Research Article

A Review of Graduate Attributes in the Oman Authority for Academic Accreditation and Quality Assurance of Education (OAAAQAE's) Quality Audit Reports

دراسة سمات الخريجين في تقارير تدقيق الجودة الخاصة بالهيئة العمانية للاعتماد الأكاديمي وضمان جودة التعليم

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Abstract

With the growing importance of the development of graduate attributes (GAs) in higher education, higher education institutions (HEIs) are emphasizing which GAs their graduates attain as part of their mission, vision, and core values, and are required to describe and document how their programs contribute to the development and promotion of those attributes. Qualitative data were collected from 12 quality audit reports from the Oman Authority for Academic Accreditation and Quality Assurance of Education (OAAAQA). This paper identifies the OAAAQA's key areas of interest and their importance in ensuring quality in college-preparedness programs, as well as making recommendations for future audits. The paper seeks to: (1) highlight the most salient issues that have been raised in their reports regarding GAs and (2) make some suggestions so that HEIs in Oman can establish and implement GAs more effectively to meet both the OAAAQA's expectations and good international practices. Following a data-driven systematic qualitative content analysis (QCA) of the QA reports, four main categories emerged regarding the GAs. Student learning objectives should be aligned with GA development, while stakeholders' awareness of these attributes should be raised. Additionally, there is a need for an appropriate evaluation mechanism for GAs to be conducted in a systematic and timely manner. Moreover, GAs should be explicitly assessed and benchmarked based on the feedback obtained from relevant stakeholders. Finally, both internal and external stakeholders should be involved in the GA development and review process.

الملخص

إنّ تصاعد الاهتمام بسمات الخريجين حدا بمؤسسات التعليم العالي أن تركز جهدها على الاهتمام بالسمات التي يكتسبها خريجوها؛ كونها تمثل جزءا أصيلًا من رسالتها ورؤيتها، وقيمها الأساسية، وهو ما يتطلب توصيف هذه السمات وتضمينها في برامج مؤسسات التعليم العالي، وتوثيق منهجية تقديمها وبيانها، وطرق تعزيزها، وتوصيفها، وتطويرها. تستند هذه الورقة في معلوماتها وتحليلها إلى البيانات المستمدة من تقارير تدقيق الجودة الصادرة من (الهيئة العمانية للاعتماد الأكاديمي، وضمان جودة التعليم)؛ لتبيّن مجالات الاهتمام الرئيسة للهيئة العمانية للاعتماد الأكاديمي وضمان جودة التعليم، وأهميتها في ضمان الجودة في البرامج الإعدادية لكلية التربية بالرستاق، فضلا عن تقديم التوصيات ذات الصلة بعمليات التدقيق المستقبلية. هذا وتسعى الورقة إلى تحقيق جملة من الأهداف، منها: تسليط الضوء على أبرز القضايا التي أثيرت في التقارير المقدمة بشأن سمات الخريجين. وتقديم بعض المقترحات التي تمكّن مؤسسات التعليم العالي في سلطنة عمان من تنفيذ سمات الخريجين بفاعلية أكبر، بما يلبي توقعات الهيئة العمانية للاعتماد الأكاديمي وضمان جودة التعليم، وما يتماشى مع الممارسات الدولية الجيّدة. استندت الورقة على تحليل المحتوى في إطار المنهج النوعي، الذي أبرز أربع قضايا أساسية تتعلق بالسمات العامة للخريجين، هي: ضرورة موائمة السمات العامة للخريجين مع عملية تطويرها، بالإضافة إلى رفع الوعي وسط أصحاب المصلحة حول أهمية هذه السمات، كما أشارت إلى ضرورة إيجاد آلية مناسبة -- وبصورة ملحة - لتقييم مواكبة هذا السمات بشكل مستمر، وضرورة تقييمها ومعايرتها وفقا للتغذية الراجعة من أصحاب المصلحة كافة، والقضية الأخير هي حتمية إشراك أصحاب المصلحة في عمليات تطوير ومراجعة تلك السمات.

