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Perceived Changes to Quality Assurance after AUN-QA Programme Assessment: Voices of Quality Assurance Practitioners, Academic Staff, and Students

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Abstract. Quality assurance in Vietnamese higher education has been turning to a new page since it was made in recent years. Foreign accreditation is accepted in Vietnam, and, among foreign accrediting agencies, AUN-QA is more popular. This study examines the extent to which quality assessment by the AUN-QA could lead to changes in Vietnamese universities. This study adopted a basic qualitative approach to explore various stakeholders' perceived changes with AUN-QA assessment with convenience and purposeful sampling techniques. Qualitative data were collected through interviews with various stakeholders such as students, academic staff, and quality assurance practitioners, followed by thematic analysis. The findings suggest that the AUN-QA quality assessment appeared to be the driver of positive changes, varying from accepting external quality assurance to learning the principles of constructive alignment in curriculum design, teaching and learning approaches, and student assessment. When the principle was learnt, superficial and minor changes were reported. The impacts were also evident in forming a culture of evidence (to demonstrate compliance with the external assessment). There were a few instances whereby changes were perceived as "perfunctory" because institutions used copying strategies for external assessment. Less evidence in the findings with not much discussion related to regular improvements and the dependence on individual academic staff for quality can be seen as directions for actions to

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be taken not only for the participating universities but also for other universities in Vietnam. The findings suggest that external assessment if applied appropriately to trigger stakeholders' perceptions, could contribute to quality enhancement.

Keywords: accreditation; external quality assessment; quality enhancement; teaching and learning

1. Introduction

Accreditation is commonly viewed as a quality assurance process whereby higher education institutions (HEIs) conduct self-assessment and receive peer assessment within particular standards to improve their academic quality and accountability (Kumar et al., 2020; Stensaker, 2011). It refers to both a process (through which HEIs and programmes are reviewed and assessed for their quality of education within predefined standards) and an "accredited status" which is the award of that process (CHEA, 2010). Accreditation offers HEIs crucial recommendations as added values for quality enhancement (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022). Accreditation can be supportive of a HEI's decision-making and clearer responsibilities that are conducive to the enhancement of teaching and learning (Liu et al., 2015) and is conducive to learning enhancement, showing an improvement in the quality of education (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022).

Accreditation was introduced into Vietnamese higher education nearly 20 years ago to reform higher education. Twenty years is not a long time, yet not too short to develop a quality assurance (QA) system (Nguyen, 2021). However, Vietnam could be an interesting case to study for several reasons. First, the development of the Vietnamese QA system has been facilitated with many international supports and projects. Therefore, with both hesitance to learn from the best practices of other countries and the national endeavour to improve the quality of the entire higher education sector, the Vietnamese QA system has undergone several phases of piloting what QA approach is appropriate for the country (Nguyen, 2018; Pham & Nguyen, 2023). Second, Vietnam is also a country that allows foreign accreditation agencies (including AUN-QA) to evaluate universities before establishing its own QA system (Nguyen, 2019). Third, in the Vietnamese QA system, in particular, quality standards and criteria used currently in Vietnam at this stage (early 2024) are the ones "borrowed" from AUN-QA (Pham & Nguyen, 2023).

Although the concept of accreditation was introduced 20 years ago, not until 2016 did the Vietnamese government issue a quality standard set to evaluate degree programmes which has been used officially within the QA system (MoET, 2016). Since 2009, Vietnamese universities have joined AUN-QA and had their programmes assessed by the network. This assessment is still common in Vietnam as of 2024 (Pham & Nguyen, 2023). As in other countries worldwide, many studies were conducted to study the QA system in Vietnam, including international projects to compare QA approaches in ASEAN (Niedermeier & Pohlenz, 2016), a book chapter about the history of the QA system (Pham & Nguyen, 2019) and several national projects. Some studies examined the impacts of accreditation in Vietnam and ASEAN (Johnson, 2017; Pham, 2018; Pham & Nguyen, 2021, 2023). These studies used different research methods to study the impacts. Johnson (2017) looked at the assessment results (scoring results) over a period of time to observe changes, and Pham and Nguyen (2023) analysed AUN-QA external assessment reports to identify impacts on Vietnamese higher education. Limited studies have been conducted to explore the experiences of related stakeholders on changes that happened at their universities with the assessment of the AUN-QA network. This paper aims to explore the perception of QA practitioners, academic staff, and students on changes after the AUN-QA assessment. They are the stakeholders who experienced the assessment so that they can discuss the extent to which changes were made following the AUN-QA programme assessment in the Vietnamese context. The study hence seeks answers to the research question, "How do quality assurance practitioners, academic staff and students perceive changes after their universities completed AUN-QA assessments?" Within this study, the focus of changes will be on curriculum design, teaching and learning approaches, and student assessment.

The paper first reviews related literature on changes in higher education as a result of quality assessment and the AUN-QA assessments. The results of the study provide valuable information relating to how various stakeholders perceived changes brought to the universities as a result of quality assessment and hence could inform policymakers and universities of appropriate approaches for quality improvement in the context of regional and international integration.

2. AUN-QA and Vietnamese higher education

Vietnam has developed its QA system. However, together with the development of the national system, Vietnam recognises the business of some foreign QA organisations, from European countries to accreditation agencies in the US, and the AUN-QA (a regional one to Vietnam). As of 31 December, 2023, the number of degree programmes accredited in Vietnam was 1,611, of which 1,125 were accredited by domestic accreditors and 486 by international ones. Out of 486 recognised degree programmes by foreign agencies, 388 were assessed by AUN-QA (AUN-QA, 2024b). It is also the first foreign agency to conduct external assessments in Vietnam beginning in 2009 before the establishment of any national QA agency (Pham & Nguyen, 2019).

2.1. AUN-QA and quality criteria

When the ASEAN Community was established, the ASEAN University Network-Quality Assurance (AUN-QA) was created as a thematic sub-network to support the community activities. The network founders are "Chief Quality Officers" appointed by the AUN official member universities. They act as "the focal point for coordinating activities to realise the mission of harmonising educational standards and seeking continuous improvement of academic quality of universities in ASEAN" (AUN-QA, 2019, p. 88). Over the development of more than 25 years (since 1998), the network has greatly contributed to higher education (HE) landscapes in ASEAN, in particular in quality assurance. It has issued a number of policies such as the Bangkok Accord and guidelines for quality assessments and carried out a wide range of training activities in the region (AUN-QA, 2024b). The network has members in 10 countries with 30 official university members and 128 associate university members as of January 2024. AUN-QA conducted 317 assessments with 1,022 study programmes assessed as of January 2023 (AUN-QA, 2024b).

