3. *The programme to show that the competences of the academic staff are determined, evaluated, and communicated.*
- 5.4. *The programme to show that the duties allocated to the academic staff are appropriate to qualifications, experience, and aptitude.*
- 5.5. *The programme to show that promotion of the academic staff is based on a merit system which accounts for teaching, research, and service.*
- 5.6. *The programme to show that the rights and privileges, benefits, roles and relationships, and accountability of the academic staff, taking into account professional ethics and their academic freedom, are well defined and understood.*
- 5.7. *The programme to show that the training and developmental needs of the academic staff are systematically identified, and that appropriate training and development activities are implemented to fulfil the identified needs.*
- 5.8. *The programme to show that performance management including reward and recognition is implemented to assess academic staff teaching and research quality.*

Explanation

A competent academic staff is able to:

- Design and deliver a coherent teaching and learning curriculum.
- Apply a range of teaching and learning methods and select the most appropriate assessment methods to achieve the expected learning outcomes.
- Develop and use a variety of instructional media.
- Monitor and evaluate their own teaching performance and evaluate courses that they deliver.
- Reflect upon their own teaching practices.
- Conduct research and provide services to benefit stakeholders.

The academic staff is the single most important learning resource available to most students. It is crucial that those who teach have full knowledge and understanding of the subject that they are teaching, have the necessary skills and experience to communicate their knowledge and understanding effectively to students in a range of teaching contexts, and can access feedback on their own performance.

The quality of a university depends not only on the quality of its programmes but also on the quality of its academic staff. The quality of the academic staff encompass

qualification, subject matter expertise, experience, teaching skills, and professional ethics. Academic staffing covers full-time and part-time professors, lecturers, and visiting teaching staff. Besides the quality of the academic staff, the university has to also determine the quantity of the academic staff required to meet the demands and needs of the students. Oftentimes full-time equivalent (FTE) and staff-to-student ratio are used to determine the needed number of academic staff.

Full-Time Equivalent

In calculating the FTE of an academic staff, universities should define what constitutes full-time student loads and faculty teaching loads including part-time students and faculty at their percentage of full-time loads.

There are different ways of calculating FTE and universities should state the method, parameters, and assumptions used. One of the methods is based on the investment of time. For example, if 1.0 FTE is equal to 40 hours per week (full-time employment), then the FTE of an academic staff member with a teaching load of 8 hours per week would be 0.2 (i.e., $8/40$). The investment of time method can also be used for calculating FTE for students. For example, if 1.0 FTE student has to attend 20 hours of lesson a week, then the FTE of a part-time student with 10 hours of lesson a week would be 0.5 (i.e., $10/20$).

Another method to calculate FTE is based on teaching load. For example, if the official full-time teaching load of an academic staff is 4 courses per semester, then each course accounts for 0.25 FTE. If an academic staff member is assigned 2 courses per semester, then the FTE will be 0.5 (i.e., 2×0.25 FTE).

Similarly, student study load can be used to calculate the FTE of students. For example, if 1.0 FTE student has to take 24 credits load per semester, then the FTE of a student with 18 credits load per semester would be 0.75 (i.e., $18/24$). Table 2.2. below is used to specify the number of academic staff and their FTEs in the last 5 academic years for a programme.

| Category | M | F | Total | | Percentage of PhD |
|---------------------------------------|---|---|-----------|-----|-------------------|
| | | | Headcount | FTE | |
| Professors | | | | | |
| Associate/ Assistant Professors | | | | | |
| Full-time Lecturers | | | | | |
| Part-time Lecturers | | | | | |
| Visiting Professors/ Lecturers | | | | | |
| Total | | | | | |

Table 2.2. Number of Academic Staff (specify reference date and method of calculation used for FTE of academic staff)

Diagnostic Questions (Academic Staff)

- Are academic staff members competent and qualified for their jobs?
- Are the competencies and expertise of the academic staff adequate for delivering the programme?
- What are the challenges that the university meet or encounter with regards to human resource, such as age distribution, difficulties in filling vacancies or in attracting qualified academic staff? How does the university handle these challenges?
- How many Master's and PhD degree holders are there among the academic staff?
- What policy is pursued with regard to the employment of academic staff, both in teaching and research?
- Is conscious effort made to involve professors in mentoring and/or training the junior or new academic staff?
- Is a policy in place with regard to involvement in seminars, supervision of final papers, practical training, or internship?
- Are academic staff members satisfied with the teaching load?
- Is the staff-to-student ratio satisfactory?
- What is the accountability of the academic staff in terms of roles, responsibilities, academic freedom, and professional ethics?
- What types of research activities are carried out by academic staff? Are these activities aligned to the vision and mission of the university and faculty?
- What is the level of research grants and how is it utilised?

Diagnostic Questions (Staff Management)

- How is manpower planning for the academic staff carried out?
- Does the department have a clearly formulated staff management structure?
- Are recruitment and promotion criteria of the academic staff established?
- Is there a performance management system?
- What is the succession plan for key appointment holders?
- What are the career development plans for the academic staff?
- Are academic staff members satisfied with the HR policy?
- What is the future development of the HR policy for the academic staff?
- How are the academic staff members prepared for the teaching task?
- Is the teaching delivered by the academic staff supervised and assessed?

Diagnostic Questions (Training and Development)

- Who is responsible for the academic staff training and development activities?
- What are the training and development processes and plans? How are the training needs identified?
- Do the training and development plans reflect the university and faculty mission and objectives?
- Is there a system to develop strategic and technical competencies of the academic staff?
- What are the training hours and number of training places for the academic staff per year?

- What percentage of payroll or budget is allocated for training the academic staff?

Sources of Evidence

- Manpower plan
- Faculty distribution in terms of age, gender, expertise, etc
- Career and succession plans
- Recruitment criteria
- Staff qualifications
- Training needs analysis
- Training and development plan and budget
- Peer review and appraisal system
- Student feedback
- Award and recognition schemes
- Staff workload
- Organisation chart
- HR policies
- Staff handbook
- Job description
- Employment contract
- Research and publication data
- National and/or professional licence/certificate.

2.6 AUN-QA Criterion 6 – Student Support Services

Requirements

- 6.1. *The student intake policy, admission criteria, and admission procedures to the programme are shown to be clearly defined, communicated, published, and up-to-date.*
- 6.2. *Both short-term and long-term planning of academic and non-academic support services are shown to be carried out to ensure sufficiency and quality of support services for teaching, research, and community service.*
- 6.3. *An adequate system is shown to exist for student progress, academic performance, and workload monitoring. Student progress, academic performance, and workload are shown to be systematically recorded and monitored. Feedback to students and corrective actions are made where necessary.*
- 6.4. *Co-curricular activities, student competition, and other student support services are shown to be available to improve learning experience and employability.*
- 6.5. *The competences of the support staff rendering student services are shown to be identified for recruitment and deployment. These competences are shown to be evaluated to ensure their continued relevance to stakeholders needs. Roles and relationships are shown to be well-defined to ensure smooth delivery of the services.*
- 6.6. *Student support services are shown to be subjected to evaluation, benchmarking, and enhancement.*

Explanation

The quality of an academic programme depends very much on the interaction between staff and students. However, academic staff cannot perform their roles well without good quality services provided by the support staff. These are the persons who manage the libraries, laboratories, computer facilities, and other student services. Table 2.3. below is used to specify the number of support staff available in the last 5 academic years.

| Support Staff | Highest Educational Attainment | | | | Total |
|--|--------------------------------|----------|--------|----------|-------|
| | High School | Bachelor | Master | Doctoral | |
| Student Services Personnel (enumerate the services) | | | | | |
| Total | | | | | |

Table 2.3. Number of Support Staff (specify reference date)

Quality of output depends very much quality of input. This means that the quality of the entering students is important.

Student intake:

- Give a summary of the intake of first year students using Table 2.4.
- Give a summary of the total number of students enrolled in the programme using Table 2.5.

| Academic Year | Applicants | | |
|---------------|-------------|-------------|-----------------------|
| | No. Applied | No. Offered | No. Admitted/Enrolled |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Table 2.4. Intake of First-year Students (last five academic years)

| Academic Year | Students | | | | | |
|---------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------|
| | 1 st Year | 2 nd Year | 3 rd Year | 4 th Year | >4 th Year | Total |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Table 2.5. Total Number of Students (last five academic years)

Diagnostic Questions (Student Quality)

- How is student intake monitored and analysed?
- How are students selected?
- What policy is pursued with regard to the intake of students? Does it aim to increase the intake or to stabilise it? Why?
- What measures are taken to influence the quality and the size of the intake? What effect does these measures have?
- How does the programme take into account the level of achievement of entering students?

Diagnostic Questions (Student Study Load and Performance)

- Does the department have a credit-point system? How are the credit points calculated?
- Is the study load divided equally across and within each academic year?
- Can an average student complete the programme in the planned duration?
- What are the indicators used to monitor student progress and performance?

Diagnostic Questions (Student Support)

- Does the department have a monitoring system for recording study progress and following graduates (for example, tracer study)?
- How is the data of the monitoring system used?
- What role do the academic staff play in informing and coaching students and integrating them into the programme?
- How are students informed about their study plan?
- Is special attention paid to coaching first year students and underperforming students? If so, how does it work?
- Is specific support given to provide study skills for students with problems?
- Is separate attention paid to coaching of advanced students?
- Is assistance given in completing the final year project? Where can students who get stuck with their practical training or final project get help?
- How are students advised on problems concerning course options, change of options, interruption, or termination of study?
- How is information provided to students on career prospects?
- Are the reasons examined regarding students who take longer than expected to complete the programme?
- Are students satisfied with the support services provided?

Diagnostic Questions (Support Staff)

- Are the support staff members competent and qualified for their jobs?
- Are the competencies and expertise of the support staff adequate?
- What difficulties are there in attracting qualified support staff?
- What policy is pursued with regard to the employment of support staff?
- Are support staff members satisfied with their roles?
- How is manpower planning of the support staff carried out?
- Are recruitment and promotion criteria for the support staff established?
- Is there a performance management system?
- What are the career development plans for the support staff?

Sources of Evidence

- Student selection process and criteria
- Trend of student intake
- Credit system
- Student workload
- Student performance report
- Participation in academic and non-academic activities, extracurricular activities, competition, etc
- Mechanisms to report and feedback on student progress
- Provision of student support services at university- and faculty-level
- Coaching, mentoring, and counselling schemes
- Student feedback and course evaluation.

2.7 AUN-QA Criterion 7 – Facilities and Infrastructure

Requirements

- 7.1. *The physical resources to deliver the curriculum, including equipment, material, and information technology, are shown to be sufficient.*
- 7.2. *The laboratories and equipment are shown to be up-to-date, readily available, and effectively deployed.*
- 7.3. *A digital library is shown to be set-up, in keeping with progress in information and communication technology.*
- 7.4. *The information technology systems are shown to be set up to meet the needs of staff and students.*
- 7.5. *The university is shown to provide a highly accessible computer and network infrastructure that enables the campus community to fully exploit information technology for teaching, research, service, and administration.*
- 7.6. *The environmental, health, and safety standards and access for people with special needs are shown to be defined and implemented.*
- 7.7. *The university is shown to provide a physical, social, and psychological environment that is conducive for education, research, and personal well-being.*
- 7.8. *The competences of the support staff rendering services related to facilities are shown to be identified and evaluated to ensure that their skills remain relevant to stakeholder needs.*
- 7.9. *The quality of the facilities (library, laboratory, IT, and student services) are shown to be subjected to evaluation and enhancement.*

Explanation

The provision of facilities and infrastructure should be in line with the objectives of the programme. Facilities are also connected to the teaching and learning approach. For example, if the approach is to teach in small working groups, then flexible classroom arrangements should be made available. Learning resources such as computers, e-learning portals, library resources, etc, should be adequately provided to meet the needs of students and staff.

Diagnostic Questions

- Are there sufficient lecture-halls, seminar rooms, laboratories, reading rooms, and computer rooms? Do these facilities meet the needs of students and staff?
- Is the library sufficiently equipped for education and research?
- Is the library accessible and within easy reach (location, opening hours)?
- Are there sufficient laboratory facilities?
- Do the laboratories meet the relevant requirements?
- Are sufficient teaching aids and tools available to staff and students?
- What hardware and software are made available to meet the needs of education and research?
- To what extent do the facilities and infrastructure promote or obstruct the delivery of the programme?

- Is the total budget for teaching aids and tools sufficient?
- How are the facilities and infrastructure maintained?

Sources of Evidence

- List of facilities, equipment, computer hardware and software, etc
- Facility booking, utilisation rate, downtime/uptime, operating hours
- Maintenance plan
- New facilities and upgrading plans
- Safety, health, and environmental policy
- Emergency plan
- Student and staff feedback
- Budget for facilities and infrastructure.

2.8 AUN-QA Criterion 8 – Output and Outcomes

Requirements

- 8.1. *The pass rate, dropout rate, and average time to graduate are shown to be established, monitored, and benchmarked for improvement.*
- 8.2. *Employability as well as self-employment, entrepreneurship, and advancement to further studies, are shown to be established, monitored, and benchmarked for improvement.*
- 8.3. *Research and creative work output and activities carried out by the academic staff and students, are shown to be established, monitored, and benchmarked for improvement.*
- 8.4. *Data are provided to show directly the achievement of the programme outcomes, which are established and monitored.*
- 8.5. *Satisfaction level of the various stakeholders are shown to be established, monitored, and benchmarked for improvement.*

Explanation

In assessing the quality assurance of an academic programme, output and outcomes measures are important. These include measuring the extent to which the expected learning outcomes have been achieved, pass rate, dropout rate, average time to graduate, and employment rate. Research is another important output from the process. The types of research activities carried by staff and students should meet the requirements of the stakeholders.