1. Introduction

Higher education is often regarded as the most essential human resource investment a country can make to provide the basis for proactive and constructive economic, social, and political reforms (Little, 2001). The increasing demands for highly skilled and educated labor from graduate employers and the knowledge-based economy have required governments to assign HEIs with the task of producing employable graduates (Gupta et al., 2020; Matu & Paik, 2021; Scott & Willison, 2021; Wong et al., 2021). The main link between higher education and the labor market is reflected through the degree to which higher education equips graduates with knowledge and skills that meet its demands (Al-Harthi, 2011; Belwal et al., 2017). GAs are commonly defined as "the qualities, skills, and understandings a university community agrees its students would desirably develop during their time at the institution" (Bowden et al., 2000, p. 3). These attributes, in general, refer to knowledge, abilities, and values that are chosen to maximize graduate employability (Smith & Do, 2018; Wong et al., 2021). The study aims to identify the status of GAs, from the OAAAQA perspective in the Omani HEIs, and to seek solutions to enhance GAs by increasing stakeholders' involvement and stimulating active use of GAs.

Higher education has always placed a premium on the acquisition of discipline-specific knowledge and abilities. The development of other general abilities and skills, such as intellectual and social skills, have tended to be taught implicitly and informally (Bath et al., 2004). However, HEIs are indeed responsible for teaching students a variety of general skills, including communication, teamwork, problem-solving, critical thinking, time management, and lifelong learning, in addition to discipline knowledge (Ali, 2012; Green et al., 2009; Griffin & Coelhoso, 2019; Mansingh & Reddy, 2021; Matu & Paik, 2021; Scott & Willison, 2021; Wong et al., 2021). A significant number of HEIs throughout the world have established a set of graduate attributes that students will develop and display throughout their studies. HEIs are expected to include GAs in their curricula, core values, and mission statements (Belwal et al., 2017; Hill et al., 2016; Wong et al., 2021).

Recently, GAs have emerged as a critical issue and key challenge in HEI quality assurance and curriculum development. Traditional academic procedures are frequently

accused of failing to satisfy and meet the needs of the labor market (Gupta et al., 2020; Matu & Paik, 2021; Scott & Willison, 2021; Wong et al., 2021). While students must now be well-rounded, work-ready, and directly employable when they graduate (Griffin & Coelhoso, 2019; Jones, 2009; Scott & Willison, 2021), employers have expressed concern that current higher education systems do not sufficiently prepare students to cope with today's rapidly changing industries. According to research, there is a widely perceived mismatch between the abilities that graduates build and gain throughout their academic studies and the talents that the labor market expects and requires (Belwal et al., 2017; Sevilla & Farías, 2020).

Bath et al. (2004) identified three factors that have influenced the growing importance of GAs in higher education. These are the widespread belief that education is a lifelong process; a greater emphasis on the link between education and graduate employment; and the creation of outcome measures as part of the quality movement. Within the local context of Oman, the last point has been consistently emphasized, as evidenced by the establishment of the OAAA. The OAAAQA is the body in charge of establishing the overall quality framework for HEIs in Oman, as well as monitoring and assessing their performance (Oman Academic Accreditation Authority, 2021). Omani HEs undergo institutional accreditation and academic program accreditation in a two-stage procedure, namely quality audit report and standards assessment outcomes, which is critical to their long-term feasibility. The quality audit is done by an external audit panel composed of national and international peers from academia and industry, and professions consider this self-study portfolio submitted by an HEI and check its completeness and accuracy through means such as interviews and cross-checking with original documentation and other information sources. The audit panel produces a joint quality audit report that includes commendations, affirmations, and recommendations. All accreditation outcomes or reports are written and defined to ensure stakeholders understand the HEI's accreditation status and any implications the outcome may have for the HEI in the future, the results of which may be seen on the official website of the OAAAQA (A-Maawali & Al-Siyabi, 2020; Carroll et al., 2009).

GAs are clearly becoming increasingly important, not just in higher education and labor market but also in government and accrediting agency efforts to ensure quality education. This paper thus seeks to answer the following questions:

1. What are the most salient issues that have been raised by OAAAAQA regarding GAs?

2. How can HEIs in Oman establish and implement GAs more effectively to meet both the OAAAQAs expectations and good international practices?