Regarding quality criteria, since its establishment, AUN-QA has issued and revised its programme assessment criteria four times (AUN-QA, 2020). The fourth and latest version was issued in 2020 and was applied for assessment in 2023 (Figure 1).

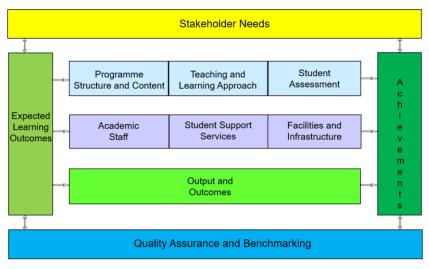


Figure 1: AUN-QA programme criteria (version 4) (AUN-QA, 2020, p. 12)

The quality criteria set has eight criteria: expected learning outcomes, programme structure and content, teaching and learning approach, student assessment, academic staff, student support services, facilities and infrastructure, and output and outcomes. Figure 1 summarises the model applied for programme assessment.

Since AUN-QA is a membership network of universities in the ASEAN community, individual institutions are required to apply to be members. Several conditions are set to be satisfied to be eligible for membership application, including (a) the institution shall be recognised by the national QA agencies and/or relevant ministry of the country where the business is registered and operated; (b) the institution must have been established for at least 10 years; and (c) there must be at least two representatives of the university who have been trained to learn and understand the AUN-QA system-AUN-QA Tier 1 Training) (AUN-QA, 2024a). Each member

university is allowed to apply for an assessment of a maximum of four study programmes annually.

2.2. How AUN-QA has impacted higher education in ASEAN

An extant review of research on AUN-QA in higher education shows that 12 studies were published in the Scopus database. The objectives of these studies are varied and have covered different aspects of the network: to study the extent to which universities were ready for AUN-QA assessment (Lam et al., 2020) or to survey students on the AUN-QA checklist followed by a curriculum review towards a competency-based curriculum to replace a knowledge-based one (Limpuangthip et al., 2021); to develop a system architecture of business intelligence to an AUN-QA framework with the purpose of facilitating the assessment (Jantakoon & Wannapiroon, 2017) or an efficient curriculum management ICT-based system to support AUN-QA (Ho et al., 2021); to report a project done at a university to comply with the AUN-QA criteria (Mukhaiyar et al., 2019); and to compare AUN-QA and ABET accreditation (Danielson et al., 2016).

Among these 12 studies, three studies were reported on the impacts of the AUN-QA assessments. A study by Pham and Nguyen (2021) examined the impact of the AUN-QA assessment from the students' perspective with a survey questionnaire. A total of 439 third and fourth year students answered the survey. Positive changes were found: observed changes in curriculum design and development, teaching methods, student assessment, infrastructure and facilities, and research. Significant differences among the results at the three universities were also found. Another study by Johnson (2017) aimed at discovering the impact of AUN-QA assessment on the quality of degree programmes. The author analysed the assessment results using medians rated based on a rating scale of seven defined by AUN-QA. The study concluded that the quality of the assessed study programmes has improved over a period of six years. The third study was conducted to thematically analyse the narratives of AUN-QA assessment reports (Pham & Nguyen, 2023). As a result, the study identified the strengths and areas for improvement responding to outcomes-based education (OBE) of study programmes assessed by AUN-QA. Some signs were evident that HEIs in Vietnam started shifting to OBE while attempting to comply with the criteria. The study, however, discussed a high possibility of "on paper" changes with constructive alignment. All these three studies did not interview those who experienced the AUN-QA assessment process so that their voices are not heard towards this regional quality assurance regime, and such a study could provide more in-depth information on the impacts of AUN-QA assessment as suggested by Pham and Nguyen (2023).

2.3 External quality assessment: reported positive changes

Although negative impacts were perceived by stakeholders, the benefits of programme assessment appear to outweigh them.

The review of related literature on the impacts of quality assessment demonstrates quality assessment of different approaches has triggered positive changes in higher education including the development of a quality culture; enhanced reputation, internationalisation, and graduate employability; changes in evidence management, changes in curriculum design; changes in the syllabuses of the curriculum, changes in teaching methodology; changes in student assessment; and improving the quality of academic staff.

Development of a quality culture. Accreditation is viewed as a process that promotes quality education, the enhancement of academic/non-academic services, transparency in the system, and assists HEIs in demonstrating public accountability at appropriate levels (Kumar et al., 2020). One of the positive aspects of accreditation is facilitating the enhancement of the assessment culture (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022). The external quality assessment has been regarded as an impetus for quality enhancement through triggering the improvement of strategic planning processes, self-assessment activities, and the development of an evidencebased culture for decision-making (Shah, 2012). External quality monitoring can promote a cultural change in the attitudes of the academic staff (Stensaker, 2003). For example, periodic external evaluations of various processes encourage HEIs to promote research and innovation culture and to have measurable publication output in referred journals, conferences and workshops, as found in a study by Dattey et al. (2014) that assesses the differential impacts of accreditation on public and private universities in Ghana.

Enhanced reputation, internationalisation, and graduate employability. Accreditation has offered prestige to the accredited programmes, as perceived by students, graduates, and teachers (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022). One of the purposes of accreditation is to attract quality students (Kumar et al., 2020). Dattey et al. (2014) found in Ghana that universities sought accreditation to attract students because Ghanaians normally wish to enrol in prestigious HEIs on account of their reputation. In other words, an enhanced reputation can lead to increased learner enrolments. Such a reputation can also encourage mutual recognition among HEIs from different countries or regions (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022; McFarlane, 2010). Accreditation also enhances national and international acknowledgement and working opportunities at national and international levels (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022).