In addition to analysing input, process, and output, universities have to analyse also the level of satisfaction of its stakeholders. There should be a system to collect and measure stakeholder satisfaction. The information collected should be analysed and benchmarked for improvement.

Pass Rate and Dropout Rate

Table 2.6. shows information on pass rate and dropout rate of the last five cohorts to be provided.

| Academic Year | Cohort Size | % Completed First Degree in | | | % Dropout During | | | |
|---------------|-------------|-----------------------------|---------|----------|----------------------|----------------------|----------------------|--------------------------------|
| | | 3 Years | 4 Years | >4 Years | 1 st Year | 2 nd Year | 3 rd Year | 4 th Years & Beyond |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Table 2.6. Pass Rates and Dropout Rate (last five cohorts)

Research Activities

Research is an important output from the academic staff. The types of research output (e.g., publications, consulting work, projects, grants, etc) carried out by the academic staff should meet the requirements of the stakeholders. Programmes are to provide data on the types and number of research publications in the last five academic years as shown in Table 2.7. below.

| Academic Year | Types of Publication | | | | Total | No. of Publications per Academic Staff |
|---------------|-------------------------|----------|----------|---------------|-------|--|
| | In-house/ Institutional | National | Regional | International | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Table 2.7. Types and Number of Research Publication

Diagnostic Questions (Pass Rate, Dropout Rate)

- Does the programme have an efficient system to monitor the pass rates and dropout rates of students?
- What does the programme think of the pass rates? If not satisfactory, what measures are taken to improve the pass rates?
- What is the dropout rate? Are there explanations for the dropout rate?
- Does the department know where the dropout students go to?

Diagnostic Questions (Average Time to Graduate)

- What does the department think of the average time to graduate?
- What measures have been taken to promote graduation and to shorten the average time to graduate?
- What effects do these measures have?

Diagnostic Questions (Quality of Graduates)

- Is the quality of the graduates satisfactory?
- Do the achieved standards match the expected standards?
- Do the graduates get jobs easily? What are the career prospects of the graduates over the last five years?

Diagnostic Questions (Employability of Graduates)

- What percentage of graduates find a job within six months of graduation over the past five years? What percentage of graduates found a job within one year of graduation?

- What percentage of graduates are still unemployed one year after graduation?

Diagnostic Questions (Research)

- What types of research activities are carried out by the students? Are these activities aligned to the expected learning outcomes and the vision and mission of the university and faculty?
- What types of research activities are carried out by academic staff? Are these activities aligned to the vision and mission of the university and faculty?
- What is the level of research grants and how is it utilised?
- What is the number of research papers published? Are the research papers published in national, regional, and/or international journals?

Diagnostic Questions (Stakeholder Satisfaction)

- What mechanisms are available for staff to express their satisfaction or dissatisfaction about the programme, resources, facilities, processes, policies, etc?
- What indicators are used to measure and monitor the satisfaction level of staff?
- What initiatives are carried out to raise the satisfaction level of staff? Are they effective?
- Does the department know what students think about the courses, programme, teaching, examinations, etc?
- How does the department cope with the feedback and complaints from students?
- What is the opinion and feedback of the graduates about the competencies that they have acquired?
- How is feedback from the alumni used to improve the programme?
- Are employers satisfied with the quality of the graduates?
- Are there any specific complaints about the graduates?
- Are specific strengths of the graduates appreciated by the employers?

Sources of Evidence

- Process and indicators for measuring stakeholder satisfaction
- Stakeholder satisfaction trend
- Graduates, alumni, and employer surveys
- Press reports
- Employment surveys
- Employment statistics
- Employer feedback.

3. Quality Assessment

3.1 Introduction to Quality Assessment

Assessment can be defined as a general term that embraces all methods used to judge the performance of an individual, group, or organisation. Self-assessment is the process of critically reviewing the quality of one's own performance at the institutional, system, or programme level.

Quality assessment in higher education, therefore, can be defined as a diagnostic review and evaluation of teaching, learning, and outcomes, based on a detailed examination of curricula, structures, resources, and effectiveness of the institution, system, or programme. It aims to determine if an institution, system, or programme meets generally accepted quality standards.

3.2 Functions and Principles of Quality Assessment

Self-assessment is introduced in higher education together with external assessment, accreditation or quality audits. In many cases, self-assessment serves as preparation for a site visit by external experts and the self-assessment report (SAR) provides the external experts with the basic information about the institution, programme, and quality assurance system. It also provides an opportunity for the institution and its staff to discover the quality of its quality assurance system.

An effective self-assessment is time-consuming as it requires effort and time. However, the gains from a good self-assessment are valuable. It gives information and facts about the quality assurance system and provides a platform for stakeholders to discuss issues on the quality of education.

The fundamental principles described in the ISO 19011 standard are relevant to self-assessment and AUN-QA assessment. Three of the principles that relate to the conduct of the assessors are:

- Ethical conduct – the foundation of professionalism
- Fair presentation – the obligation to report truthfully and accurately
- Due professional care – the application of diligence and judgment to assessment.

Two other principles that relate to the assessment process are:

- Independence – the basis for the impartiality and objectivity of the assessment conclusions
- Evidence – the rational basis for reaching reliable and reproducible assessment conclusions in a systematic assessment process. Evidences are based on records and statements of fact or information which are relevant to the assessment criteria and are verifiable.

Adherence to these fundamental principles is a prerequisite for providing a reliable and relevant assessment process and outcome. The following considerations should be made before carrying out a self-assessment:

- Management must fully support the self-assessment and provide access to relevant information that is needed for an effective quality assurance system. The self-assessment serves to acquire structural insight into the operation and performance of the institution.
- Gaining management support to carry out a self- assessment is not enough. The whole organisation has to prepare itself for the self-assessment. Assessing quality is more than evaluating the performance of a programme; it is also about developing and shaping the institution. Staff members should be made responsible for the quality and all staff should be involved in the self-assessment.
- Writing a critical self-evaluation of the quality assurance system demands good organisation and coordination. Primarily, someone has to lead and coordinate the self-assessment process. The chosen leader should have good contacts within the institution including key management staff, faculty, and support staff; have access to obtain the required information at all levels; and have the authority to make appointments with stakeholders.
- It is desirable to install a working group in charge of the self-assessment. It is important that the group is structured in such a way that the involvement of all sections is assured. The working group should be in charge of the self-assessment, gathering and analysing data and drawing conclusions.
- As it is assumed that the self-assessment is supported by the institution, it is important that all staff members should be acquainted with the contents of the SAR. The working group might organise a workshop or seminar to discuss or communicate the SAR.

3.3 Preparation of Self-Assessment Report

Figure 3.1 illustrates the approach for preparing a self-assessment which encompasses the Plan-Do-Check-Act (PDCA) cycle of improvement.

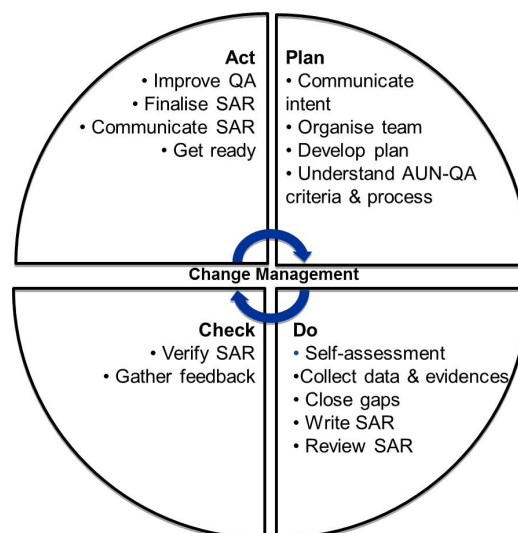


Figure 3.1. PDCA Approach to SAR Development

The “Plan” phase starts with the communication of intent for quality assessment. Appoint a group responsible for writing the SAR. The group should consist of key people representing various departments and led by someone appointed by the faculty or university. As part of the change management process, early engagement with the stakeholders is crucial to get their buy-in and commitment before the start of the project. A clear timetable should be set up to develop the SAR (see Figure 3.2). Each member in the group should be made responsible for collecting and analysing data and information, and writing the SAR. Each member must have a good understanding of the AUN-QA criteria before proceeding to the next phase.

| Activity/Month | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Deadline | Assigned to | Status |
|-----------------------|--|---|---|---|---|---|---|---|---|---|----|----|----|----------|-------------|--------|
| P L A N | Communicate Intent | | | | | | | | | | | | | | | |
| | Organise Team | | | | | | | | | | | | | | | |
| | Develop Plan | | | | | | | | | | | | | | | |
| | Understand AUN QA criteria and process | | | | | | | | | | | | | | | |
| D O | Self-assessment | | | | | | | | | | | | | | | |
| | Collect data & evidences | | | | | | | | | | | | | | | |
| | Close gaps | | | | | | | | | | | | | | | |
| | Write SAR | | | | | | | | | | | | | | | |
| | Review SAR | | | | | | | | | | | | | | | |
| C H E C K | Verify SAR | | | | | | | | | | | | | | | |
| | Gather Feedback | | | | | | | | | | | | | | | |
| A C T | Improve QA | | | | | | | | | | | | | | | |
| | Finalise SAR | | | | | | | | | | | | | | | |
| | Communicate SAR | | | | | | | | | | | | | | | |
| | Get Ready | | | | | | | | | | | | | | | |
| Change Management | | | | | | | | | | | | | | | | |

Figure 3.2. Typical Project Timeline for SAR Development

The “Do” phase involves identifying the gaps in the quality assurance system in meeting the AUN-QA criteria. Data collection is a critical step in this phase as it helps to quantify the existing quality assurance practices as well as to identify what the institution needs to do to meet the AUN-QA criteria. Solutions to close the gaps should be implemented before proceeding to write and review the SAR.

The “Check” phase involves verifying the SAR as well as the quality assurance practices, and giving feedback to improve them. An independent team should be appointed to assess the SAR and the existing quality assurance practices against the AUN-QA criteria. Recommendations to improve the SAR and close the gaps in the existing quality assurance practices should be made.

The “Act” phase involves implementing the recommendations raised in the “Check” phase. The SAR is finalised before communicating it to relevant stakeholders and getting ready for the external assessment.

3.4 Self-Assessment Report

A typical self-assessment project would take about nine months to a year to prepare. However, the duration depends on the stage of development, availability of data and information, and the maturity of the university, faculty or school. At the start of the project, it is important that the sponsor, project team, and staff members involved have a common comprehension and understanding of the AUN-QA guidelines and criteria. Training and communications should be set up to ensure this. The SAR is the product of the self-assessment exercise and it should be written in an objective, factual, and complete manner and follow the AUN-QA self-rating form (See Appendix A).

The self-assessment must be finalised with a SAR. Writing an effective SAR requires skill and time. Some guidelines for writing an effective SAR are:

- The report is the account of the self-assessment. That is to say, the SAR is not just descriptive. It is also analytical. It includes an evaluation of the problems. At the same time, it provides an indication of how the problems identified will be dealt with. Use the diagnostic questions provided in each of the AUN-QA criteria to do this.
- Since it is a self-assessment, which is of the utmost importance for an external assessment team, it is important for the SAR to follow a specific format based on the AUN-QA criteria and checklist.
- Illustrate clearly what, where, when, who, and how the QA mechanisms or instruments are implemented and managed to fulfil the criteria. This will help to piece all related information together.
- Focus on information and data (objective evidences) that directly address the criteria. The report has to be concise and factual. Provide trends and statistics to show achievement and performance. The quantitative data require special attention. The manner in which data is presented is important for the right interpretation of the data. There is a clear need for standardisation of data such as student numbers, appointment of teaching staff, staff-to-student ratio, pass rates, etc.
- Self-assessment forms the starting point for improvement between the review committee and the faculty as well as a document for inter-collegial assessment. When conducting a self-assessment, it is important to draw up an institution's own standards and criteria, but it is also essential to take account of the criteria formulated by outsiders, such as an accrediting body. When analysing an institution's own quality, it is important to look for evidence on how far the criteria have been met. If there are no formally formulated standards in the country or region, the standards as formulated in this manual may be used and taken as benchmarks.
- The SAR should be written or translated into a language (i.e., English) that is easy for external assessors to comprehend. Provide a glossary of abbreviations and terminologies used in the report.

The SAR is the final document that will play a role in formulating a quality plan for years to come. It might also provide input for accreditation or for inter-collegial assessment.

The contents of a SAR consist of:

Part 1: Introduction

- Executive summary of the SAR
- Organisation of the self-assessment – how the self-assessment was carried out and who were involved?
- Brief description of the university, faculty and department – outline the history of quality assurance, mission, vision, objectives and quality policy of the university followed by a brief description of the faculty and department.

Part 2: AUN-QA Criteria

This section contains the write-up on how the university, faculty or department addresses the requirements of the AUN-QA criteria. Follow the criteria listed in the self-assessment checklist.

Part 3: Strengths and Weaknesses Analysis

- Summary of strengths - summarise the points that the department considers to be its strengths and mark the points that the institution is proud of.
- Summary of Weaknesses - indicate which points the department considers to be weak and in need of improvement.
- Completed self-ratings as in Appendix A
- Improvement plan – recommendations to close the gaps identified in the self-assessment and the action plan to implement them.

Part 4: Appendices

Glossary and supporting documents and evidences

3.5 Preparation of Quality Assessment

Conducting a quality assessment requires good preparation. It is important that the university considers its resources and prepares its people before proceeding with the assessment. The preparation includes communicating the SAR and other documentation, host team, interviewees, assessment team, logistics, and other administrative arrangements.

Before requesting for the quality assessment, it is important that management or the project initiator communicates the intent to all stakeholders concerned. This is to ensure that those involved understand the reasons and objectives behind the assessment and at the same time to get commitment and approval for the assessment project. Sufficient time should be given for criteria owners to prepare the quality assessment.