A brief historical overview of the OAAAQA will be presented in the next section. The issues related to the implementation of GAs in Omani HEIs and GAs in Oman will be discussed in the parts that follow. Next, the methodology will be introduced. The main findings and analysis will subsequently be presented. Finally, a conclusion with a number of implications and suggestions for HEIs will be offered.

1.1. Historical sketch on the OAAAQA

The OAAA was established in 2010 based on Royal Decree No 54/2010, replacing the former Oman Accreditation Council (OAC). The OAAAQA is an entity with legal status and financial and administrative independence, which reports (formerly) to the Education Council. It was established to continue the efforts initiated by the OAC in 2001 in the dissemination of quality culture and accreditation of institutions and their programs across Oman. However, on January 13, 2021, the Oman Authority for Academic Accreditation and Quality Assurance of Education (OAAAQA) was established by Royal Decree No 9/2021, amending the name of the Oman Academic Accreditation Authority, and reporting to the Council of Ministers (http://www.oaaa.gov.om). The Decree also includes an expansion of OAAQA's competencies compromising the quality of school education and implementing the National Qualifications Framework. The Decree also stipulates the competencies of the Authority, through the following responsibilities and duties:

1. *Formulating a national quality assurance system for school education and higher education in the Sultanate, to ensure the continued maintenance of a level that meets international standards and to encourage educational institutions to develop their internal quality assurance systems.*

2. *Assessing public and private schools following the standards and procedures set by OAAAQA.*

3. *Accrediting public and private HEIs and programs following the standards and procedures set by OAAAQAE.*

4. *Auditing the quality of general foundation programs.*

5. *Preparing and developing the Comprehensive National Qualifications Frame-work, listing Omani qualifications in it, and aligning foreign and international qualifications with it.*

6. *Publishing the results of the quality assurance and accreditation processes, and the outcomes of listing qualifications in the national framework and aligning them with it, following the guidelines set by OAAAQA.*

7. *Training educational personnel in the field of quality assurance of school and higher education, and the national qualifications framework.*

8. *Proposing draft laws and royal decrees, and issuing regulations and decisions relating to the competencies of OAAAQA.*

9. *Enhancing and developing cooperation in competencies relating to OAAAQA with other concerned stakeholders in countries and specialized regional and international organizations and institutions.*

10. *Representing Oman in regional and international conferences, events and meet-ings relating to the competencies of OAAAQA.*

11. *Any other competencies prescribed by laws and royal decrees. (http://www.oaaaqa.gov.om)*

1.2. Graduate attributes in HEIs in Oman and issues associated with their implementation

There is a general agreement among academics and employers that the attainment of GAs reflects the success of the completion of the undergraduate program. Despite the importance of GAs in higher education, several challenges have been identified in promoting them. These challenges are related to lack of (a) clear definition of the GAs, (b) awareness about GAs among key stakeholders, (c) explicit alignment of GAs to the programs/course outcomes, and (d) systematic assessment and review of GAs (Anderson, 2017; Green et al., 2009; Hill et al., 2016; Ho et al., 2014; Moalosi et al., 2012; Wong et al., 2021). There is considerable confusion regarding how these GAs should be identified, conceptualized, described, and incorporated into the curriculum. HEIs often have differing perspectives on GAs, which has an impact on their teaching and assessment (Wong et al., 2021). One might also expect that lack of conceptual clarity has its effects on promoting and implementing the concept of GAs (Green et al., 2009); for example, how can GAs be successfully integrated into HEIs' programs,

courses, or curricula and communicated to students, staff, and employers if HEIs lack awareness of what GAs are and what they are required to perform? Furthermore, when GAs are not clearly defined by the HEIs and communicated to key stakeholders, the educational system is unlikely to be successful in enhancing student knowledge of GAs (Green et al., 2009). Due to a lack of awareness of GAs, teachers might fail to integrate these GAs into their courses, and students might then fail to attain the desired GAs (Anderson, 2017; Lesley & Ranjit, 2008). It is worth noting that integrating GAs into the course does not only entail providing lists of the intended GAs with the course outline but some pedagogical practices should also be adopted to support students in acquiring and converting the GAs into personal learning goals (Hill et al., 2016; Moalosi et al., 2012). To achieve this, the successful implementation of GAs also involves more reliable assessment techniques. The difficulty in measuring GAs stems from the fact that certain value-related GAs are difficult to measure directly—GAs cannot be assessed on scales because of their disciplinary-specific nature.