Evidence for quality assessment. As the external quality assessment fostered the development of an evidence-based culture for decision-making (Shah, 2012), there were changes in ways of keeping evidence for quality assurance. As accreditation sheds light on programme strengths and areas for improvements such as curriculum design, faculty development, administration, and support, it encourages systematic data collection (e.g., about teaching and learning) and analysis and institutional research for self-enhancement (e.g., examining curriculum content for improvement) (Hou et al., 2015). In Pham's (2018) study, QA managers perceived that evidence was

systemised thanks to HEI's self-assessment process. It encouraged the enhancement of data collection and monitoring processes by employing information technology specialists and purchasing electronic platforms (Blouin et al., 2018). Such evidence-based management can promote a quality culture whereby academics use evidence to improve teaching and adapt to changes.

Changes in curriculum design and review. Accreditation is conducive to the enhancement of programme quality (Pavlakis & Kelley, 2016) as it can impact the quality of the curriculum (Kumar et al., 2020), regarding the change in study programme design. It can promote the engagement of multiple stakeholders in quality discourse. Accreditation can engage external stakeholders in the educational process (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022). Pham (2018) reviewed previous studies and found that external quality assessment promoted enhanced conversations and collaboration within academic units and helped a closer partnership between faculty and staff in undergoing curriculum reform. HEIs' relationship with external stakeholders was also encouraged. For example, in the UK, the engagement between universities and employers is encouraged by the government so that HEIs can collaborate with industries to develop work-based learning programmes for industry-ready graduates (Shearman & Seddon, 2010).

Changes in curriculum syllabi. Accreditation can promote positive changes to curriculum implementation (Al Mohaimeed et al., 2012). It could promote systematic mapping of the curriculum and assessment strategies (Blouin et al., 2018). Assessing scaled students' satisfaction as an indirect measure of accreditation impact on medical programme in Saudi Arabia, Al-Eyadhy and Alenezi (2021) found that it has a positive impact on course conduction and practical/clinical experience. At the course level, another example is that the mission and objectives of the institution were incorporated into the course design (Hou et al., 2015).

Changes in teaching and learning approaches. External quality assessment can trigger changes in teaching methodology. Hou et al. (2015) examined the impacts of three programme accreditations on Taiwanese universities and found that teaching was emphasised as the core function of universities with more attention paid to students' learning outcomes and the relationship between teaching methods and learning outcomes. Acevedo-De-los-Ríos and Rondinel-Oviedo (2022) found that accreditation made teachers change their teaching methodologies such as reformulating subject content through implementing portfolios with a graphic and writing sample of the teaching methodology and student work. As a result of the impact of accreditation, students were satisfied with the teaching methodology which suggested that their learning was enhanced (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022). In this aspect, teacher professional development received more attention to enhance teacher quality. For instance, one-fifth to one-quarter of academic staff reported enhancing teaching and learning due to their professional development engagement. Academics were also driven to take initiatives that affect academic activities and learning (Volkwein et al., 2007). Accreditation also boosted

academics' engagement in programme implementation and academic accountability (Blouin et al., 2018).

Changes in student assessment. Programme accreditation triggered changes in teachers' student assessment methods, for example, they started to use new grading tools such as rubrics and portfolios (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022). Changes were also reported in the review of related literature in the assessment of learning progress. Accreditation can impact the assessment of learning outcomes; for example, it was suggested that student performances be assessed by industry during their internship so that improvement can be made before their graduation (Kumar et al., 2020). Another example is that teachers acknowledged improvement in student assessment such as changes in the ways teachers kept course progress records, such as implementing the student academic portfolio to evidence the achievements of students within each subject (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022).

2.4. Theoretical framework of the study

This study is based on the AUN_QA model for programme assessment. The model covers eight aspects of a degree programme. This research aims to explore the perceptions of QA practitioners, academic staff and students on changes after the AUN-QA assessment. Therefore, it focuses on three aspects of programme assessment: curriculum design and review, teaching and learning approaches, and student assessment. With these aspects, QA practitioners, academic staff and students are stakeholders that can provide information for the study. Figure 2 illustrates the theoretical framework used in the study to collect and analyse data.

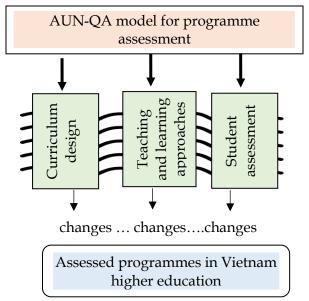


Figure 2: The theoretical framework of the study

3. Research methods

The paper is qualitative in nature to collect and analyse in-depth interview data (Johnson & Christensen, 2019) to evaluate the impact of external quality assurance from the perspective of academics, students and QA practitioners of accredited degree programmes. For this study's purposes, a qualitative design is appropriate because it can provide a deeper understanding of a complex phenomenon (Creswell & Creswell, 2022), i.e. impacts of higher education accreditation in the Vietnamese context, particularly at the programmatic level. To evaluate perceived impacts, the researchers conducted interviews with three groups of stakeholders: academics, students and QA staff members of the assessed programmes by the AUN-QA agency.

This study employed purposive and convenience sampling. For purposive sampling, certain criteria will be set to select participants who are in a position to provide information on the issues under investigation (Creswell & Creswell, 2022; Fraenkel & Wallen, 2023). In this study, participants must be the ones working for universities that have already undergone an AUN-QA assessment. Therefore, to ensure appropriate higher education institutions were selected for the study, from the list of universities with the programmes assessed by the AUN-QA agency, some were identified based on a convenience sampling technique based on the network of the study researchers. Participants were recruited from the universities that were accessible to the researchers. To secure access to expected participants, these universities had to be in the same city as the researchers. Five universities were contacted for consent to participate in the study, including QA practitioners, academic staff and students of the programmes assessed by AUN-QA. In total, 26 participants joined the study (Table 1). Participants were coded as QA1-QA11 for QA practitioners, AS1-AS10 for academic staff, and ST1 to ST5 for students.