The purpose of the assessment is not about the assessment ratings but rather on the continuous improvement of the quality assurance system implemented. As the assessment will be based mostly on objective evidences, it is important that the university has prepared a well-written SAR and get ready all key documents and records for assessment. Information about the university and programme should be prepared and presented to the assessment team. This would allow them to have an

overview of the university history, policies, vision, mission, and programme. The SAR and key documents should be translated to a language that is understood by the assessment team. An interpreter may be present during the site assessment, if necessary. The translated copy of the SAR should be sent to the assessment team in advance – at least two months before the site assessment.

The university should assemble key management representatives, SAR team and guides or interpreter to host the assessment. The key management representatives could give the commitment and support for the assessment and giving the presentation of the university, faculty or programme. The SAR team should be present for clarification of the SAR and serve as contact person(s) for the exercise.

Guides should be available to bring the assessors to the site as well as making documents and records available; and serve as a liaison between the assessors and the staff of the faculty or university. Interpreter may be engaged to translate documents, interview questions or responses.

Prepare and notify the interviewees in advance about the assessment. It is important to share with them the intent and purpose of the assessment. Key office holders and fair representation from staff and students should be invited for the assessment exercise. External parties such as alumni, employers and other stakeholders should also be invited for the interview.

For internal assessment, experts from adjacent faculties may be considered. However, there are some conditions that members have to meet:

- They should act independently.
- There should be no conflict of interest. Members should have no advantage through their verdict.
- They must be accepted by the faculty to be assessed.

It is also possible to invite retired staff on the grounds that they are more independent (and have more time available). However, it is also important to have members still working in the field and with a knowledge of recent developments.

Depending on the types of quality assessment, an assessment team appointed to carry out the quality assessment may consist of 2 to 5 members. The members of the team may include:

- A chairperson, totally independent and unconnected with the institution to be assessed. The chair does not need to be an expert in the field, but should have the experience with management of higher education institutions and the development of quality assurance in higher education.
- Two experts on the subject area or discipline being assessed.
- An expert from the labour market and/or from the professional association.
- An expert from abroad (but because the visit will be done in the local language, this member must be proficient in the language).
- An expert on education and learning processes.

In selecting the assessors, consideration should be given to their competence and personal attributes in addition to education and work experience. Knowledge and skills specific to quality management system are those related to:

- Quality and quality assurance in general
- AUN-QA guidelines and criteria
- Other QA education models and frameworks.

As far as assessment team leaders are concerned, they should have the knowledge and leadership skills necessary to enable the team to conduct the assessment efficiently and effectively. In addition to the above, the assessor should possess a number of personal attributes that contribute to the successful performance of assessment. An assessor should be ethical, open minded, diplomatic, observant, perceptive, versatile, tenacious, decisive and self-reliant. The necessary knowledge and skills and the personal attributes to apply them effectively can be acquired by an appropriate combination of education, work experience, assessor training and assessment experience. These “building blocks” are quantified by, for example, specifying the minimum level of education, the necessary number of years’ work experience and the minimum amount of audit or assessment experience.

The appointed assessors should have the required knowledge and skills on quality, quality assurance, AUN-QA guidelines and criteria and assessment techniques and skills. If not, training should be conducted for them.

The training should include:

- Quality and quality assurance in higher education
- The AUN-QA criteria and guidelines
- Organisation of self-assessment project
- Writing and reviewing of SAR
- Quality assessment process
- Stakeholders’ interviews
- Writing feedback reports.

Staff organising the assessment should take care of the following logistics and other administrative arrangements:

- Meeting and interviewing rooms:
 - Opening/closing meeting which normally would require a bigger room in consideration of the number of people involved
 - Interview room for the conduct of the assessment with the interviewees
 - Assessors would need room for discussion and report writing
- Observers who wish to learn about the conduct of the assessment
- Site tour – arrangement for the assessors to visit places such as library, lab, lecture halls, etc as part of the assessment
- Computer equipment/facilities for presentation on opening and closing meetings
- Photocopying/printing services
- Refreshments/meals
- Transport arrangements/airport transfers

- Accommodation.

3.6 Quality Assessment Process

The Plan-Do-Check-Act (PDCA) or Deming Cycle illustrated in Figure 3.3 is adopted for quality assessment at the programme level, as well as for both institutional assessment and IQA assessment.



Figure 3.3 – PDCA Approach to AUN-QA Assessment

3.6.1 Plan Phase

The “Plan” phase consists of:

- Types of Assessment
- Assessment Team
- Schedule & Itinerary.

At the start of the planning, the institution has to decide which quality assessment that they want to conduct as each serves a different purpose and requires a different level of expertise. The three types of quality assessment in AUN-QA are institutional, IQA system, and programme level.

The assessment team(s) will be appointed by the AUN Secretariat in advance based on assessor's background, experience and language ability. Each team should comprise at least 2 members from different universities. The assessors in each team should decide on their roles and assignment before, during and after the assessment.

The chairperson or the lead assessor will provide leadership to the assessment team, setup preliminary meetings/discussions, assigning of roles and assessment areas/criteria and moderating the final assessment results. In general, an assessor should perform the following roles:

- Preparing assessment plan and checklist
- Communicating and clarifying assessment requirements
- Planning & carrying out assigned responsibilities effectively and efficiently
- Making observations on curricula, processes, facilities and quality improvements
- Reporting the assessment results
- Retaining and safeguarding documents pertaining to the assessment.

Before the site assessment, assessors need to check the date, time, location and venue of the assessment to be carried out for each programme. For venue, it is normally held at the university which facilitates the access to documents, site tour, faculty members and supporting staff. Interviews are best held in conference-like arrangement and avoid using a room that is too large or in a lecture-style. When interviewing staff, it is preferably that the room also holds the relevant documents to facilitate easy verification.

Assessors should also obtain the details of the contact person(s) of the university and AUN Secretariat so that prior communication can be established, if necessary. Know who is in the assessment team and agree on the roles. Make sure that the SAR is submitted at least 1.5 to 2 months before the site assessment to allow for the preparation of desktop assessment.

A typical Itinerary will spread over 3 days and it will normally consist of:

- Opening meeting
 - Presentation on the overview of the unit to be assessed
- Interviews (Dean, Department Head, Programme Chair, faculty members, supporting staff, students, alumni and employers)
- Site tour (teaching facilities, laboratories, workshops, libraries, general facilities)
- Assessment and report preparation
- Breaks, lunches and dinners
- Closing meeting
 - Presentation of preliminary assessment findings

A typical itinerary is shown in Table 3.1.

| Date/ Time | Activities |
|---|---|
| Day 0 | |
| Arrival and Pick-up of Assessors and Staff from AUN Secretariat | |
| Day 1 | |
| 09.00 – 09.30 | Opening Session |
| 09.30 - 09.45 | Coffee Break |
| 09.45 – 10.00 | Briefing by Dean |
| 10.00 – 11.30 | Meeting Key Faculty Members: Head of Department, Programme Chair and SAR Team |
| 11.30 – 13.00 | Site Visit to Campus and Faculty - Laboratories, Lecture Facilities, Libraries, Computer Facilities, etc. |
| 13.00 – 14.00 | Lunch |
| 14.00 – 15.30 | Meeting with Faculty Members |
| 15.30 – 15.45 | Coffee Break |
| 15.45 – 17.00 | Meeting with Support Staff |
| 17.00 onwards | Dinner |
| Day 2 | |
| 08.30 – 10.00 | Meeting with Students |
| 10.00 – 10.15 | Coffee Break |
| 10.15 – 11.30 | Meeting with Alumni |
| 11.30 – 13.00 | Meeting with Employers |
| 13.00 – 14.00 | Lunch |
| 14.00 – 17.00 | Clarification and/or Preparation of Assessment Findings |
| 17.00 onwards | Dinner (Free & Easy) |
| Day 3 | |
| 09.00 - 11.00 | Presentation of Preliminary Assessment Findings |
| 11.00 – 11.30 | Closing Session |
| 11.30 – 13.00 | Lunch and Departure of Assessors |

Table 3.1. Typical AUN-QA Assessment Itinerary

3.6.2 Do Phase

The “Do” phase involves desktop and site assessment.

Desktop Assessment

Desktop assessment is the first initial step before the site assessment. It is a document review exercise which involves a preliminary assessment of the quality assurance system based on the SAR and available documents. The desktop assessment facilitates the development of an assessment plan. The AUN-QA Assessment Planning Template (see Appendix B) is used for this purpose. The desktop assessment allows the following preparatory work to be done:

- Clarifying SAR and quality assurance practices
- Identifying strengths and weaknesses of the quality assurance practices
- Identifying gaps in meeting the AUN-QA criteria
- Identifying possible areas for improvement
- Crafting questions for stakeholders’ interviews
- Identifying sources of evidence for verification.

The purpose of assessment planning is to gather evidence of practices that meet AUN-QA guidelines and criteria. The plan should include:

- Sources of information and evidence
- Strategy employed to gather the evidence as well as identifying documents and records for review. Strategy may include interview, site visit, document review, website access, etc
- Identify individuals to be interviewed and plan schedule of interviews and site tour
- Prepare questions needed to gather the evidence.

The SAR is the most critical document for desktop assessment and it should be given to the assessors in advance before the actual assessment. It should give an overview of the university, faculty, department and programme being assessed. The SAR should cover all the criteria listed in the checklist. If any of the criteria are not documented, the assessors should clarify with the contact person of the university. Assessors should identify information and documents mentioned in the report and verify them against the physical documents during the site assessment.

The PDCA approach is a good tool to apply in assessment planning. Questions can be formulated at each stage of the PDCA (see Figure 3.4).

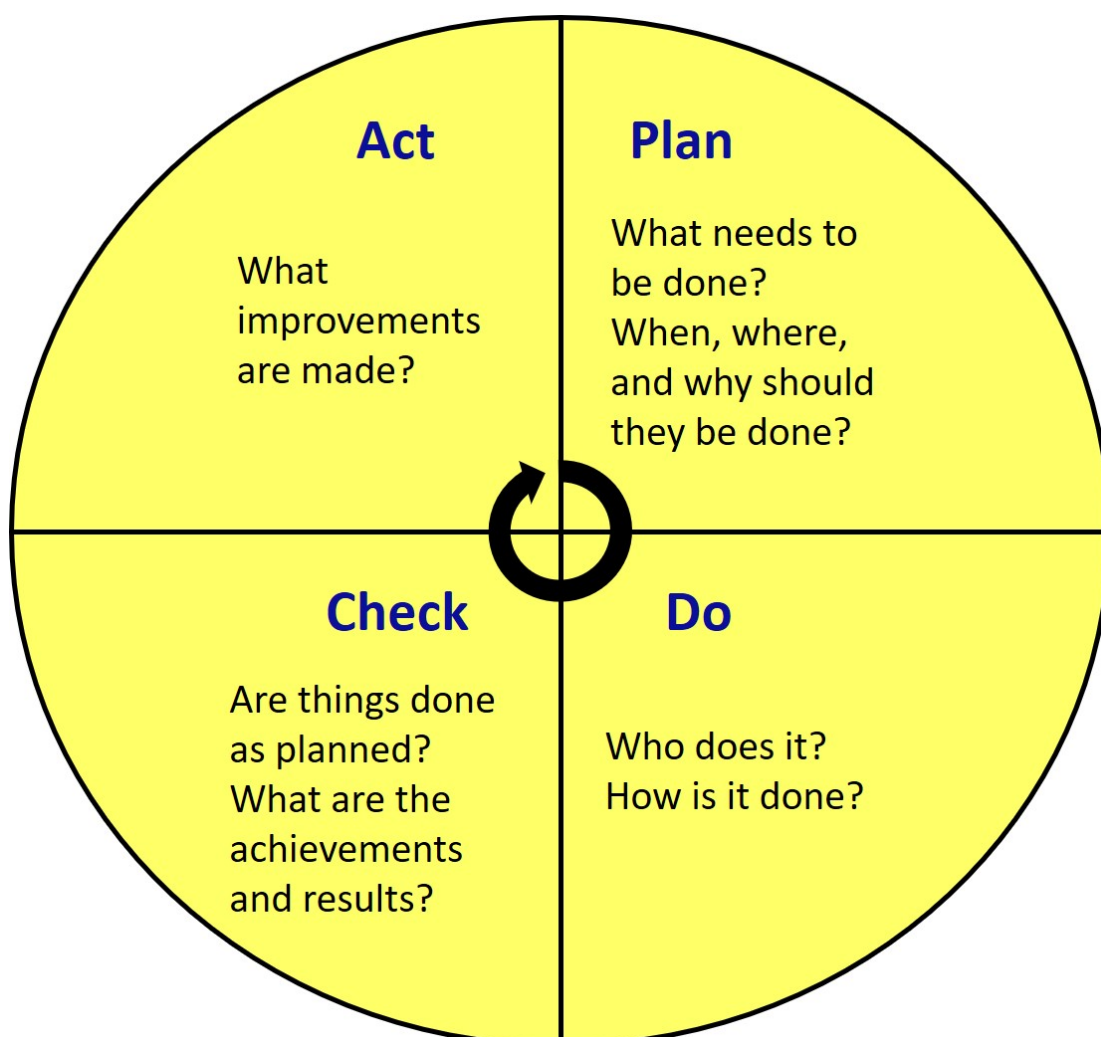


Figure 3.4. PDCA Approach in Formulating Questions

For example, at the “Plan” stage, questions on what, when and why can be used to establish objectives and processes that deliver results based on AUN-QA guidelines and criteria and organisation policies. At the “Do” stage, questions can revolve around implementation and who are involved. At the “Check” stage, questions on monitoring and measuring performance and processes can be formulated. Lastly, at the “Act” stage, assessors can plan questions on actions to continually improve performance. Adopt the 5Ws (why, what, where, who and when) and 1H (How) questioning technique during the interview.

To facilitate the desktop assessment and planning, a template for desktop assessment at programme level is documented in Appendix B. A sample on how the template is being used for desktop planning is documented in Appendix C.