The OAAAQA has clearly highlighted the importance of GAs in its quality audit manual (2008, p. 20), and what should be considered when developing them:

The HEI should describe and evaluate the effectiveness of its overall commitment to specific graduate attributes (i.e., generic qualities that any graduate, from any program in the HEI, ought to have). This may include, for example, the list of institution-wide intended graduate attributes; links between mission and graduate attributes; input from external stakeholders; method for incorporating the attributes into program curricula; assessment of attributes. How does the HEI know that its graduates embody the core knowledge, skills, and characteristics for which it wishes to be recognized?

The increasing number of graduates has contributed significantly to the shift to quality accreditation and recognition in Oman. Belwal et al. (2017) attributed the growing focus and interest in graduate attributes, particularly within the context of Oman, to three main factors. First, the increasing pressure on educational institutions to prepare and create graduates with competent employability skills. Second, the increased number of graduates and the competition among students and institutions for their accommodation and employment in the labor market. Third, the instructions of the OAAA, which indicates in the institutional standards assessment manual (ISAM) that HEIs must ensure that academic standards for the award are set at an adequate level. The OAAAQA has emphasized that academic standards must be maintained through the efficient implementation of HEIs' well-managed programs for the "design, delivery, and assessment of all students learning through coursework program" (Oman Academic Accreditation Authority, 2016, p. 33). This entails HEIs to implement effective policies and processes to

build their programs and satisfy the standards for national accreditation. The OAAAQA in its accreditation standard 2 (students learning by coursework programs) identifies GAs as an essential indication of effective practice deserving of academic certification. This requirement is in line with international standards and was accommodated by most HEIs in Oman. As a result, Omani HEIs have responded to this request by creating and designating lists of the desired general GAs for each academic program. These attributes reflect: (a) the Omani qualification framework, (b) the institutions' vision and mission, and (c) the stakeholders' expectations including the students themselves and the labor markets. The key relationship between GAs and quality assurance measures, as both are used to assess the efficacy and performance of HEI's academic programs (Yorke & Harvey, 2005), indicates that HEI's curriculums need to be redesigned to incorporate GAs. As a result, identifying, assessing, and reviewing GAs is a key indicator for any HEI to be effectively accredited (Oman Academic Accreditation Authority, 2016). For instance, according to the OAAA, the procedure for determining the level to which students have acquired these attributes must be clearly identified and executed.

Students at all academic levels are expected to have acquired these attributes by the completion of their studies. Most Omani HEIs' lists of GAs are driven by the OAAA's criteria and meet student expectations as well as labor market demands. As a result, the majority of GAs recognized and listed by HEIs in Oman have addressed, to some extent, comparable attributes related to knowledge, critical thinking, practical application, and life-long learning. This does not imply that Omani HEIs have identical lists of GAs across all HEIs and programs; there is some variation across HEIs because each mission and vision differ from one another and from one program to another.

The OAAAQA asserts that GAs need to be internally and externally benchmarked. It also states that different stakeholders, including students, professionals, and employers, should be involved in designing and developing academic programs and related GAs (Oman Academic Accreditation Authority, 2016). For example, considering the feedback from employers regarding which skills they expect from graduates, it is highly important to ensure that programs can accommodate the demands of the dynamic labor market. Despite the rising relevance of program accreditation, few studies have looked at the key difficulties and challenges surrounding GAs in the Omani setting, as detailed in the OAAAQA's audit reports.