University	Academic staff-AS (n)	Student-ST (n)	QA practitioner- QA (n)
А	2	1	2
В	2	1	2
С	2	1	2
D	2	1	2
Е	2	1	3
Total	10	05	11

Table 1: Participants of the study

Interviews were conducted both face-to-face and online regarding the preferences of the participants. Questions were asked about the following aspects: (a) their participation in the entire process of quality assessment and (b) perceived changes as a result of the assessment in curriculum design, teaching and learning methods, and student assessment (Appendix 1). The interviews were conducted in Vietnamese and recorded for transcribing and subsequent analysis. Each interview lasted approximately 15 minutes for students and almost an hour for academic staff as well as QA practitioners. The interview questions were similar for all three groups of stakeholders. However, students were only able to share certain aspects related to AUN-QA.

Interview data collected were transcribed in Vietnamese and coded with NVivo software, version 12.00. They were analysed thematically to cover aspects relating to curriculum design and implementation. The data were co-coded by two researchers to ensure the trustworthiness of the study (Saldaña, 2021).

4. Findings

This section reports themes that emerged from the interview data. The section will first report themes related to the entire experience of joining the AUN-QA assessment: accepting quality assurance as a way to improve quality and a belief that this will gradually form a quality culture as well as a culture of evidence. The section will then report themes more specific to aspects under investigation: curriculum itself (curriculum design and review, teaching and learning approaches, and student assessment).

4.1. "Accepting" quality assurance as a way to improve quality (quality culture)

In general, most participants shared their experiences of seeing changes in academic staff, support staff and university leadership towards activities required by the external quality assurance (in this case it is AUN-QA). Some of them said:

"The assessment has an impact on the university, academic staff, systems, and programmes. I can see these impacts... there have been changes in the perception of the academic staff and leaders of the university including the Board of Rectors". (QA2)

"In my opinion, there are positive aspects of quality assessment. We have not engaged in assessment before, so all academic staff have not understood its importance. We just participated in the process without knowing its importance." (QA2)

The changes took place in different aspects of quality assurance. Some participants changed their beliefs that being recognised by a third party (AUN-QA) would contribute to their university's and the programme's reputation. One QA said:

"Quality assessment helps them [academic staff] build their brand. They are also more confident in operating the programmes." (QA1)

For most QA practitioners, the assessment with AUN-QA raised awareness of those involved in the process, shaping the development of a quality culture within the university. One QA practitioner believed that, with the assessment from AUN-QA, her university was more aware of the quality provided, leading to the gradual development of quality culture within the university. When being asked about the impacts of AUN-QA assessment, she said:

"We think that quality is the decisive factor of our 'survival,' so leaders of my university focused on improving the quality of education, and enhancing the quality of study programmes. Thus, in recent years, quality culture has been founded and developed." (QA2)

Sharing this viewpoint, another QA staff member considered the requirements of AUN-QA for programme accreditation as daily activities of academic staff and the university, rather than one-off activities to fulfil any external requirements, i.e. developing a quality culture:

"Whether they do it well, whether they are accredited or not, they still have to do it according to their functions and duties." (QA1)

These changes also mean seeing external assessment as something unnecessary to accepting it because the assessment revealed aspects requiring improvements of the degree programme that the university had not realised before.

"An academic staff once joked that our discipline has been famous since the time of Van Khoa (former name of the University) and Indochina, it is not necessary to be assessed by AUN-QA to build a brand. However, after the assessment, the academic staff really liked it. He told me that, ...we realised there were many problems. at least, I can see its impact..." (QA1)

Also through the stories shared by these QA practitioners, both the support staff and academic staff of the respondent universities gradually changed their perspectives of what they would do to serve students and the programmes better. In other words, they saw their roles differently, not the same as they used to be before the assessment.

"At the institutional level, staff from the Academic Affairs Office, the Student Affairs Office, the Research Office, and so on become more aware of their support roles after many interviews with the AUN-QA assessors... They know that the assessment requires a lot of student support, so in particular, the Student Affairs Office will adjust the process to better serve students ... (QA1)

The most important change that was facilitated after the AUN-QA assessment was that the participants could see a tendency to close the feedback loop at the university.

The university staff would look at the results and data from surveying various stakeholders for improvement. One QA head said:

"...What's more, they look at the survey results and take actions for improvements." (QA1)

The changes were reported before, during, and after the onsite visit of the AUN-QA team. Before the onsite visit, these universities examined the quality standards, trained related staff, took actions to comply with the standards, and collected evidence for self-assessment reports of the programme. One academic staff said, "*Two drivers encouraged changes to the study programme: identification of areas for improvement through self-assessment and feedback from AUN-QA assessors*" (AS04). During the onsite visit, "evaluative feedback" (QA2) of the assessment team was believed to contribute to action the university would take to improve the programme:

"When the assessor team arrived, our faculty members became aware of many things such as the importance of the study programme and curriculum design and development, which is thanks to the AUN-QA assessors' comments through interviews with relevant stakeholders..." (QA2)

"This change came from those participating in the assessment process and feedback from AUN-QA assessors." (AS04)

After the onsite visit, the assessment team sent a final assessment report to the university which was seen as valuable for the programme improvement:

"Even though I do not think it's possible to go in-depth or cover many things in two or three days, the final assessment report is valuable." (QA2)

"After the AUN-QA assessment, the study programme was reviewed and revised based on the recommendations regarding the criteria from the [AUN-QA] guideline. External quality assessors offered recommendations [to improve the programme]." (AS04)

4.2 Evidence: now and then - a culture of evidence

The interview data showed that the participating universities had to demonstrate evidence of how the degree programmes complied with the AUN-QA requirements. In this scenario, some academic staff believed that there were changes, especially in having a more systematic process of documentation for their programmes and universities. Some of them articulated these changes as follows:

"...They kept evidence for decision-making, avoiding making decisions intuitively. Survey data provided evidence for the self-assessment reports to show the level of stakeholders' satisfaction." (QA1)

From what they had done for the assessment, some of the other participants believed that the universities should continue collecting evidence more frequently so that they have data for decision-making to improve teaching and services offered (QA3). This

practice of quality assurance will form a culture of evidence, starting from developing a habit of keeping evidence for whatever they do (QA1). One academic staff said:

"There was a positive change, but it needs to be done regularly. For example, previously, all support units, faculties, and programme directors did not have a habit of keeping evidence or did not do it adequately even though they had conducted many activities to deliver the programmes. After the assessment, everyone knew that they should archive the test papers, synthesise and organise them so that if necessary, they can review or retrieve them immediately." (AS02)

These are themes emerging from the interviews with the study participants. Furthermore, in responding to more specific aspects of how the assessment impacted their universities, the interview data collected showed that more positive changes happened, yet continuous improvements are more important for sustainable development.