Site Assessment

Site assessment or site visit consists of an opening meeting with key management representatives of the university. The opening meeting is normally followed by a presentation of the university and programme. After which, interviews would be held with the various stakeholders. Site tour may be arranged before or between the interviews. The assessment will conclude with a closing meeting.

An opening meeting with the host university management representatives should be held at the start of the site assessment. The purpose of the brief opening meeting is to:

- Introduce the members of the assessment team to the host university's management representatives.
- Establish official communication links between the assessment team and the host university.
- Review scope and objectives of the assessment.
- Clarify details of the assessment plan and schedule.
- Allow the host university to introduce the university and its programme normally done through a presentation.

Typical opening statements by the chairperson of the assessment team are as follows:

“Good morning ladies and gentlemen. My name is XXX and my colleague is YYY. We are the assessment team from ASEAN University Network (AUN).

At the request of your university, we are glad to make a quality assessment at the programme level under the AUN-QA guidelines and criteria. The scope of the assessment will cover the XXX programme at the faculty of ABC. We will be looking at the activities that are relevant to these areas. We will be following a schedule as agreed earlier and do let us know if there are any changes. The assessment will take about 3 days.

A closing ceremony will be held on the final day of the assessment where we will be presenting the preliminary assessment findings.

Before we proceed, is there anything that you would like to ask? (Pause for a second).

Thank you and you may now introduce the members in your team.”

Interviews

Interviews with various stakeholders are normally pre-arranged by the host university prior to the site assessment. The interviews may start with a discussion involving the writers of the SAR at the start and during the site assessment. In this interview, the team can ask for clarification of any obscurities and explanation of any topics that are not clear.

The interviews with the students provide a very rich source of information, but the information needs to be checked and tested against the ideas of the staff members. Student interviews are important to get an insight into the study load, quality of the academic staff, the curriculum of the programme, the quality of the facilities, etc.

The student interview should be held in the absence of staff members, so that they can speak freely. The size of the student groups is ideally about 5 students in each cohort. It's best to talk to about 5 students from the first year, 5 from say the second and third years, and 5 who are nearly at the end of their studies. It is important that the students are a fair representation of the population. The selection of students should follow the requirements stated in the "Guidelines for AUN-QA Assessment and Assessors". The assessors should have a list of the students and their details such as name, year of study, etc.

Interviews with staff members will be used for discussion on the content of the programme, learning outcomes, teaching and learning methods, student assessment, etc. It is advisable to interview with group of not more than 25 staff members. Other interviews may be held with members of a curriculum committee and with members of the committee responsible for examinations. During the interview with the curriculum committee, the question of how the curriculum is kept up to date will be discussed as will the question of how innovations are planned and realised. The interview with the examination committee must clearly show how the quality of the examinations and degree is assured.

Interviews with employers and alumni provide a good indication of the quality of graduates and curriculum. They can provide a good source for the university to improve its processes, systems, facilities, curriculum, etc.

In each interview, the assessor will usually go through several steps including informing the interviewees about the purpose of the interview, gather background information about the interviewees and conducting the actual interview.

Objectives of Interview are to:

- Gather information and evidences
- Clarify and verify SAR and practices
- Give interviewees opportunity to present the full picture.

It is important for the assessors to talk less and listen more as the purpose of the interview is to ensure a fair and objective view of the assessment. In preparing the interview, the assessor should consider the following:

- Know the interviewees
 - Language
 - Education
 - Specialisation or area of interests
- Plan the questions
 - Focus on the criteria

- Phrase questions as neutrally as possible to avoid bias
- Use open-ended questioning technique (5Ws and 1H) to probe for information
- Use close-ended questions to confirm information
- Manage time to cover different criteria and interviewees.

An interviewing process consists of 3 phases as follows:

- Introduction
- Questioning
- Conclusion.

At the introduction phase, the following items should be carried out:

- Introduce the assessment team
- Explain purpose of the interview
- Put interviewees at ease
- Get to know the background of interviewees (e.g. years of service or study, current position, scope of work, etc.), if necessary.

During questioning, do take note of the following factors:

- Use reassuring tones and approach in a respectful manner
- Assure interviewees that the session is strictly confidential and no information will be attributed to any one individual
- Lead the discussion
- Take note
- Keep to the agenda
- Watch your time.

Use effective questioning techniques:

- Ask one question at a time. Give interviewees ample time to respond before moving to the next question.
- Use open-ended questions to probe for information.
- Use close-ended questions to confirm information.
- Avoid leading questions.
- Try to use neutral language. Avoid words like never, bad, good, always, weak, etc.

Before concluding the interview, do the following:

- Ask if interviewees have anything else to add. This gives them some control over the interview and a chance to tell you something important that might not be on the list.
- Thank the interviewees for their time

Four basic techniques in active listening are:

1. Mirroring. Restating what the interviewee says using different words. Restate in such a way as to encourage the interviewee to go on.
2. Using silences. Silence may make people feel uncomfortable in a conversation. However, not every gap in a conversation needs to be filled. Distinguish between positive and negative silences where the interviewee is thinking. During a negative silence where the interviewee is not able to respond, provide help.
3. Acknowledging. Remind the interviewee periodically that you are listening with words like “Yes”, “I see”, “Um..m”. Use body language like nodding and eye contact without interrupting the interviewee unnecessarily.
4. Open-ended questioning. Use questions that encourage the interviewees to think further rather than give a straight “Yes” or “No” answer. Close ended questions often cut the natural flow of the interviewee’s thoughts, make them feel interrogated and put them on the defensive.

Objective Evidence

Evidence should be collected on all matters related to the assessment objectives and scope. Checklist can be used to aid the collection of evidence. Evidence should be collected through:

- Interviews
- Examination of documents/records (physical and electronic)
- Observation of activities and facilities
- Site tour
- Use of statistical methods such as sampling can be used to increase efficiency during assessment. However, the sample should be a fair representation of the area under examination.

Site tour can be planned before or between interviews. The site tour normally includes visit to lecture halls, tutorial rooms, laboratories, workshops or practical rooms, libraries and computer labs. Special attention should be paid to the environment in the facilities, condition of the equipment and tools, cleanliness and maintenance of the facilities. Site tour also provides the assessors an opportunity to clarify the findings or SAR with the support staff.

3.6.3 Check Phase

The “Check” phase involves report preparation and presentation of the assessment findings.

At the end of the assessment, prior to preparing the final report, the assessment team may hold a clarification meeting with the host university’s management representatives and those responsible for the programme.

The purpose of the meeting is to:

- Present the preliminary results of the assessment

- Ensure that the results of the assessment are clearly understood
- Provide an opportunity for clarification
- Conclude the assessment.

The meeting is part of the “Check” phase and it helps the assessors to prepare an objective and factual report. It gives the assessors and assesseees an opportunity to clarify doubts and to seek a better understanding of the QA processes and how the AUN-QA criteria are being fulfilled. It helps to identify and agree on the areas for improvement and provides the motivational force for the university to improve its QA system. The 2-way communication in the “Check” phase would make the university more receptive to the findings and help to build a closer and enduring relationship between the assessors and the university.

Assessment Report

The objectives of assessment report are:

- Level of performance based on AUN-QA guidelines and criteria
- Key strengths of university/faculty/programme
- Areas for improvement.

The steps to prepare assessment report are illustrated in Figure 3.5.

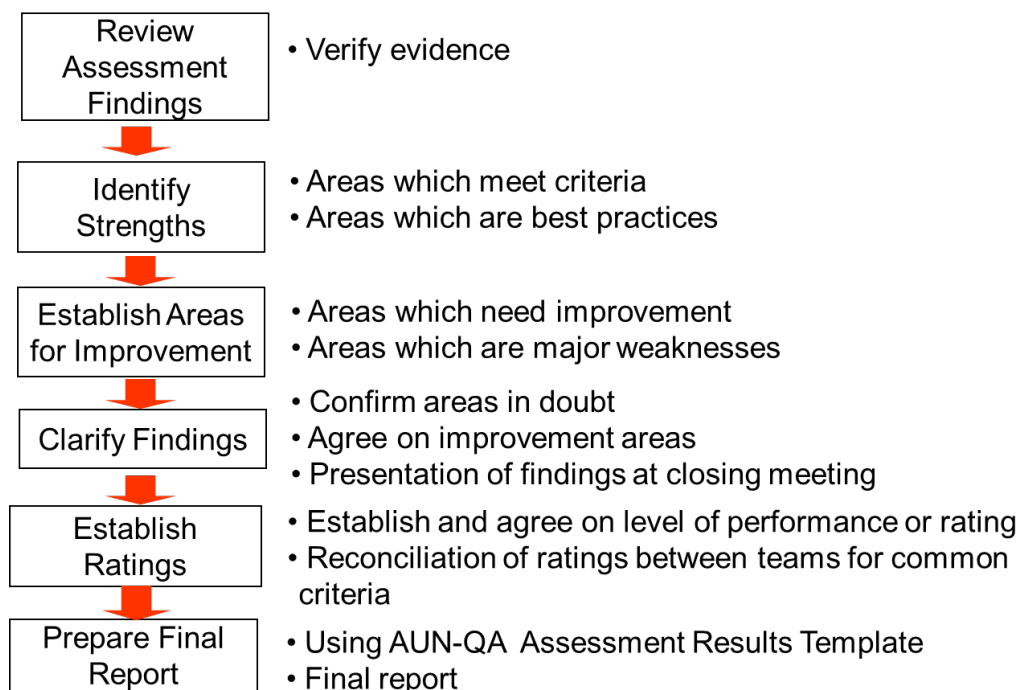


Figure 3.5. Steps in Preparing Assessment Report

To prepare a creditable and objective report, the assessment team has to verify the evidences gathered and agree on the strengths and weaknesses of the QA practices

adopted by the university. Next is to establish the gaps against the AUN-QA criteria and suggest areas for improvement. Based on the findings, the assessment team has to establish and agree on the level of performance or rating. Any differences should be resolved through factual and objective evidences against the best known practices. Reconciliation of ratings of common criteria across programmes should be carried out to ensure consistency of results.

A seven-point rating scale is used for AUN-QA assessment. It provides universities and assessors an instrument for scaling their verdicts and to see how far they have progressed in their AUN-QA journey. The seven-point rating scale is described below.

| Rating | Description |
|----------|---|
| 1 | Absolutely Inadequate The QA practice to fulfil the criterion is not implemented. There are no plans, documents, evidences or results available. Immediate improvement must be made. |
| 2 | Inadequate and Improvement is Necessary The QA practice to fulfil the criterion is still at its planning stage or is inadequate where improvement is necessary. There is little document or evidence available. Performance of the QA practice shows little or poor results. |
| 3 | Inadequate but Minor Improvement Will Make It Adequate The QA practice to fulfil the criterion is defined and implemented but minor improvement is needed to fully meet them. Documents are available but no clear evidence to support that they have been fully used. Performance of the QA practice shows inconsistent or some results. |
| 4 | Adequate as Expected The QA practice to fulfil the criterion is adequate and evidences support that it has been fully implemented. Performance of the QA practice shows consistent results as expected. |
| 5 | Better Than Adequate The QA practice to fulfil the criterion is better than adequate. Evidences support that it has been efficiently implemented. Performance of the QA practice shows good results and positive improvement trend. |
| 6 | Example of Best Practices The QA practice to fulfil the criterion is considered to be example of best practices in the field. Evidences support that it has been effectively implemented. Performance of QA practice shows very good results and positive improvement trend. |
| 7 | Excellent (Example of World-class or Leading Practices) The QA practice to fulfil the criterion is considered to be excellent or example of world-class practices in the field. Evidences support that it has been innovatively implemented. Performance of the QA practice shows excellent results and outstanding improvement trends. |

In assigning a rating to each criterion, only whole numbers are used (e.g., 3.0, 4.0, 5.0, 6.0). The overall verdict for a study programme assessment will be based on a holistic assessment rather than the arithmetic average. The descriptive term of the seven-point scale for the overall verdict will be stated. The arithmetic average is not used. The scoring for each criterion is provided at the summary page of the report.

Before making the presentation to the university management, the assessment team should clarify any doubts and agree on the areas for improvement with the key staff of the faculty or department. The report should not be judgmental such as using the word “frequently”. Instead state the comment factually and indicate the importance of having the practice or process. The final report should be prepared using the AUN-QA Assessment Report Template in Appendix D.

In writing feedback report, do adhere to the following guidelines:

- Feedback must be:
 - Objective
 - Based on evidence
 - Encouraging
 - Part of a “learning” process
- Feedback must not
 - Ridicule
 - Mandate solution
 - Be insensitive to the overall effort
 - Ignore the achievement made.

Good feedback is fundamental to an effective assessment. It would help the university to determine its readiness in meeting AUN-QA guidelines and criteria. It also provides the basis for feedback on areas that the university needs to improve. Good feedback should:

- Use clear, simple, grammatically correct and complete sentences. They help to reduce the time needed to clarify points.
- Avoid jargons or acronyms.
- Be constructive – use positive tone, be specific to guide improvement and comment only on areas contained in the criteria.
- Be non-prescriptive – state observations and evaluation.

A closing meeting is usually done by the chairperson of the assessment team. Typical closing meeting statements include:

“Good morning ladies and gentlemen. On behalf of the assessment team, I would like to thank you and your staff for the hospitality and assistance which you have given us throughout the assessment. We have enjoyed the friendly atmosphere during the assessment.

First, I would like to reiterate the purpose and scope of this assessment under the AUN-QA guidelines and criteria at programme level. The assessment has been carried out on the basis of a prepared plan which involved examining a representative sample of the activities relevant to the AUN-QA framework. With your kind consent, I will present the preliminary results and findings from the team.

A final report will be sent to your university by the AUN secretariat at a later date.”