2. Methodology

This paper relies on 12 quality audit reports related to GAs written by the OAAAQA on Omani HEIs posted on its website – see http://www.oaaa.gov.om. The quality audit process has several stages, with the overarching purpose of evaluating the effectiveness of the system in HEIs and seeing to what extent the mission and vision are achieved from an external review perspective. The external audit panel of national and international peers from academia, industry, and professions considers this portfolio and checks its completeness and accuracy through such means as interviews and cross-checking with original documentation and other information sources. The audit panel produces a quality audit report that includes commendations, affirmations, and recommendations (CARs). The OAAAQA audit reports were written by various OAAAQA panels to which the audits were entrusted. They include the so-called CARs: commendations (= Well done!), affirmations (= The HEI seems to have started dealing with the problem), and recommendations (= There is still work to be done). All accreditation outcomes or reports are clearly written and defined to ensure stakeholders understand HEI's accreditation status and any implication the outcome may have for the HEI in the future.

The selection criteria for these reports were the frequency of CARs on all of them.

We analyzed audit reports (available on the OAAAQA's website: http://www.oaaa. gov.om) of 12 Omani local HEIs (universities and colleges) as part of our research. We have chosen not to disclose the details of the HEIs in this study; however, the readers may easily access the OAAAQA website to examine these reports and the available comments regarding the HEIs' approaches in developing, implementing, and promoting GAs. By reviewing the corpus on the OAAAQAE's website – http://www.oaaaqa.gov.om –data for this study were collected and compiled based on the recommendations and affirmations made by the OAAAQA's panels on GAs across the 12 Omani HEIs. The analysis of the review was done through content analysis to identify categories (Morse, 2008), guided by the objectives of the study and the research questions. Qualitative content analysis (QCA) is "a highly flexible, pragmatic, and systematic method used for investigation of a wide range of topics" (Selvi, 2019, p. 450). The most salient issues in the reports regarding the GAs were highlighted, discussed, and reported. The OAAAQA audit reports were written by various OAAAQA panels to which the audits were entrusted; they include the so-called CARs. The recommendations are general to give each HEI the freedom to seek out solutions to their particular challenges.

The analysis was done manually and was guided by research questions. Data related to GAs were extracted from OAAAQA reports. Lists of codes and subcategories were

manually developed, and subsequently relevant data were used to answer the research questions.

3. Findings and Discussion

In general, the reviewed reports indicate that GAs are presented either in the audited HEI's students' handbook, program objectives and specifications, and are derived from the HEI's vision and mission. The reports also indicate that the majority of the inspected HEIs are committed to ensuring that students obtain these skills by the time they complete their tertiary education. Consideration of the report points to the following as key steps to bear in mind: involving key stakeholders in the process, raising stakeholders' awareness and understanding of GAs, aligning GAs with the course learning outcomes, and having the appropriate mechanism for reviewing this. These four areas will be summarized and discussed sequentially, highlighting significant recommendations.

3.1. Involving stakeholders in the GAs development process

Involving key internal and external stakeholders in the development, review process, and evaluations of the attainment of GAs was one of the most frequently highlighted issues by the OAAAQA. There should be a mechanism in place that can be used to collect stakeholders' views on the GAs. This issue is clearly articulated in the following affirmation:

The Oman Academic Accreditation Authority agrees with the … that further work is required to ensure that its defined set of key graduate attributes (KSAs) are systematically developed in students, assessed and subject to evaluation from relevant stakeholders, and supports its ongoing efforts to achieve this.

The most prominent issue in the reports and audited HEIs seems to be a lack of GA awareness among students and staff, which is likely to be a barrier to their involvement, as highlighted by the OAAAQA in the two extracts below:

There seems to be a lack of awareness of GAs across student cohorts and some staff and there is a need for a systematic awareness-raising and embedding of GAs within the College's teaching and learning activities.

From the interview with the College staff, students, and stakeholders, it became clear to the Panel that there is a lack of awareness of all GAs among the students, staff, and stakeholder, who were interviewed.

This strongly resonates with previous research (Carew & Therese, 2007; Griffin & Coelhoso, 2019; Smith & Do, 2018). For example, Carew and Therese (2007) highlighted that students' inability to develop and acquire desired GAs may be due to a lack of awareness.