4.3. Positive changes in curriculum design and review

4.3.1. Participatory process to meet societal needs

Participants acknowledged that there were changes in curriculum design within their disciplinary faculties. Observable changes included the processes of curriculum design to reflect the societal needs of the professions related to the programmes. The process was more participatory and inclusive of the voices of various stakeholders to replace a rather "subjective curriculum" (QA3) (meaning that the university designed courses based on their experience and what academic staff could teach) without consulting or collecting feedback from other stakeholders. The process expects to collect input from not only academic staff but also students, experts and potential employers so that the graduates of the programmes can make a difference in society (QA1). Some participants (mostly QA and academic staff) expressed this as follows:

"This assessment changes the way of thinking about the quality of our educational delivery associated with the market." (AS01)

"For the development and implementation of new study programmes, feedback was collected from stakeholders such as academic staff, employers, academic units, and quality assurance units." (AS07)

When as many as groups of related stakeholders as possible joined in the process of reviewing the curriculum to meet the AUN-QA requirements, the participants in this study appreciated this occasion in helping them to have an overall view of the programme.

4.3.2. Connecting the dots of the programme

With the participation of all academic staff in curriculum design and review to meet the AUN-QA criteria, most QA and academic staff stated that the assessment was a good chance for them to have an overall picture of offering a degree programme: from curriculum design to how to deliver the curriculum to link all activities and work together:

"If the academic staff participated in the assessment, they would have an overview of their programme through assessors' evaluative feedback with both their strengths and areas that need improvement" (QA2)

"The AUN-QA assessment is conducive to raising everybody's awareness of gaining insights into their programmes through external assessment." (AS01)

More importantly, the participants believed that the AUN-QA methodology in curriculum design was seen as "standardised" for the universities to follow:

4.3.3. AUN-QA as a standardised and methodologically sound approach to curriculum design For the assessment, most participants considered the AUN-QA criteria in curriculum design as "standardised" (QA3, AS03) or as "guideline," (QA3), or "more scientifically" (AS01) to design and review curriculum. One said:

"The AUN-QA assessment contributed to the enhancement of programme quality, e.g., there were standardised [processes] ...Changes to the study programme were implemented first in the process of curriculum review. The process was carried out more systematically and methodically." (AS03)

"...So far, we have implemented the programme based on our experience, but now we will do it more scientifically. For example, we interviewed or surveyed different stakeholders for their views of the programme..." (AS01)

The interview data also showed that, to review the curriculum, the universities reviewed the process and issued a "standardised" one for AUN-QA assessment:

"There was a dramatic change in programme development. For example, we examined if we had a relevant process for programme development. We established a standardised procedure and offered training so that everybody could follow it." (QA5)

"The institution's unit responsible for programme development is the Office of Academic Affairs which has taken actions to review the process for programme development. The process will be applied to all the faculties. The faculties will follow the process for programme review and development that helps enhance their self-assessment and internal quality assurance." (QA7)

The attempts to review the curriculum in compliance with the AUN-QA requirements resulted in revising learning outcomes for the programme.

4.3.4. Revising programmes' learning outcomes

The universities in this study reported that they followed the AUN-QA guidelines to revise programme learning outcomes before and after the assessment.

"We followed the AUN-QA guideline for adjusting programme learning outcomes." (AS05)

Changes in the curriculum also focused on revising learning outcomes after the assessment.

"Many faculties took the initiative to improve the quality of their study programmes after the external assessment, focusing on programme learning outcomes. The extent of these changes depended on the deans." (QA6)

4.3.5. Introduction of the concept of curriculum mapping and benchmarking Participants of the study also reported changes in curriculum design related to the concept of curriculum mapping and benchmarking. Curriculum mapping means developing matrices to show how individual courses/modules contribute to the achievement of pre-defined programmes learning outcomes.

"Previously, they were not very familiar with building matrices for programme learning outcomes, now they are more experienced." (QA1)

Based on the curriculum map, academic staff revised their syllabi accordingly. One participant stated, "*Now, to write their course syllabus, academic staff were provided with a matrix and had to examine it to see how their course's contributes to programme learning outcomes*" (*QA1*). In addition, a syllabus template was created so that academic staff could follow it to demonstrate compliance with the principles of constructive alignment in the AUN-QA criteria. The alignment is required teaching and learning methods as well as student assessment to achieve programme learning outcomes. One illustrative quote for this is as follows:

"Since the AUN-QA assessment, a new template for course specification has been recommended. Thus, academic staff had to consider their course in relation to other courses and programme learning outcomes, establishing the alignment between teaching, student assessment, and learning outcomes." (QA1)

At another university, a more complex process was piloted to approve the syllabi of the programme in line with the AUN-QA requirements. One QA staff shared, "We had a process of revising all syllabi followed by many cross-checks by heads of departments, deans, academic affairs' office, and quality assurance office (QA3)." Besides the concept of curriculum mapping, the concept of benchmarking was also introduced to the universities because it is included in the AUN-QA model:

"There was no benchmarking of study programmes previously, but now it is in the process." (QA1)

While revising and approving syllabi, changes were also observed with textbooks and materials used in the programmes: more updated.

4.3.6. Updated textbooks and materials

In addition, textbooks and materials for curriculum courses were updated to align with the revised programmes. The universities required their academic staff to clarify the choice of selected materials for the course as follows:

"Through the process of developing and reviewing the syllabus, we were asked to keep an eye on the textbooks and materials and see how updated they are. During the approval process, academic staff have to demonstrate that the materials and textbooks designed for the course are consistent with the course content, objectives, teaching, and assessment methods." (AS05)

Actions also taken to keep the materials and textbooks updated to comply with the quality standards were such as the following:

"We reviewed the course syllabi and realised that course materials should be updated. Thus, there was collaboration between academic staff, the academic department, the library, and the university leadership for funding and buying new materials." (AS02)

4.3.7. Curriculum structure and content

Both students and academic staff noticed changes in curriculum content and structure. For students, they noted the programme was designed for 4 years instead of 4.5 years. This change is considered positive because it is convenient for them.