3.6.4 Act Phase

The “Act” phase involves preparing the final report and the assessment feedback. The final report consists of a summary and the detailed assessment results (see Appendix D). A sample of the report is documented in Appendix E. A typical summary in the report is reproduced below.

This report is based on information provided in the self-assessment report (SAR), evidences, site tours, and interviews with selected stakeholders including academic and support staff, students, alumni, and employers. It should be read together with the preliminary findings presented at the closing ceremony where the key strengths and areas for improvement were highlighted.

The AUN-QA assessment at programme level covers eight criteria. Each criterion is assessed based on a seven-point scale. The summary of the assessment results is as follows:

| Criterion | Score |
|------------------------------------|-----------------------------|
| 1. Expected Learning Outcomes | 4 |
| 2. Programme Structure and Content | 5 |
| 3. Teaching and Learning Approach | 4 |
| 4. Student Assessment | 5 |
| 5. Academic Staff | 5 |
| 6. Student Support Services | 5 |
| 7. Facilities and Infrastructure | 4 |
| 8. Output and Outcomes | 5 |
| Overall Verdict | <i>Adequate as Expected</i> |

Based on the assessment results, the Bachelor of XXX Programme fulfills the AUN-QA requirements. Overall the quality assurance implemented for the programme is *Adequate as Expected*.

The overall verdict for study programme assessment will be based on a *holistic assessment* rather than an arithmetic average. The descriptive term of the seven-point scale for the overall verdict will be stated. The arithmetic average is not used. Thus, the overall verdict would be one of the below:

- *Absolutely Inadequate*, or

- *Inadequate and Improvement is Necessary*, or
- *Inadequate but Minor Improvement Will Make It Adequate*, or
- *Adequate as Expected*, or
- *Better Than Adequate*, or
- *Example of Best Practices*, or
- *Excellent (Example of World-class or Leading Practices)*.

The scoring for each sub-criterion will no longer be reported in the final report submission (Appendix D). The scoring for each criterion will be provided at the summary page of the report.

After the assessment team has completed its report, it sends the report to the AUN Secretariat. This is forwarded to the university programme assessed. The university programme in turn provides its feedback to the AUN of the performance of the assessors. This is done using Appendix F. The purpose of Appendix F is to help the AUN Secretariat to improve the assessment process.

4. References

Article 11. Qualitative Evaluation. (UNESCO, 1998). World Declaration on Higher Education for the Twenty-first Century: Vision and Action. Published in the *World Conference on Higher Education, Paris, 1998*. UNESCO. Director-General, 1987-1999 (Mayo F.).

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5. Appendices

- Appendix A – Self-rating for AUN-QA Assessment at Programme Level
- Appendix B – Template for AUN-QA Assessment Planning at Programme Level
- Appendix C – Sample of AUN-QA Assessment Planning at Programme Level
- Appendix D – Template for AUN-QA Assessment Report at Programme Level
- Appendix E – Sample of AUN-QA Assessment Report at Programme Level
- Appendix F – Feedback Report for AUN-QA Assessment at Programme Level

Self-rating for AUN-QA Assessment at Programme Level

| | Criterion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------|--|---|---|---|---|---|---|---|
| 1 | Expected Learning Outcomes | | | | | | | |
| 1.1 | The programme to show that the expected learning outcomes are appropriately formulated in accordance with an established learning taxonomy, are aligned to the vision and mission of the university, and are known to all stakeholders. | | | | | | | |
| 1.2 | The programme to show that the expected learning outcomes for all courses are appropriately formulated and are aligned to the expected learning outcomes of the programme. | | | | | | | |
| 1.3 | The programme to show that the expected learning outcomes consist of both generic outcomes (related to written and oral communication, problem-solving, information technology, teambuilding skills, etc) and subject specific outcomes (related to knowledge and skills of the study discipline). | | | | | | | |
| 1.4 | The programme to show that the requirements of the stakeholders, especially the external stakeholders, are gathered, and that these are reflected in the expected learning outcomes. | | | | | | | |
| 1.5 | The programme to show that the expected learning outcomes are achieved by the students by the time they graduate. | | | | | | | |
| | Overall opinion | | | | | | | |
| 2 | Programme Structure and Content | | | | | | | |
| 2.1 | The specifications of the programme and all its courses are shown to be comprehensive, up-to-date, and made available and communicated to all stakeholders. | | | | | | | |
| 2.2 | The design of the curriculum is shown to be constructively aligned with achieving the expected learning outcomes. | | | | | | | |
| 2.3 | The design of the curriculum is shown to include feedback from stakeholders, especially external stakeholders. | | | | | | | |
| 2.4 | The contribution made by each course in achieving the expected learning outcomes is shown to be clear. | | | | | | | |
| 2.5 | The curriculum to show that all its courses are logically structured, properly sequenced | | | | | | | |

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| | (progression from basic to intermediate to specialised courses), and are integrated. | | | | | | | |
| 2.6 | The curriculum to have option(s) for students to pursue major and/or minor specialisations. | | | | | | | |
| 2.7 | The programme to show that its curriculum is reviewed periodically following an established procedure and that it remains up-to-date and relevant to industry. | | | | | | | |
| | Overall opinion | | | | | | | |
| 3 | Teaching and Learning Approach | | | | | | | |
| 3.1 | The educational philosophy is shown to be articulated and communicated to all stakeholders. It is also shown to be reflected in the teaching and learning activities. | | | | | | | |
| 3.2 | The teaching and learning activities are shown to allow students to participate responsibly in the learning process. | | | | | | | |
| 3.3 | The teaching and learning activities are shown to involve active learning by the students. | | | | | | | |
| 3.4 | The teaching and learning activities are shown to promote learning, learning how to learn, and instilling in students a commitment for life-long learning (e.g., commitment to critical inquiry, information-processing skills, and a willingness to experiment with new ideas and practices). | | | | | | | |
| 3.5 | The teaching and learning activities are shown to inculcate in students, new ideas, creative thought, innovation, and an entrepreneurial mindset. | | | | | | | |
| 3.6 | The teaching and learning processes are shown to be continuously improved to ensure their relevance to the needs of industry and are aligned to the expected learning outcomes. | | | | | | | |
| | Overall opinion | | | | | | | |
| 4 | Student Assessment | | | | | | | |
| 4.1 | A variety of assessment methods are shown to be used and are shown to be constructively aligned to achieving the expected learning outcomes and the teaching and learning objectives. | | | | | | | |
| 4.2 | The assessment and assessment-appeal policies are shown to be explicit, communicated to students, and applied consistently. | | | | | | | |
| 4.3 | The assessment standards and procedures for student progression and degree completion, are shown to be explicit, communicated to students, and applied consistently. | | | | | | | |
| 4.4 | The assessments methods are shown to include rubrics, marking schemes, timelines, and | | | | | | | |

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| | regulations, and these are shown to ensure validity, reliability, and fairness in assessment. | | | | | | |
| 4.5 | The assessment methods are shown to measure the achievement of the expected learning outcomes of the programme and its courses. | | | | | | |
| 4.6 | Feedback of student assessment is shown to be provided in a timely manner. | | | | | | |
| 4.7 | The student assessment and its processes are shown to be continuously reviewed and improved to ensure their relevance to the needs of industry and alignment to the expected learning outcomes. | | | | | | |
| | Overall opinion | | | | | | |
| 5 | Academic Staff | | | | | | |
| 5.1 | The programme to show that academic staff planning (including succession, promotion, re-deployment, termination, and retirement plans) is carried out to ensure that the quality and quantity of the academic staff fulfil the needs for education, research, and service. | | | | | | |
| 5.2 | The programme to show that staff workload is measured and monitored to improve the quality of education, research, and service. | | | | | | |
| 5.3 | The programme to show that the competences of the academic staff are determined, evaluated, and communicated. | | | | | | |
| 5.4 | The programme to show that the duties allocated to the academic staff are appropriate to qualifications, experience, and aptitude. | | | | | | |
| 5.5 | The programme to show that promotion of the academic staff is based on a merit system which accounts for teaching, research, and service. | | | | | | |
| 5.6 | The programme to show that the rights and privileges, benefits, roles and relationships, and accountability of the academic staff, taking into account professional ethics and their academic freedom, are well defined and understood. | | | | | | |
| 5.7 | The programme to show that the training and developmental needs of the academic staff are systematically identified, and that appropriate training and development activities are implemented to fulfil the identified needs. | | | | | | |
| 5.8 | The programme to show that performance management including reward and recognition is implemented to assess academic staff teaching and research quality. | | | | | | |
| | Overall opinion | | | | | | |

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|----------|---|--|--|--|--|--|--|--|
| 6 | Student Support Services | | | | | | | |
| 6.1 | The student intake policy, admission criteria, and admission procedures to the programme are shown to be clearly defined, communicated, published, and up-to-date. | | | | | | | |
| 6.2 | Both short-term and long-term planning of academic and non-academic support services are shown to be carried out to ensure sufficiency and quality of support services for teaching, research, and community service. | | | | | | | |
| 6.3 | An adequate system is shown to exist for student progress, academic performance, and workload monitoring. Student progress, academic performance, and workload are shown to be systematically recorded and monitored. Feedback to students and corrective actions are made where necessary. | | | | | | | |
| 6.4 | Co-curricular activities, student competition, and other student support services are shown to be available to improve learning experience and employability. | | | | | | | |
| 6.5 | The competences of the support staff rendering student services are shown to be identified for recruitment and deployment. These competences are shown to be evaluated to ensure their continued relevance to stakeholders needs. Roles and relationships are shown to be well-defined to ensure smooth delivery of the services. | | | | | | | |
| 6.6 | Student support services are shown to be subjected to evaluation, benchmarking, and enhancement. | | | | | | | |
| | Overall opinion | | | | | | | |
| 7 | Facilities and Infrastructure | | | | | | | |
| 7.1 | The physical resources to deliver the curriculum, including equipment, material, and information technology, are shown to be sufficient. | | | | | | | |
| 7.2 | The laboratories and equipment are shown to be up-to-date, readily available, and effectively deployed. | | | | | | | |
| 7.3 | A digital library is shown to be set-up, in keeping with progress in information and communication technology. | | | | | | | |
| 7.4 | The information technology systems are shown to be set up to meet the needs of staff and students. | | | | | | | |
| 7.5 | The university is shown to provide a highly accessible computer and network infrastructure that enables the campus community to fully | | | | | | | |

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| | exploit information technology for teaching, research, service, and administration. | | | | | | | |
| 7.6 | The environmental, health, and safety standards and access for people with special needs are shown to be defined and implemented. | | | | | | | |
| 7.7 | The university is shown to provide a physical, social, and psychological environment that is conducive for education, research, and personal well-being. | | | | | | | |
| 7.8 | The competences of the support staff rendering services related to facilities are shown to be identified and evaluated to ensure that their skills remain relevant to stakeholder needs. | | | | | | | |
| 7.9 | The quality of the facilities (library, laboratory, IT, and student services) are shown to be subjected to evaluation and enhancement. | | | | | | | |
| | Overall opinion | | | | | | | |
| 8 | Output and Outcomes | | | | | | | |
| 8.1 | The pass rate, dropout rate, and average time to graduate are shown to be established, monitored, and benchmarked for improvement. | | | | | | | |
| 8.2 | Employability as well as self-employment, entrepreneurship, and advancement to further studies, are shown to be established, monitored, and benchmarked for improvement. | | | | | | | |
| 8.3 | Research and creative work output and activities carried out by the academic staff and students, are shown to be established, monitored, and benchmarked for improvement. | | | | | | | |
| 8.4 | Data are provided to show directly the achievement of the programme outcomes, which are established and monitored. | | | | | | | |
| 8.5 | Satisfaction level of the various stakeholders are shown to be established, monitored, and benchmarked for improvement. | | | | | | | |
| | Overall opinion | | | | | | | |