3.2. Raising stakeholders' awareness about GAs

Raising stakeholders' awareness and understanding of the GAs is reiteratively seen as a key area of focus. Details of GAs should be disseminated and communicated to all stakeholders. The OAAAQA's recommendation of an Omani HEI below illustrates this issue:

The Oman Academic Accreditation Authority recommends that...increase awareness, understanding, and application of its designated Graduate Attributes among students, staff, and stakeholders.

The Oman Academic Accreditation Authority recommends that HEI undertakes a college-wide systematic program of raising awareness, understanding, and application of graduate attributes and that the College evaluate the appropriateness of the graduate attributes.

The Oman Academic Accreditation Authority agrees with the HEI that it needs to develop a systematic strategy to incorporate graduate attributes into the design and delivery of all programme curricula; to communicate graduate attributes to all stakeholders and to assess the level of attainment of these attributes, and supports its efforts in this area.

3.3. Mapping GAs against student learning objectives

Once awareness has been raised, the HEI is in a better position to map GAs onto intended learning objectives, which is an important precursor to implementation. Graduates are expected to attain several skill-based competencies, which should be academic and nonacademic, and should be derived from and aligned with the mission, vision, core values, and strategic goals of that particular HEI. This is highlighted in the following OAAAQA reports extract:

The Oman Academic Accreditation Authority recommends that the ... ensure that explicit alignment between course learning outcomes, program learning outcomes, and generic attribute attributes is established and documented for all programs.

In its reports to the audited HEIs, the OAAAQA identified a lack of explicit alignment between academic course and program learning outcomes and GAs as a major issue. In this case, explicit alignment means that a course should be taught and assessed in such a way that students meet specified course learning goals, which will contribute to the accomplishment of course learning outcomes and, eventually, the attainment of university graduate attributes (Smith & Do, 2018). The following extract indicates OAAAQA's concern in this regard: "The College needs to develop a more systematic strategy for embedding its graduate attributes within the design and delivery of the curriculum."

This suggests that there is a substantial gap in showing how GA development is incorporated into academic courses and programs. Although it is widely accepted that students' development of GAs should be integrated into the curriculum, teachers have struggled to adopt this approach due to a lack of awareness of GAs, time, resources, and confidence (Ho et al., 2014; Wong et al., 2021). In theory, students who successfully finish a course should have progress toward the achievement of the desired GAs; nevertheless, the complexity associated with the embedded method might mean that students are not able to realize and comprehend the importance of these GAs (Anderson, 2017; Smith & Do, 2018). To support, develop, and measure the range of skills and attributes of graduates, it is especially important to design academic courses that encourage a deep approach to learning. Students need a variety of written and oral learning activities, as well as individual and group-based practices and assessments, which allow them to practice and improve graduate attributes (Lesley & Ranjit, 2008). According to Lesley and Ranjit (2008), the lecture-exam mode may contribute little to the development of higher-order thinking abilities, beliefs, and attitudes related to personal and intellectual autonomy, as well as research and inquiry. GA development is successfully done in disciplinary contexts, as an integrated part of the curriculum, rather than being added on. Therefore, a checklist approach to GAs, as well as traditional approaches to teaching and learning, such as the "bolt-on approach," are regarded as useless since they foster a fragmented curriculum (Bath et al., 2004, p. 316). The teaching of GAs should not be done in decontextualized attributes/skills courses, and proper attributes integration will entail certain changes to the curriculum's methodology and content, and the adaptation to new teaching and learning approaches (Bath et al., 2004; Green et al., 2009; Hill et al., 2016; Moalosi, et al., 2012). This is clearly reflected in the OAAAQA's recommendations:

*The Oman Academic Accreditation Authority recommends that the College ....
develop a strategy to incorporate graduate attributes into the curriculum, communicate*

them to all key stakeholders and to monitor students' progress and achievements in these areas.