"I realised that the structure of the course is much more sophisticated with the removal of some general education courses and emphasis on specialised courses. Not much changed but appropriate." (ST01)

"We had seminars to collect feedback from departmental heads and academic staff. There was about 50-60% of changed content and structure." (AS05)

In summary, the ways these universities designed and reviewed curricula were found to undergo significant changes to align with the AUN-QA requirements: from the principle of constructive alignment to a more participatory process of engaging different stakeholders to review the curriculum. The constructive alignment requires the universities to revise programme learning outcomes and map the curriculum to the learning outcomes via the concept of curriculum mapping. As a result, all syllabi were revised following a "standardised" process/procedure to approve the curriculum. While revising the syllabi, textbooks and materials were required to be updated, which is also another requirement of the criteria. Other observable changes are the opportunities for all academic staff to gain insight into the entire process of curriculum design as well as changes in curriculum structure and content. In addition to changes in curriculum design and review, the interview data also showed that participants of the study believed in the impacts of the assessment on teaching and learning approaches.

4.4. Positive changes in teaching and learning approaches

4.4.1. Constructive alignment for teaching and learning approaches

Responding to questions about any change the participants of the study were able to observe related to teaching and learning approaches with the assessment, both academic and QA staff believed that teaching and learning methods used in the programme were changed to align with programme learning outcomes. Some confirmed this as follows:

"Academic staff changed or adjusted their teaching methods to align with course and programme learning outcomes." (QA8)

"Teaching methods were changed. There was constructive alignment between teaching methods and learning outcomes which are communicated with academic staff. For example, more practice was offered so that students could achieve some professional skills" (AS01)

Others believed that, with the constructive alignment principle, the AUN-QA assessment helped to change the perception of academic staff and students and increase their awareness as follows.

"The academic staff paid more attention to their teaching quality. If their teaching was not in alignment with the learning outcomes of the banking programme, students' grades could not be high. The staff had to update their disciplinary knowledge within their departments." (AS05)

Participants further clarified the observed changes in teaching and learning approaches: learner-centred, diversified teaching methods, and varied learning activities. These include integrating varied methods such as traditional and modern methods together with multimedia. (QA5) and lecturing combined with discussion and dialogue (AS07). Information technology was also applied in teaching when they talked about changes in teaching methods.

Perhaps these articulated changes were both changes after the assessment and "natural" changes with time as a result of continuous professional development.

4.4.2. More awareness of educational quality – a facilitator for continuous professional development

The external quality assessment has made the university aware of the importance of educational quality, so academic staff were offered training in pedagogy, classroom management, and professional knowledge.

"Previously the training focused on making academic staff aware of quality assurance, but after the AUN-QA assessment, the training was carried out at different levels and focused on supporting academics to gain an in-depth understanding of pedagogy, student assessment, classroom management, and improve their competence." (QA10) "Academic staff were encouraged to participate in training to gain insights into teaching and improve their teaching effectiveness." (QA8)

4.5. Positive changes in student assessment

The findings on changes related to student assessment after the assessment seem to be positive in terms of complying with the AUN_QA assessment criteria: constructive alignment in student assessment including review of test banks and introduction of rubrics.

4.5.1. Constructive alignment for student assessment

At some universities, the interview data illustrated that the participants again discussed the concept of constructive alignment as a principle to meet AUN-QA criteria, similar to what they had already discussed for questions about curriculum design and review. This was most discussed by QA staff.

"We established and improved a detailed procedure from programme development, implementation, and student assessment." (QA2)

The changes in student assessment were believed to ensure that it can measure student learning outcomes:

"There were changes whereby assessment methods were designed to align with specific learning outcomes. It helped academic staff to accurately assess students' knowledge and skills when completing the course. It is a way to monitor student's learning progress so that relevant teaching and learning activities can be adjusted" (QA8)

Participants also provided further information that the deans of disciplinary faculties are responsible for this aspect:

"The deans of disciplinary faculties or heads of professional divisions are responsible for approving test papers or examinations for end-of-course assessment. Thus, when he/she examines the test papers and checks answer keys, for example, he/she can communicate with academic staff for confirmation..." (QA1)

When discussing this, some participants believed that changes in student assessment could be possible if this is initiated by the deans and heads of professional divisions after the assessment:

"After AUN-QA assessment, changes can happen to student assessment at the faculties whose deans are interested in quality enhancement." (QA8)

4.5.2. Revised test banks for learning outcomes

Another theme was also evident from the data collected that some universities had already developed test banks to assess students. For these universities, interviews with participants showed that existing test banks were evaluated to ensure they were able to measure student learning outcomes. The changes were attributed to training on testing so that academic staff could be able to design relevant and objective test items. Some clearly articulated this as follows:

"We adjusted the test banks by reviewing test items to see if they aligned with learning outcomes within the required content. It was time-consuming, but the test banks were so well-designed that students felt fairness and validity in the assessment." (AS05)

"Test banks were developed in alignment with course learning outcomes which contribute to programme learning outcomes. The practice was carried out after the external quality assessment of our first two programmes." (AS08)

4.5.3. Introduction of rubrics and more weight on formative assessment

For other assessment methods, rubrics were introduced to academic staff via various trainings. Faculties began to be aware of the importance of rubrics and develop rubrics for student assessment.

"Before the AUN-QA assessment, the faculties did not know what assessment rubrics were. Now each faculty knows how to develop rubrics. We trained them... Academic staff now know how to grade students based on rubrics." (QA1)

In addition, all interviewed participants talked about positive changes in formative assessment, particularly forms and methods of assessment as well as weight for formative and summative assessment.

"The learning outcomes were not well designed before, so the assessment methods used to be simple and monotonous. Now there are varied assessment methods that align with teaching, ... The assessment is more formative than summative as it was before. The previous grade weight is 30% for formative assessment and 70% for summative assessment, now it is 50/50." (AS01)

4.6. Minor improvements in fulfilling the principle of constructive alignment It seems evident from the data collected that, if the universities "knew" the AUN-QA criteria and the principle of constructive alignment, there seemed to be superficial or minor or even no changes after the AUN-QA assessment. The AUN-QA assessment had limited impacts on curriculum design and review:

"The university already applied ISO in quality management, so academic staff had to follow strict requirements for curriculum design and course development. This is why we could not see any significant change..." (AS03)

Regarding student assessment, there was no change within some universities because they believed that they had done it appropriately and in alignment with student learning outcomes. "In general, student assessment has been well developed [in my university]. For example, the staff knew how to assess student learning in alignment with learning outcomes." (QA3)

As regarding revising learning outcomes, some participants believed that there were also just superficial changes, such as changing the wording of learning outcomes.