AUN-QA ASSESSMENT PLANNING AT PROGRAMME LEVEL

| | |
|--|---------------------|
| AUN-QA Assessment No.: | Date of Assessment: |
| Name of Programme Assessed: | |
| Name of University: | |
| Name of Faculty/School: | |
| Name and Designation of Management Representative: | e-mail: |
| Name of Assessors: | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|---|-----------|---------------------|---------------------|-----------------------|
| 1. Expected Learning Outcomes | | | | |
| 1.1. The programme to show that the expected learning outcomes are appropriately formulated in accordance with an established learning taxonomy, are aligned to the vision and mission of the university, and are known to all stakeholders. | | | | |
| 1.2. The programme to show that the expected learning outcomes for all courses are appropriately formulated and are aligned to the expected learning outcomes of the programme. | | | | |
| 1.3. The programme to show that the expected learning outcomes consist of both generic outcomes (related to written and oral communication, problem-solving, information technology, teambuilding skills, etc) and subject specific outcomes (related to knowledge and skills of the study discipline). | | | | |
| 1.4. The programme to show that the requirements of the stakeholders, especially the external stakeholders, are gathered, and that these are reflected in the expected learning outcomes. | | | | |
| 1.5. The programme to show that the expected learning outcomes are achieved by the students by the time they graduate. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|--|-----------|---------------------|---------------------|-----------------------|
| 2. Programme Structure and Content | | | | |
| 2.1. The specifications of the programme and all its courses are shown to be comprehensive, up-to-date, and made available and communicated to all stakeholders. | | | | |
| 2.2. The design of the curriculum is shown to be constructively aligned with achieving the expected learning outcomes. | | | | |
| 2.3. The design of the curriculum is shown to include feedback from stakeholders, especially external stakeholders. | | | | |
| 2.4. The contribution made by each course in achieving the expected learning outcomes is shown to be clear. | | | | |
| 2.5. The curriculum to show that all its courses are logically structured, properly sequenced (progression from basic to intermediate to specialised courses), and are integrated. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|--|------------------|----------------------------|----------------------------|------------------------------|
| 2.6. The curriculum to have option(s) for students to pursue major and/or minor specialisations. | | | | |
| 2.7. The programme to show that its curriculum is reviewed periodically following an established procedure and that it remains up-to-date and relevant to industry. | | | | |
| 3. Teaching and Learning Approach | | | | |
| 3.1. The educational philosophy is shown to be articulated and communicated to all stakeholders. It is also shown to be reflected in the teaching and learning activities. | | | | |
| 3.2. The teaching and learning activities are shown to allow students to participate responsibly in the learning process. | | | | |
| 3.3. The teaching and learning activities are shown to involve active learning by the students. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|---|-----------|---------------------|---------------------|-----------------------|
| 3.4. The teaching and learning activities are shown to promote learning, learning how to learn, and instilling in students a commitment for life-long learning (e.g., commitment to critical inquiry, information-processing skills, and a willingness to experiment with new ideas and practices). | | | | |
| 3.5. The teaching and learning activities are shown to inculcate in students, new ideas, creative thought, innovation, and an entrepreneurial mindset. | | | | |
| 3.6. The teaching and learning processes are shown to be continuously improved to ensure their relevance to the needs of industry and are aligned to the expected learning outcomes. | | | | |
| 4. Student Assessment | | | | |
| 4.1. A variety of assessment methods are shown to be used and are shown to be constructively aligned to achieving the expected learning outcomes and the teaching and learning objectives. | | | | |
| 4.2. The assessment and assessment-appeal policies are shown to be explicit, communicated to students, and applied consistently. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|--|-----------|---------------------|---------------------|-----------------------|
| 4.3. The assessment standards and procedures for student progression and degree completion, are shown to be explicit, communicated to students, and applied consistently. | | | | |
| 4.4. The assessments methods are shown to include rubrics, marking schemes, timelines, and regulations, and these are shown to ensure validity, reliability, and fairness in assessment. | | | | |
| 4.5. The assessment methods are shown to measure the achievement of the expected learning outcomes of the programme and its courses. | | | | |
| 4.6. Feedback of student assessment is shown to be provided in a timely manner. | | | | |
| 4.7. The student assessment and its processes are shown to be continuously reviewed and improved to ensure their relevance to the needs of industry and alignment to the expected learning outcomes. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|---|-----------|---------------------|---------------------|-----------------------|
| 5. Academic Staff | | | | |
| 5.1. The programme to show that academic staff planning (including succession, promotion, re-deployment, termination, and retirement plans) is carried out to ensure that the quality and quantity of the academic staff fulfil the needs for education, research, and service. | | | | |
| 5.2. The programme to show that staff workload is measured and monitored to improve the quality of education, research, and service. | | | | |
| 5.3. The programme to show that the competences of the academic staff are determined, evaluated, and communicated. | | | | |
| 5.4. The programme to show that the duties allocated to the academic staff are appropriate to qualifications, experience, and aptitude. | | | | |
| 5.5. The programme to show that promotion of the academic staff is based on a merit system which accounts for teaching, research, and service. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|--|-----------|---------------------|---------------------|-----------------------|
| 5.6. The programme to show that the rights and privileges, benefits, roles and relationships, and accountability of the academic staff, taking into account professional ethics and their academic freedom, are well defined and understood. | | | | |
| 5.7. The programme to show that the training and developmental needs of the academic staff are systematically identified, and that appropriate training and development activities are implemented to fulfil the identified needs. | | | | |
| 5.8. The programme to show that performance management including reward and recognition is implemented to assess academic staff teaching and research quality. | | | | |
| 6. Student Support Services | | | | |
| 6.1. The student intake policy, admission criteria, and admission procedures to the programme are shown to be clearly defined, communicated, published, and up-to-date. | | | | |
| 6.2. Both short-term and long-term planning of academic and non-academic support services are shown to be carried out to ensure sufficiency and quality of support services for teaching, research, and community service. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|--|-----------|---------------------|---------------------|-----------------------|
| 6.3. An adequate system is shown to exist for student progress, academic performance, and workload monitoring. Student progress, academic performance, and workload are shown to be systematically recorded and monitored. Feedback to students and corrective actions are made where necessary. | | | | |
| 6.4. Co-curricular activities, student competition, and other student support services are shown to be available to improve learning experience and employability. | | | | |
| 6.5. The competences of the support staff rendering student services are shown to be identified for recruitment and deployment. These competences are shown to be evaluated to ensure their continued relevance to stakeholders needs. Roles and relationships are shown to be well-defined to ensure smooth delivery of the services. | | | | |
| 6.6. Student support services are shown to be subjected to evaluation, benchmarking, and enhancement. | | | | |
| 7. Facilities and Infrastructure | | | | |
| 7.1. The physical resources to deliver the curriculum, including equipment, material, and information technology, are shown to be sufficient. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|--|-----------|---------------------|---------------------|-----------------------|
| 7.2. The laboratories and equipment are shown to be up-to-date, readily available, and effectively deployed. | | | | |
| 7.3. A digital library is shown to be set-up, in keeping with progress in information and communication technology. | | | | |
| 7.4. The information technology systems are shown to be set up to meet the needs of staff and students. | | | | |
| 7.5. The university is shown to provide a highly accessible computer and network infrastructure that enables the campus community to fully exploit information technology for teaching, research, service, and administration. | | | | |
| 7.6. The environmental, health, and safety standards and access for people with special needs are shown to be defined and implemented. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|---|-----------|---------------------|---------------------|-----------------------|
| 7.7. The university is shown to provide a physical, social, and psychological environment that is conducive for education, research, and personal well-being. | | | | |
| 7.8. The competences of the support staff rendering services related to facilities are shown to be identified and evaluated to ensure that their skills remain relevant to stakeholder needs. | | | | |
| 7.9. The quality of the facilities (library, laboratory, IT, and student services) are shown to be subjected to evaluation and enhancement. | | | | |
| 8. Output and Outcomes | | | | |
| 8.1. The pass rate, dropout rate, and average time to graduate are shown to be established, monitored, and benchmarked for improvement. | | | | |
| 8.2. Employability as well as self-employment, entrepreneurship, and advancement to further studies, are shown to be established, monitored, and benchmarked for improvement. | | | | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|--|-----------|---------------------|---------------------|-----------------------|
| 8.3. Research and creative work output and activities carried out by the academic staff and students, are shown to be established, monitored, and benchmarked for improvement. | | | | |
| 8.4. Data are provided to show directly the achievement of the programme outcomes, which are established and monitored. | | | | |
| 8.5. Satisfaction level of the various stakeholders are shown to be established, monitored, and benchmarked for improvement. | | | | |



AUN-QA ASSESSMENT PLANNING AT PROGRAMME LEVEL

| | |
|---|--|
| AUN-QA Assessment No.: 99th AUN-QA Assessment at AUN University | Date of Assessment: 1 – 3 August 2019 |
| Name of Programme Assessed: Bachelor Degree in Manufacturing Engineering | |
| Name of University: AUN University | |
| Name of Faculty/School: Faculty of Engineering | |
| Name of Management Representative/Designation: Dr Ali Ahmad/Head of Department | e-mail: ahmad@aun.com |
| Name of Assessors: Dr. Tommy Lee, University of SEA Dr. Amir Hamzeh, University of Northeast | |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|---|--|--|---|--|
| 1. Expected Learning Outcomes | | | | |
| 1.1. The programme to show that the expected learning outcomes are appropriately formulated in accordance with an established learning taxonomy, are aligned to the vision and mission of the university, and are known to all stakeholders. | The established learning outcomes are aligned to the requirements of the National Accreditation Board as well as referenced to ABET and prominent university in USA, UK, Australia and Singapore. The expected learning outcomes are revised every 4 years with the latest revision in 2018. | What educational taxonomy is used in writing the expected learning outcomes? | Programme specification University and faculty websites Curriculum review minutes and documents | Consider to place greater emphasis on the higher levels of a learning taxonomy (e.g., on knowledge analysis and construction). |
| 1.2. The programme to show that the expected learning outcomes for all courses are appropriately formulated and are aligned to the expected learning outcomes of the programme. | Course learning outcomes are formulated and are clearly mapped to the programme learning outcomes. | | Programme specification Curriculum review minutes and documents | |
| 1.3. The programme to show that the expected learning outcomes consist of both generic outcomes (related to written and oral communication, problem-solving, information technology, teambuilding skills, etc) and subject specific outcomes (related to knowledge and skills of the study discipline). | The expected learning outcomes are established and integrated for both specific and generic skills and knowledge using matrix of competencies as documented in the new curriculum 2018. | How do the generic learning outcomes meet the needs of the employers? | Programme specification | Need there be more specific (3 rd and 4 th year) courses that the programme can offer? |

| Criterion | Strengths | Interview Questions | Sources of Evidence | Areas for Improvement |
|---|---|---|----------------------------|---|
| 1.4. The programme to show that the requirements of the stakeholders, especially the external stakeholders, are gathered, and that these are reflected in the expected learning outcomes. | Stakeholder's inputs (meeting with stakeholders on 28 August 2017) are gathered and reflected in the expected learning outcome documented in the new curriculum 2018. | How the needs of the stakeholders are gathered? | Surveys and tracer reports | Perhaps feedback from external stakeholders and potential employers can be boosted. |
| 1.5. The programme to show that the expected learning outcomes are achieved by the students by the time they graduate. | | | | |



AUN-QA ASSESSMENT REPORT AT PROGRAMME LEVEL

| | |
|--|---------------------|
| AUN-QA Assessment No.: | Date of Assessment: |
| Name of Programme Assessed: | |
| Name of University: | |
| Name of Faculty/School: | |
| Name and Designation of Management Representative: | e-mail: |
| Name of Assessors: | |

Report Summary

This report is based on information provided in the self-assessment report (SAR), evidences, site tours, and interviews with selected stakeholders including academic staff, support staff, students, alumni, and employers. It should be read together with the preliminary findings presented at the closing ceremony where key strengths and areas for improvement were highlighted.

The AUN-QA assessment at programme level covers eight criteria. Each criterion is assessed based on a seven-point scale. A summary of the assessment results for the xxx programme at xxx university, is as follows:

| Criterion | Score |
|------------------------------------|-------|
| 1. Expected Learning Outcomes | |
| 2. Programme Structure and Content | |
| 3. Teaching and Learning Approach | |
| 4. Student Assessment | |
| 5. Academic Staff | |
| 6. Student Support Services | |
| 7. Facilities and Infrastructure | |
| 8. Output and Outcomes | |
| Overall Verdict | |

Based on the assessment results, the XXX programme at xxx university fulfills/ does not fulfill the AUN-QA requirements to be awarded the AUN-QA certificate. The overall quality assurance implemented by the programme is Absolutely Inadequate/ Inadequate and Improvement is Necessary/ Inadequate but Minor Improvement Will Make It Adequate/ Adequate as Expected/ Better Than Adequate/ Example of Best Practices/ Excellent (Example of World-class or Leading Practices).

| Criterion | Strengths | Areas for Improvement |
|---|---|---|
| 1. Expected Learning Outcomes | | |
| 1.1. The programme to show that the expected learning outcomes are appropriately formulated in accordance with an established learning taxonomy, are aligned to the vision and mission of the university, and are known to all stakeholders. | Assessors to provide comments on the programme's strengths for the criterion as a whole or for each requirement separately. | Assessors to provide suggestions for areas for improvement for the criterion as a whole or for each requirement separately. |
| 1.2. The programme to show that the expected learning outcomes for all courses are appropriately formulated and are aligned to the expected learning outcomes of the programme. | | |
| 1.3. The programme to show that the expected learning outcomes consist of both generic outcomes (related to written and oral communication, problem-solving, information technology, teambuilding skills, etc) and subject specific outcomes (related to knowledge and skills of the study discipline). | | |
| 1.4. The programme to show that the requirements of the stakeholders, especially the external stakeholders, are gathered, and that these are reflected in the expected learning outcomes. | | |
| 1.5. The programme to show that the expected learning outcomes are achieved by the students by the time they graduate. | | |

| Criterion | Strengths | Areas for Improvement |
|--|---|---|
| 2. Programme Structure and Content | | |
| 2.1. The specifications of the programme and all its courses are shown to be comprehensive, up-to-date, and made available and communicated to all stakeholders. | Assessors to provide comments on the programme's strengths for the criterion as a whole or for each requirement separately. | Assessors to provide suggestions for areas for improvement for the criterion as a whole or for each requirement separately. |
| 2.2. The design of the curriculum is shown to be constructively aligned with achieving the expected learning outcomes. | | |
| 2.3. The design of the curriculum is shown to include feedback from stakeholders, especially external stakeholders. | | |
| 2.4. The contribution made by each course in achieving the expected learning outcomes is shown to be clear. | | |
| 2.5. The curriculum to show that all its courses are logically structured, properly sequenced (progression from basic to intermediate to specialised courses), and are integrated. | | |

| Criterion | Strengths | Areas for Improvement |
|--|---|---|
| 2.6. The curriculum to have option(s) for students to pursue major and/or minor specialisations. | | |
| 2.7. The programme to show that its curriculum is reviewed periodically following an established procedure and that it remains up-to-date and relevant to industry. | | |
| 3. Teaching and Learning Approach | | |
| 3.1. The educational philosophy is shown to be articulated and communicated to all stakeholders. It is also shown to be reflected in the teaching and learning activities. | Assessors to provide comments on the programme's strengths for the criterion as a whole or for each requirement separately. | Assessors to provide suggestions for areas for improvement for the criterion as a whole or for each requirement separately. |
| 3.2. The teaching and learning activities are shown to allow students to participate responsibly in the learning process. | | |
| 3.3. The teaching and learning activities are shown to involve active learning by the students. | | |