The Oman Accreditation Council recommends that the College ... ensure that the course content of all programs is clearly linked to the stated learning outcomes and the College's graduate attributes and greater efforts are made to communicate these to students.

3.4. Reviewing GAs

The report also highlights that in order for GAs to be effectively mapped and remain subsequently relevant, HEIs should systematically and periodically carry out appropriate evaluations. They should be benchmarked and assessed, obtaining feedback from relevant stakeholders during the process as laid out below:

The Oman Academic Accreditation Authority recommends that HEI review its graduate attributes and ensure that they are embedded in its curricula and that the attainment of these attributes is evaluated systematically both internally and externally and on a systematic basis.

HEIs certainly need to provide reliable and systematic methods for determining whether students have acquired these skills or not. As far as quality assurance and accountability are concerned, adopting more accurate techniques for assessing GAs is a significant challenge. This is because institutions are increasingly being asked to demonstrate the attainment of their goals, including those linked to these GAs and learning outcomes. Assessment of performance against each university's declared objectives is one of the key elements of the OAAAQA approach. This involves evaluating their performance concerning the stated GAs (Lesley & Ranjit, 2008). While some attributes may be assessed directly and formally, for example, through cocurricular activities, assessing the attainment of affective attitudes and values-related attributes is far more complicated and challenging (Green et al., 2009; Hill et al., 2016). The OAAAQA expects HEIs to utilize a variety of methods to assess how effective graduates have been in acquiring these skills. This is reflected in the following excerpt:

Although the College states that the graduate attributes are evaluated both internally and externally (Portfolio, p. 18), the panel saw no evidence of a clear, systematic link between these, the curriculum and the assessment of learning outcomes. Some attributes, such as application of knowledge, may be monitored through examination results, but others, such as social responsibility, are difficult to measure.

Both students and academics/teachers must be motivated and proactive when integrating GAs into the curriculum, and their relevance must be regularly reviewed. If lists of GAs are provided in the course outline without a standardized evaluation method in place to assess them, teachers and students are unlikely to take them seriously (Green et al., 2009; Wong et al., 2021). Apart from providing evidence of desired outcomes for quality assurance purposes, assessing the development of GAs in students contributes significantly to boosting awareness of such attributes among students and teaching staff, as well as encouraging more engagement in the development of these areas of higher education (Bath et al., 2004; Lesley & Ranjit, 2008).

We also believe that employer feedback is the most reliable method of determining whether graduates have developed these skills. However, the OAAAQA audited reports suggest that the lack of involvement of stakeholders, particularly employers, in developing and reviewing the GAs remains a major concern pointed out by the OAAAQA. According to the audited reports, employers and industry representatives have noted that commitment, interpersonal skills, critical thinking, and graduate communication skills require more attention from HEIs. This indicates that HEIs need to assess and review their GAs regularly to respond effectively to the dynamic changes in labor markets and their demands by equipping their graduates with the necessary attributes to meet their employers' expectations.

4. Conclusion

This study argues that the development of a program begins with clear awareness, understanding, and establishment of the GAs that influence learning goals so that key stakeholders can be engaged and involved. HEIs must ensure that these attributes are clearly defined and integrated into the curriculum and that they are effectively assessed in terms of students' attainment of these attributes as well as employer input. These attributes must also be benchmarked and regularly assessed locally and internationally. A key contribution of this study is that it focuses on OAAAQA's reports which have not received sufficient attention from researchers. This study provides evidence that there is a need for a comprehensive approach for developing GAs in Omani HEIs. There has been a strong focus on OAAAQA's reports of concerns related to GA implementation in HEIs. While it has been useful to provide a comprehensive review of this, future studies that consider the perceptions of key stakeholders such as students, academic staff, and employers will serve to further enrich these insights. There is indeed a vast potential for future research, which could also include an additional review of the relationship

between the GAs and the learning objectives. The use of other supporting methods of data collection to investigate these reports – such as observations or interviews with key stakeholders – is recommended. It would thus be helpful to have more studies of the salient issues raised in the OAAAQA quality audit reports employing more multifaceted approaches so that both educators and policymakers can better steer their quality assurance endeavors.

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