"We have learned learnt something from experience and changed the wording of learning outcome statements. Nothing new." (AS06)

Despite positive changes found at these universities through the perspectives and experiences of the study participants, some areas of improvement were also evident and crucial for the programmes albeit less discussed by the participants in this study.

4.7. Areas of improvements

4.7.1 A need for regular improvements

The study also found that, despite changes observed in many aspects of the programmes after the assessment, regular improvements are crucial for assuring the quality of the programmes.

"This assessment helps the entire university and lecturers be aware of the regular improvement of study programmes, teaching, and assessment methods... When we participated in the assessment, we knew that this is a continuous, regular process, and requires the engagement of all stakeholders in the university..." (AS01).

"We have made just some adjustments to improve ourselves. This contributed to the educational quality." (AS03)

4.7.2. *Perfunctory changes and quality dependent on individual academic staff* Interviews with participants also revealed that some changes were "perfuntory" as a coping strategy for external assessment.

"They were per functionary ...to deal with the requirements of external assessment, not to improve their quality. It was just a coping strategy." (QA5)

Another theme emerged with the interview data across various aspects interviewed in this study: the quality of the programmes will depend on individual academic staff, their willingness to change, and an acceptable rationale for changing. Otherwise, they will develop a coping strategy for complying with external requirements. Some said:

"Some academic staff did not complete their courses' test banks. I do not know the reasons why but ...can say that they did not agree on what to do." (QA2).

"Not every faculty member changes...Several faculty members reviewed and implemented varied forms (including formative and summative assessment) and methods of learner assessment while others did not." (QA6)

"Some faculties have not changed anything for 10 years." (QA5)

"Some academic staff change, a majority of them were not adaptable to the changes, particularly in the digital era 4.0." (QA5)

4.7.3. Other challenges in student assessment

As regard student assessment, several academic staff perceived it was difficult to design formative assessments that can measure pre-defined learning outcomes.

"There was a challenge in designing formative assessments so that learning outcomes could be assessed." (QA1)

For students, they believed that the tests were too difficult, and hence learning outcomes were not able to be achieved.

"As for student assessment, I rate it 7.5 on a 10-point scale because I was not fully satisfied. For example, the formative and summative tests were difficult for students. Some courses require many difficult tests. It was difficult to achieve the learning outcomes." (ST02)

5. Discussion

5.1. Quality assurance: drivers of quality culture and enhancement

The participants all recognised the change in the perception of academic staff, support staff, as well as leaders of the universities about accepting quality assurance as a way to improve the quality of education and the importance of quality accreditation. This is similar to what has been found in the literature review that external quality assessment can trigger a cultural change in the attitudes of the academic staff. Such change in these stakeholders' perceptions derived from three factors: (a) HEIs need to be assessed to affirm or enhance their position because the accredited programmes have their prestige as perceived by students, graduates and teachers (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022) and to attract quality students (Patil & Codner, 2007); (b) the experience of participating in the AUN-QA assessment as one of the benefits of external quality assessment is enhancing the assessment culture (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2022); (c) from the comments of quality assessors as evidenced in May and Strong's (2006) study. Yet, other participants also emphasised the importance of having a long-term postaccreditation plan, to ensure improvement acts are implemented in their HEI's practices. This finding confirms that accreditation is viewed as a catalyst for quality enhancement by promoting improvement of strategic planning processes, selfassessment activities and the development of evidence-based culture for decisionmaking (Shah, 2012).

As regard evidence, several participants perceived a change for a more methodical and scientific storage process and a need for ongoing improvement of such an evidence system. They perceived that data were used for decision-making, illustrating the development of an evidence-based culture (Shah, 2012); such perception could lead to changes in keeping evidence for quality assurance and promote systematic data collection (Hou et al., 2015). This finding also concurs with Pham's (2018) study in that QA managers perceived that HEI's self-assessment process resulted in systemised evidence. QA processes can be conducive to enhancement when valued for evidence-based management and viewed as vital parts of HEI's research outputs (Seyfried & Pohlenz, 2018).

5.2. Curriculum design and implementation aligning constructive alignment

For particular aspects under the exploration, the individuals participating in the study acknowledged changes in the curriculum design of the study programme at the faculty and institutional levels. Themes emerging in this study reveal that they are connected to the concept of constructive alignment. This principle of constructive alignment brings a new language in curriculum design: curriculum mapping which triggers the universities to develop matrices and examine them to get an overview of the curriculum before reviewing and adjusting all curriculum syllabi. Such changes illustrate that external quality assessment is conducive to improving programme quality (Pavlakis & Kelley, 2016) as it can impact the quality of study curriculum design (Kumar et al., 2020). Benchmarking and teamwork to support each other were also included in the programme design. It means that external quality assessment dialogues and collaboration within academic units were promoted (Stensaker, 2003), which helped develop a closer partnership among academics for curriculum reform (Hou et al., 2015). Thus, accreditation encourages multiple stakeholders to engage in quality discourse.

These changes come from the participants' awareness or the feedback of the AUN-QA assessors. Specifically, the change of study programme is first carried out in the process of curriculum review. The review process is carried out more methodically and systematically. This means that external quality assessment can trigger positive changes to curriculum implementation (Al Mohaimeed et al., 2012) such as developing systematic mapping of the curriculum and assessment strategies (Blouin et al., 2018).

The change also focuses on revising intended learning outcomes. The courses were reviewed so that they could align and contribute to these learning outcomes. In addition, course materials and course books were updated to align with the new programme. As found by Al-Eyadhy and Alenezi (2021), there were positive changes in course conduction and practical experience.