| Criterion | Strengths | Areas for Improvement |
|---|---|---|
| 3.4. The teaching and learning activities are shown to promote learning, learning how to learn, and instilling in students a commitment for life-long learning (e.g., commitment to critical inquiry, information-processing skills, and a willingness to experiment with new ideas and practices). | | |
| 3.5. The teaching and learning activities are shown to inculcate in students, new ideas, creative thought, innovation, and an entrepreneurial mindset. | | |
| 3.6. The teaching and learning processes are shown to be continuously improved to ensure their relevance to the needs of industry and are aligned to the expected learning outcomes. | | |
| 4. Student Assessment | | |
| 4.1. A variety of assessment methods are shown to be used and are shown to be constructively aligned to achieving the expected learning outcomes and the teaching and learning objectives. | Assessors to provide comments on the programme's strengths for the criterion as a whole or for each requirement separately. | Assessors to provide suggestions for areas for improvement for the criterion as a whole or for each requirement separately. |
| 4.2. The assessment and assessment-appeal policies are shown to be explicit, communicated to students, and applied consistently. | | |

| Criterion | Strengths | Areas for Improvement |
|--|-----------|-----------------------|
| 4.3. The assessment standards and procedures for student progression and degree completion, are shown to be explicit, communicated to students, and applied consistently. | | |
| 4.4. The assessments methods are shown to include rubrics, marking schemes, timelines, and regulations, and these are shown to ensure validity, reliability, and fairness in assessment. | | |
| 4.5. The assessment methods are shown to measure the achievement of the expected learning outcomes of the programme and its courses. | | |
| 4.6. Feedback of student assessment is shown to be provided in a timely manner. | | |
| 4.7. The student assessment and its processes are shown to be continuously reviewed and improved to ensure their relevance to the needs of industry and alignment to the expected learning outcomes. | | |

| Criterion | Strengths | Areas for Improvement |
|---|---|---|
| 5. Academic Staff | | |
| 5.1. The programme to show that academic staff planning (including succession, promotion, re-deployment, termination, and retirement plans) is carried out to ensure that the quality and quantity of the academic staff fulfil the needs for education, research, and service. | Assessors to provide comments on the programme's strengths for the criterion as a whole or for each requirement separately. | Assessors to provide suggestions for areas for improvement for the criterion as a whole or for each requirement separately. |
| 5.2. The programme to show that staff workload is measured and monitored to improve the quality of education, research, and service. | | |
| 5.3. The programme to show that the competences of the academic staff are determined, evaluated, and communicated. | | |
| 5.4. The programme to show that the duties allocated to the academic staff are appropriate to qualifications, experience, and aptitude. | | |
| 5.5. The programme to show that promotion of the academic staff is based on a merit system which accounts for teaching, research, and service. | | |

| Criterion | Strengths | Areas for Improvement |
|--|---|---|
| 5.6. The programme to show that the rights and privileges, benefits, roles and relationships, and accountability of the academic staff, taking into account professional ethics and their academic freedom, are well defined and understood. | | |
| 5.7. The programme to show that the training and developmental needs of the academic staff are systematically identified, and that appropriate training and development activities are implemented to fulfil the identified needs. | | |
| 5.8. The programme to show that performance management including reward and recognition is implemented to assess academic staff teaching and research quality. | | |
| 6. Student Support Services | | |
| 6.1. The student intake policy, admission criteria, and admission procedures to the programme are shown to be clearly defined, communicated, published, and up-to-date. | Assessors to provide comments on the programme's strengths for the criterion as a whole or for each requirement separately. | Assessors to provide suggestions for areas for improvement for the criterion as a whole or for each requirement separately. |
| 6.2. Both short-term and long-term planning of academic and non-academic support services are shown to be carried out to ensure sufficiency and quality of support services for teaching, research, and community service. | | |

| Criterion | Strengths | Areas for Improvement |
|--|---|---|
| 6.3. An adequate system is shown to exist for student progress, academic performance, and workload monitoring. Student progress, academic performance, and workload are shown to be systematically recorded and monitored. Feedback to students and corrective actions are made where necessary. | | |
| 6.4. Co-curricular activities, student competition, and other student support services are shown to be available to improve learning experience and employability. | | |
| 6.5. The competences of the support staff rendering student services are shown to be identified for recruitment and deployment. These competences are shown to be evaluated to ensure their continued relevance to stakeholders needs. Roles and relationships are shown to be well-defined to ensure smooth delivery of the services. | | |
| 6.6. Student support services are shown to be subjected to evaluation, benchmarking, and enhancement. | | |
| 7. Facilities and Infrastructure | | |
| 7.1. The physical resources to deliver the curriculum, including equipment, material, and information technology, are shown to be sufficient. | Assessors to provide comments on the programme's strengths for the criterion as a whole or for each requirement separately. | Assessors to provide suggestions for areas for improvement for the criterion as a whole or for each requirement separately. |

| Criterion | Strengths | Areas for Improvement |
|--|-----------|-----------------------|
| 7.2. The laboratories and equipment are shown to be up-to-date, readily available, and effectively deployed. | | |
| 7.3. A digital library is shown to be set-up, in keeping with progress in information and communication technology. | | |
| 7.4. The information technology systems are shown to be set up to meet the needs of staff and students. | | |
| 7.5. The university is shown to provide a highly accessible computer and network infrastructure that enables the campus community to fully exploit information technology for teaching, research, service, and administration. | | |
| 7.6. The environmental, health, and safety standards and access for people with special needs are shown to be defined and implemented. | | |

| Criterion | Strengths | Areas for Improvement |
|---|---|---|
| 7.7. The university is shown to provide a physical, social, and psychological environment that is conducive for education, research, and personal well-being. | | |
| 7.8. The competences of the support staff rendering services related to facilities are shown to be identified and evaluated to ensure that their skills remain relevant to stakeholder needs. | | |
| 7.9. The quality of the facilities (library, laboratory, IT, and student services) are shown to be subjected to evaluation and enhancement. | | |
| 8. Output and Outcomes | | |
| 8.1. The pass rate, dropout rate, and average time to graduate are shown to be established, monitored, and benchmarked for improvement. | Assessors to provide comments on the programme's strengths for the criterion as a whole or for each requirement separately. | Assessors to provide suggestions for areas for improvement for the criterion as a whole or for each requirement separately. |
| 8.2. Employability as well as self-employment, entrepreneurship, and advancement to further studies, are shown to be established, monitored, and benchmarked for improvement. | | |

| Criterion | Strengths | Areas for Improvement |
|--|-----------|-----------------------|
| 8.3. Research and creative work output and activities carried out by the academic staff and students, are shown to be established, monitored, and benchmarked for improvement. | | |
| 8.4. Data are provided to show directly the achievement of the programme outcomes, which are established and monitored. | | |
| 8.5. Satisfaction level of the various stakeholders are shown to be established, monitored, and benchmarked for improvement. | | |



AUN-QA ASSESSMENT REPORT AT PROGRAMME LEVEL

| | |
|---|--|
| AUN-QA Assessment No.: 99th AUN-QA Assessment at AUN University | Date of Assessment: 1 – 3 August 2019 |
| Name of Programme Assessed: Bachelor Degree in Manufacturing Engineering | |
| Name of University: AUN University | |
| Name of Faculty/School: Faculty of Engineering | |
| Name and Designation of Management Representative: Dr. Ali Ahmad, Head of Department | e-mail: aliamhad@aun.com |
| Name of Assessors: Dr Shri Kishen, University of Singapore (lead assessor) Dr Amir Hamzeh, University of Northeast (co-assessor) | |

Report Summary

This report is based on the information provided in the self-assessment report (SAR), evidences, site tours, and interviews with selected stakeholders including academic staff, support staff, students, alumni, and employers. It should be read together with the preliminary findings presented at the closing ceremony where the key strengths and areas for improvement were highlighted.

The AUN-QA assessment at programme level covers eight criteria. Each criterion is assessed based on a seven-point scale. The summary of the assessment results for the xxx programme at xxx university is as follows:

| Criterion | Score |
|------------------------------------|-----------------------------|
| 1. Expected Learning Outcomes | 4 |
| 2. Programme Structure and Content | 5 |
| 3. Teaching and Learning Approach | 4 |
| 4. Student Assessment | 5 |
| 5. Academic Staff | 5 |
| 6. Student Support Services | 5 |
| 7. Facilities and Infrastructure | 4 |
| 8. Output and Outcomes | 5 |
| Overall Verdict | <i>Adequate as Expected</i> |

Based on the assessment results, the xxx programme at xxx university fulfilled the AUN-QA requirements to be awarded the AUN-QA certificate for a successful programme-level assessment. The overall quality assurance implemented for the programme is Adequate as Expected.

| Criterion | Strengths | Areas for Improvement |
|---|--|---|
| 1. Expected Learning Outcomes | | |
| 1.1. The programme to show that the expected learning outcomes are appropriately formulated in accordance with an established learning taxonomy, are aligned to the vision and mission of the university, and are known to all stakeholders. | The expected learning outcomes (ELOs) are aligned to the requirements of the National Accreditation Board. They also reference to ABET requirements, and are benchmarked against prominent universities in the USA, UK, and Australia. The ELOs are revised every four years with the latest revision being in 2018. | The formulation of expected learning outcomes may be based on an educational taxonomy and the basic rules in writing the expected learning outcomes should be observed. |
| 1.2. The programme to show that the expected learning outcomes for all courses are appropriately formulated and are aligned to the expected learning outcomes of the programme. | The course learning outcomes of the programmes are formulated and aligned to the programme learning outcomes and mapped as shown in Table 1.4 | The alignment between the course learning outcomes and programme learning outcomes may need to be reviewed in regular intervals. |
| 1.3. The programme to show that the expected learning outcomes consist of both generic outcomes (related to written and oral communication, problem-solving, information technology, teambuilding skills, etc) and subject specific outcomes (related to knowledge and skills of the study discipline). | The expected learning outcomes are established and integrated for both specific and generic skills and knowledge using matrix of competencies as documented in the new curriculum 2018. | There is a lack of core courses and electives contributing to the programme generic expected learning outcomes 6, 7, 8 and 9 as documented in the curriculum map. |
| 1.4. The programme to show that the requirements of the stakeholders, especially the external stakeholders, are gathered, and that these are reflected in the expected learning outcomes. | Stakeholder's inputs (meeting with stakeholders on 23 August 2017) are gathered and reflected in the expected learning outcome documented in the new curriculum 2018. | The relationship between the stakeholders' needs and the programme expected learning outcomes should be mapped so that the rationale and impact of change can be well established and communicated. |
| 1.5. The programme to show that the expected learning outcomes are achieved by the students by the time they graduate. | Achievement of expected learning outcomes are evident in students at the time of graduation. This is validated by the final year capstone project that involves students with an industrial partner. | The programme may also undertake surveys of students a few years after graduation to reassure that expected learning outcomes have been achieved. |



AUN-QA ASSESSMENT FEEDBACK REPORT AT PROGRAMME LEVEL

| | | |
|---|--|---------------------|
| AUN-QA Programme Assessment No.: | | Date of Assessment: |
| Name of University/Faculty/School: | | |
| Name of Programme Assessed: | | |
| Name and Designation of Management Representative: | | e-mail: |
| Name of Assessors: | | |
| Feedback on SAR preparation (interpretation of criteria, writing of SAR, gathering of evidences, problems faced in preparing the SAR, etc): | | |
| Feedback on assessment process (process: pre-assessment preparation, site assessment, final assessment results, presentation; assessment: objectivity, independence, evidence-based; programme: itinerary, activities, duration): | | |
| Feedback on usefulness of assessment report (for self-improvement, planning, and benchmarking purposes): | | |
| Please consider to provide suggestions for the AUN-QA to improve its assessment process. | | |

ADDENDUM:

Supplementary Notes for the Assessment of Postgraduate Programmes with Dominant Research Component

This addendum is prepared to serve as a supplement to the “Guide to AUN-QA Assessment at Programme Level Version 4.0” that provides additional notes and interpretations for assessment of the research component for the postgraduate programmes. In addition, it may also be used for assessment of programmes where the research component is dominant or is not given any credit rating or credit hour to represent its learning loads. Similar to the requirements for all criteria in this guide, this addendum can also be referred to and read together when writing the self-assessment report of such programmes.

Introduction

In general, postgraduate programmes are programmes that require an undergraduate degree or equivalent to be considered for entry which leads to qualifications such as a postgraduate diploma, a master's degree or a doctoral degree. Postgraduate degrees are taken for a number of reasons, such as to move into academia and research, to have certain in-depth specialisation or to change track entirely.

A doctoral degree refers to a degree that incorporates significant research component which qualifies the holder to teach at university level in the degree's field, or to work in a specific profession. In most countries, the duration of study is typically 3-4 years, even though some may take a longer period to complete their study. There are mainly two types of doctoral degrees, which are as follows:

1. Doctor of Philosophy (Ph.D.) Degree

It refers to an academic degree focused on original research, data analysis, and the evaluation of theory. The programme structure ranges from a full research to research as main and compulsory graduation component coupled with a set of courses as requisites, typically used as one of the criteria for confirmation of Ph.D. candidature.

This type of programme seeks to evaluate the relevance of seminal, current, and emerging theories within the field, to analyse theories and concepts within the field, to assess identified gaps in the current research literature and advance the body of knowledge in the field through original research. Eventually, the research outcomes are communicated to an academic audience and general stakeholders.

2. Professional Doctorates

This type of degrees focuses on applying research to practical problems, formulating solutions to complex issues, and designing effective professional

practices within the field of study. Examples are programmes awarding Doctor of Business Administration (DBA) degree, Doctor Engineering (D.Eng.) degree and Doctor of Education (Ed.D.) degree. The common programme structure would be a combined set of courses rated in credit units or credit hours coupled with the main project as a compulsory programme component. Typically, the programme structure comprises a significant percentage of credit units or credit hours for courses that serve as the eligibility criteria to complement the main project and to complete the study.

Hence, the aim of the programme is to evaluate the relevance of current and emerging theories and practices within the field, to formulate effective solutions to complex, real-world problems common to the field and to design rigorous research that expands the professional body of knowledge in the field. Then, the outcomes of the research are applied to the practical problems in the field which could bring about effective and innovative solution to the problem.

Similar to doctoral programmes, a master's programme can take a number of forms ranging from a curriculum structure with taught courses and projects to a full research programme leading to a thesis or dissertation. A master's programme could be differentiated from a doctoral programme based on the respective expected learning outcomes or graduate attributes or qualification's descriptors, which are of lower level with smaller number of credit hours or credit units or requiring shorter period to complete. A master's degree could also be used to enter a doctoral programme.

Many countries regulate and harmonise these programmes using their national qualifications frameworks and standards, which require the programme to conform to certain criteria and mapped to certain qualification levels. As such, Ph.D. and professional doctorate programmes are typically mapped to a same qualification level, which is commonly the highest qualification level in the country's national qualifications framework. Similarly, a master's programme with dominant research component can also be mapped to a designated qualification level in the country's national qualifications framework. Globally, the learning outcomes and/or graduate profiles for both types of programmes may be benchmarked with, among others:

- ASEAN Qualifications Reference Framework (AQRF, 2015) — Level 8 descriptors for doctorate programmes or Level 7 descriptors for master's programmes;
- UNESCO's International Standard Classification of Education (ISCED, 2011) — Level 8 for doctoral programmes or equivalent, or Level 7 for master's programmes or equivalent;
- European Qualifications Framework (EQF) — Level 8 for doctoral programmes or Level 7 for master's programmes;
- Dublin Descriptors (2004) — Third cycle qualification for doctoral programmes or second cycle qualification for master's programmes.

Approach to Assessment Extension to a Postgraduate Programme with Research Component

In principle, the criteria and outline specified by the “Guide to AUN-QA Assessment at Programme Level, version 4.0” are still applicable and should be referred to in writing the programme SAR and in performing the programme assessment of a master’s or doctorate programme where its research component is dominant. As such, many requirements and sub-criteria are still be applicable for assessment of a postgraduate programme, with exception of several sub-criteria which require different contextual interpretation, particularly for the research component or the doctorate project of the programme.

The interpretation for assessing such master’s or doctorate programme are presented in the form of this addendum, with appropriate diagnostic questions and/or sources of evidence. These diagnostic questions and sources of evidence are listed in addition to the similar questions and sources of evidence listed in the main section of this guide for all criteria, thus should be read together with this addendum. Hence, this document provides specific interpretations for a number of sub-criteria for the purpose of assessing the research component of the programme.

The AUN-QA Criteria which contain explanatory notes for the terms that require specific interpretations for the purpose of assessment of research component in the programme are given in the following sections.

AUN-QA Criterion 1 – Expected Learning Outcomes

Related Requirements for AUN-QA Criterion 1

- 1.1. The programme to show that the expected learning outcomes^a are appropriately formulated in accordance with an established learning taxonomy, are aligned to the vision and mission of the university, and are known to all stakeholders.
- 1.3. The programme to show that the expected learning outcomes^a consist of both generic outcomes (related to written and oral communication, problem-solving, information technology, teambuilding skills, etc) and subject specific outcomes (related to knowledge and skills of the study discipline).
- 1.5. The programme to show that the expected learning outcomes are achieved by the students by the time they graduate^b.

Additional Notes for Assessment of Programme Research Component

^aFormulation of the “expected learning outcomes” shall consider the national, regional and global points of reference of a postgraduate programme. As such, elements related to original research, novelty, emerging theories and practice in solving real-world problems, etc., in the graduate profile should be assessed and benchmarked.

^bThe phrase “achieved by the students by the time they graduate” may include student’s contribution after graduation in applying their doctorate-level and other employability skills, that may be triangulated with the referred qualification descriptors and/or the requirements of stakeholders for the degree.

Diagnostic Questions

- What is the source(s) of reference in the formulation of the expected learning outcomes?
- How to ensure that the formulated statements of the expected learning outcomes are of higher level than those of the lower degree programme, such as a bachelor programme offered by the same department or institution?
- Does the labour market or stakeholders set specific requirements for the graduates of higher degree programmes as compared to the lower degree graduates, such as from a bachelor programme of the same department or institution?

Sources of Evidence

- Benchmarking report for the process of formulating the expected learning outcomes
- Stakeholders’ input and survey questionnaire
- Student’s publication, citations and h-index

AUN-QA Criterion 2 – Programme Structure and Content

Related Requirements for AUN-QA Criterion 2

- 2.1. The specifications of the programme and all its courses^c are shown to be comprehensive, up-to-date, and made available and communicated to all stakeholders.
- 2.2. The design of the curriculum is shown to be constructively aligned^d with achieving the expected learning outcomes.
- 2.4. The contribution made by each course^c in achieving the expected learning outcomes is shown to be clear.
- 2.5. The curriculum to show that all its courses^c are logically structured, properly sequenced (progression from basic to intermediate to specialised courses), and are integrated.

Additional Notes for Assessment of Programme Research Component

^cIn the context of planning and delivering the programme research component that is aligned to the expected learning outcomes, the term “course” or “courses” should be referred to programme activities or/and assessment tasks related to monitoring progression and reviewing academic performance of a postgraduate student.

^dConsequently, the term “constructive alignment” for the programme research component could be shown or demonstrated by mapping between the expected

learning outcomes of the programme with activities or/and assessment tasks related to progress and performance reviews of a doctorate candidate/student.

Diagnostic Questions

- How are the expected learning outcomes translated into the programme activities or/and assessment tasks?
- What are the mechanisms and platforms provided for students to present and share their research proposals, findings and outcomes as well as to improve their research and other required skills?
- How to monitor progression and review academic performance of a doctorate candidate or student?
- How to review and continually improve the programme activities and assessment tasks to ensure constructive alignment with expected learning outcomes?

Sources of Evidence

- Programme map, and delivery and assessment plans for the programme research component
- Student assessment records and reports
- Programme activity reports
- Programme review and quality improvement reports

AUN-QA Criterion 3 – Teaching and Learning Approach

Related Requirements for AUN-QA Criterion 3

- 3.1. The educational philosophy is shown to be articulated and communicated to all stakeholders. It is also shown to be reflected in the teaching and learning activities^e.
- 3.2. The teaching and learning activities^e are shown to allow students to participate responsibly in the learning process.
- 3.3. The teaching and learning activities^e are shown to involve active learning by the students.
- 3.4. The teaching and learning activities^e are shown to promote learning, learning how to learn, and instilling in students a commitment for life-long learning (e.g., commitment to critical inquiry, information-processing skills, and a willingness to experiment with new ideas and practices).
- 3.5. The teaching and learning activities^e are shown to inculcate in students, new ideas, creative thought, innovation, and an entrepreneurial mindset.

Additional Notes for Assessment of Programme Research Component

^eThe term “teaching and learning activities” for the programme research component may include discussion and consultation with the supervisors as well as programme activities and assessment tasks that are related to progress monitoring and performance reviews of a postgraduate student.

Diagnostic Questions

- How does the educational philosophy influence and is reflected in the planning and delivery of the programme research component?
- How is research or project supervision carried out by the research or project supervisor(s) and how to monitor its effectiveness?
- How do the teaching and learning activities enhance independent and autonomous learning and help inculcate research skills?
- How is student's feedback on the teaching and learning activities for programme research component gathered and analysed for improvement?

Sources of Evidence

- Programme delivery plan for the programme research component
- Students' feedback on programme activities and quality of supervision
- Progress monitoring reports of a doctorate candidature or student.
- Programme activity reports and quality improvement reports

AUN-QA Criterion 4 – Student Assessment

Related Requirements for AUN-QA Criterion 4

- 4.1. A variety of assessment methods^f are shown to be used and are shown to be constructively aligned to achieving the expected learning outcomes and the teaching and learning objectives.
- 4.4. The assessment methods^f are shown to include rubrics, marking schemes, timelines, and regulations, and these are shown to ensure validity, reliability, and fairness in assessment.
- 4.5. The assessment methods^f are shown to measure the achievement of the expected learning outcomes of the programme and its courses.

Additional Notes for Assessment of Programme Research Component

^fThe term “assessment methods” for the programme research component may include semester-based and/or annual progress monitoring and reviews of student's academic performance, as well as the final assessment of the thesis or dissertation leading to award of the postgraduate degree. The final assessment of the thesis or dissertation may also be referred to as *viva-voce* or thesis/dissertation defence.

Diagnostic Questions

- What are the pre-requisite courses and criteria and other requisites needed to be fulfilled by the students before they can graduate from the programme?
- How are the academic progress of the students monitored and reviewed and how frequent are the students being monitored and reviewed?
- What are the criteria for appointment of internal/external examiners for the thesis or dissertation?

- How is student's feedback on the assessment methods for programme research component gathered and analysed for improvement?

Sources of Evidence

- Programme assessment plan for the programme research component
- Student progress and assessment reports
- Students' feedback on assessment and evaluation processes of their study
- Examiner's (internal/external) reports on candidate's/student's thesis or dissertation
- Reports of student's fulfilment of the graduation criteria leading to the award of the degree, such as passing the compulsory courses and the research proposal defence, and fulfilling the requisites and criteria for journal article publication
- Student's thesis or dissertation
- Programme assessment reports and quality improvement reports on student's assessment

AUN-QA Criterion 5 – Academic Staff

Related Requirements for AUN-QA Criterion 5

- 5.3. The programme to show that the competences⁹ of the academic staff are determined, evaluated, and communicated.
- 5.7. The programme to show that the training and developmental needs^h of the academic staff are systematically identified, and that appropriate training and development activities are implemented to fulfil the identified needs.

Additional Notes for Assessment of Programme Research Component

⁹The term “competences” of academic staff appointed to be a supervisor for a master's or doctorate candidate or student should include competence to provide an effective supervision for a master's or doctorate level project. This may include skills in providing guidance for the students to carry out their research works based on their study plan and monitor the student's progression as according to the plan in order to ensure that they can finish their project as planned.

^hAs such, the phrase “training and developmental needs” of the academic staff may include training on how to be an effective supervisor for a master's or doctorate candidate or student.

Diagnostic Questions

- Are there plans to equip the academic staff with adequate research and supervisory skills?
- How are the research and supervisory skill of the academic staff being assessed and evaluated?

Sources of Evidence

- Training programme for academic staff on research and supervisory skills.
- Stakeholders' input and survey questionnaire

AUN-QA Criterion 6 – Student Support Services

Additional Notes for Assessment of Programme Research Component

As the academic and non-academic requirements of postgraduate students may be different from other students, the AUN-QA Criterion 6, namely Requirements 6.1, 6.3 and 6.4, may be customised and contextualised accordingly. Due to different nature of their study and social life in the campus, postgraduate students may require different kind of systems for monitoring their academic progression and services in providing support and guidance to them. As such, special consideration may be given to certain types of requirement or to specific support systems and services that are more relevant to the postgraduate programmes and/or frequently used by the postgraduate students.

AUN-QA Criterion 7 – Facilities and Infrastructure

Additional Notes for Assessment of Programme Research Component

Due to different nature of postgraduate programmes, the postgraduate students may require different kind of learning environment and educational eco-system that are more conducive to their needs, which may be different from other types of programme. Hence, the AUN-QA Criterion 7, namely Requirements 7.1 – 7.7, may be customised and contextualised accordingly. As such, special consideration may be given to certain types of equipment, infrastructure and facilities, that are more relevant to the postgraduate programmes and for the postgraduate students.

AUN-QA Criterion 8 – Output and Outcomes

Related Requirements for AUN-QA Criterion 8

- 8.1. The pass rate, dropout rate, and average time to graduate^j are shown to be established, monitored, and benchmarked for improvement.
- 8.2. Employability^j as well as self-employment, entrepreneurship, and advancement to further studies, are shown to be established, monitored, and benchmarked for improvement.
- 8.3. Research and creative work output^k and activities carried out by the academic staff and students, are shown to be established, monitored, and benchmarked for improvement.

Additional Notes for Assessment of Programme Research Component

ⁱThe component “average time to graduate” may be or may not be considered based on contexts of the discipline and the country. While average time to graduate could indicate programme efficiency and may still be monitored, if average time to graduate for a postgraduate programme is not considered important in the country’s higher education eco-system of the assessed institution, this component may be omitted in the evaluation process for this requirement. However, the consideration of this component is subject to the judgement by the lead assessor, upon consultation with the chief assessor.

^jThe component “employability” for master’s or doctorate graduates may be or may not be considered in the assessment process based on the country’s contexts. Even though it may be monitored periodically as one of the programme metrics, there may be circumstances that the graduate employability of the programme may not be a norm in the country of the assessed institution or viable indicator for measurement of the programme achievement. In this case, this component or the whole statement in the Requirement 8.2 may be omitted in the evaluation process. Alternatively, other “appropriate measures” may be used to monitor the success of the postgraduate programme. As such, similar to the Requirement 8.1, the consideration of this component or the whole Requirement 8.2 is subject to the judgement by the lead assessor, upon consultation with the chief assessor.

^kThe term “research and creative work output” may include any kind of output or deliverables produced by the academic staff and students in conjunction with the research and creative work activities carried out and performed by the academic staff and students involved in the programme. The outputs or deliverables may be in form of publication materials such as journal articles, articles or chapters in books, technical reports, monographs, artefacts, etc.

Diagnostic Questions

- Based on the type and context of programme assessed, what are the appropriate data or output that could represent students’ performance in research?
- What is the relationship between the students’ performance data, such as on publication, with attainment of the expected learning outcomes by the students and by the programme?
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Sources of Evidence

- Student enrolment and graduation data by year, including average time to graduate
- Benchmarking report for research funding, projects and publications
- Stakeholders’ satisfaction survey questionnaire and data on research quality and output
- Student’s publication, citations and h-index