Several HEIs invited multiple stakeholders (such as academic staff, employers and QA agencies) to engage in curriculum review. This indicates that external quality assessment could engage external stakeholders in the educational process (Acevedo-

De-los-Ríos & Rondinel-Oviedo, 2022; May & Strong, 2006). The finding also concurs with a study in the UK in that HEIs were encouraged to collaborate with employers, for example, to develop work-based learning programmes for industry-ready graduates (Shearman & Seddon, 2010).

Among the detailed changes in the implementation of the study programme were changes in teaching and learning methods which were to align with learning outcomes. For instance, there were diversified teaching and learning activities and the application of information technology in teaching. Hou et al. (2015) previously found a similar result in Taiwan that accreditation made HEIs focus on the alignment between teaching methods and students' learning outcomes. A similar finds was in a study by Acevedo-De-los-Ríos and Rondinel-Oviedo (2022).

The reported changes in student assessment such as assessment processes, review of assessment processes, and diversity of assessment instruments concur with a study by Acevedo-De-los-Ríos and Rondinel-Oviedo (2022) in that academic staff perceived improvement in student assessment such as using the student academic portfolio to measure learner achievements within each course. It suggests that external quality assessment could promote changes in the approach to student assessments (Gerbic & Kranenburg, 2003).

It was found that the academic staff were aware of the importance of building rubrics for student assessment and started to do it. However, several participants realised the difficulty in developing rubrics and assessing learning using rubrics. Acevedo-Delos-Ríos and Rondinel-Oviedo (2022) also found changes in teachers' student assessment such as using rubrics. All interviewed participants perceived the changes in the assessment of learner progression and types of assessment. This will help alter the way learning outcomes are assessed, as reported in a study by Kumar et al. (2020). Most participants believed that AUN-QA external programme assessment helped to enhance the quality of education and made them aware of the importance of educational quality, especially encouraging academics to align their teaching with programme learning outcomes. To improve the quality of teaching, training on pedagogy, classroom management and professional development were offered to academic staff. As found in previous studies, accreditation promoted the improvement of academic staff quality (Kumar et al., 2020) with attention to teacher professional development (Volkwein et al., 2007). Academic staff were encouraged to take initiatives to enhance teaching and learning (Volkwein et al., 2007). In other words, external quality assessment encouraged academics to engage in programme implementation and academic accountability (Blouin et al., 2018).

5.3. A few negative impacts

Although participants perceived a majority of stakeholders changed while participating in the assessment, there were some instances of superficial compliance. "Perfunctionary" actions as a coping strategy for QA illustrated the assessed institutions' compliance with the requirements of quality assessment (Stensaker,

2003). In addition, some staff were reluctant to change their teaching practice, as Liu (2013) found that there was a slight change regarding teaching although HEIs offered resources for teaching after the national quality assessment scheme in China. These instances suggest that the extent of changes at these assessed universities was not the same (Liu, 2013). Those who had learnt and knew the constructive alignment in curriculum design and delivery saw minor changes after the assessment. This is something more "important" that several participants mentioned: regular improvement albeit whatever requirements imposed from outside. This is evident for the universities that reported minor changes or nothing new after the assessment.

6. Conclusion

AUN-QA's external quality assessment aims to support universities within the ASEAN University Network to improve their quality. Findings from the study suggest that programme assessment contributes to the enhancement of QA in higher education. The change in the perception of internal stakeholders on QA has triggered their initiatives for quality enhancement in various aspects, including curriculum design, teaching and assessment methods, and raised awareness of academic staff of their roles in continuous improvement. This signals a change in their quality culture, for example, institutions taking an evidence-based approach for quality enhancement and improved training for academic staff.

The research is limited in several aspects. Because the purpose of the study was to explore changes the participants could observe, the participants therefore tended to talk about changes in a more positive way. This limitation perhaps contributes to less discussion of these negative aspects of the assessment. Another limitation is the use a convenience sampling technique, which fails to include voices of other academic staff. The third relates to the selection of participants, in particular, academic staff. The selection did not consider the field of study of the participants, hence was unable to discuss the difference among disciplines. Two other groups of stakeholder were not considered in this study: support staff and university leaders. These groups can add value to such a study. Further research should involve them in an impact study. Several implications can be drawn from this study. First, AUN-QA or any external QA mechanism could bring changes to higher education. Such changes may play an essential role in improving the institutions' public accountability. The change in stakeholders' perception of external assessment and QA can be driven by the need to be recognised. With successful external quality assessment, the institutions could gain prestige nationally or internationally, which may be their competitive advantage to attract prospective students. Within these institutions, assessors' recommendations could be used as cues for quality enhancement. This means that external assessment can be an occasion for higher institutions to reflect on their quality of education. Such practice is a value added to HEIs' quality culture. Recently, having assessed or accredited programmes can be viewed as an academic indicator of HEIs, of which they can be proud. To sum up, external quality assessment may contribute to quality enhancement and HEIs' recognition. During the change, some are more willing to

learn and change while others can develop coping strategies or even be resistant to changes. There is a sign that a participatory process could be a solution for positive changes. This study suggests that for positive changes augmented with continuous quality improvements, university leaders can use a QA mechanism to organise quality dialogues and conversations with related stakeholders and engage them in this endeavour. This can help them achieve two purposes simultaneously: complying with external requirements and improving educational quality.

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Appendix 1 Interview Guide

(Part of the interview guide, which data were reported in this paper) *Introduction*

- ✤ Introduce to the interviewer;
- Overview of the interview: Explore the impacts of the AUN-QA assessment on the study programmes: changes in the study programmes in (a) curriculum design, (b) teaching and learning approaches, (c) student assessment, and other comments

Part A: Demographic information

- 1. Your role/position at the university
- 2. What is the programme that was assessed by AUN-QA?
- 3. Working experiences

Part B: Interview questions

1. Participation in the AUN-QA assessment?

- Do you participate in the self-assessment/external assessment?
- Role and level of participation?
- Describe the process of participating in the self-assessment/external assessment.

2. Changes observed after the AUN-QA assessment?

Please describe what changes took place at the university: *Prompts:*

- Curriculum design and review. How has it been changed after the assessment? How about before?
- Teaching and learning approaches. How has it been changed after the assessment? How about before?
- Student assessment. How has it been changed after the assessment? How about before?
- Other changes.

Part C: Thanks and goodbye.