



United Nations
Educational, Scientific and
Cultural Organization



International Institute
for Educational Planning

From Externally to Internally Driven Quality Assurance University of Bahrain

Bassam AlHamad and
Rama Aladwan

Bahrain



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Bassam AlHamad and Rama Aladwan

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Abbreviations

ABET	Accreditation Board for Engineering and Technology
AIMS	Assessment Information Management System
APPR	action plan progress report
BCE	Bahrain Centre for Excellence
BEDB	Bahrain Economic Development Board
BEM	Bahrain Excellence Model
CILOs	course intended learning outcomes
DAC	Department Accreditation Committee
DHR	Directorate of Higher Education Reviews
EQA	external quality assurance
ERB	Education and Training Reform Board
GDQ	General Directorate of National Qualification
GPA	grade point average
HEC	Higher Education Council
HEIs	higher education institutions
IAO	internal audit office
ILOs	intended learning outcomes
IQA	internal quality assurance
IT	information technology
KPIs	key performance indicators
NAQQAET or QQA	National Authority for Qualifications and Quality Assurance for Education and Training
NQF	national qualifications framework
PAC	programme advisory committee
PCAC	programme and course assessment cycle
PCAP	Professional Certificate in Academic Practices
PEOs	programme education objectives
PIs	performance indicators
PILOs	programme intended learning outcomes
QA	quality assurance
QAAC	Quality Assurance and Accreditation Centre
QAC	Quality Assurance Committee
QAE	Quality Assurance Executive
SAC	Student Advisory Committee
SER	self-evaluation report
SWOT	strengths, weaknesses, opportunities, threats
T&L	teaching and learning
UNDP	United Nations Development Programme
UoB	University of Bahrain

Introduction

Student numbers have increased tremendously in the Kingdom of Bahrain since 2002, driven by growing social demand for access to higher education (University of Bahrain, 2010; Economic Development Board, 2013). Wider access to higher education was necessary to address the diversifying demands of the local labour market, as the country moves from an oil-based to a knowledge-based economy. Improving the quality of higher education was considered essential to this process.

The University of Bahrain (UoB) was founded in 1986, a result of the merger of two higher education colleges. It is now the largest university in Bahrain, with 20,332 students based there in 2014/15. The UoB is the only national university in Bahrain and mainly offers undergraduate bachelor degrees as well as some postgraduate degrees. The university's internal quality assurance (IQA) system aims to continuously improve the quality of its academic programmes and to enhance the employability of its graduates.

In spite of the fact that quality assurance (QA) at the university was, initially, externally driven, the university has, over a number of years, developed its own internal quality assurance system, which is now supported by well-documented quality policies, procedures, and instruments. The university uses a large number of tools to produce data directly intended to enhance the quality and labour market relevance of study programmes. The IQA system at the University of Bahrain is also strongly evidence-based and includes the use of measures and key performance indicators (KPIs), outcomes, and feedback from internal and external stakeholders (including students, staff, employers, and the community). It is a system based on professionalism, dialogue, and knowledge-sharing (Al-Alawi *et al.*, 2009).

An important aspect of IQA at the university is that the established IQA structures balance centralized and decentralized IQA procedures. It has developed a highly decentralized and well-coordinated support structure for IQA, with distinct responsibilities for each actor. In order to guide and harmonize IQA processes, the preparation of policies, tools, and calendars is carried out at central level by the university's Quality Assurance and Accreditation Centre (QAAC), while tools are implemented at college and departmental levels. Data are analysed at all levels and reported to university leaders.

The university was pleased to participate in IIEP's research project, entitled 'Exploring innovative and effective methods of internal quality assurance in higher education: What are the effects on teaching and learning, employability and management?' The general objective of the project was to generate knowledge in order to provide evidence-based policy advice to national and institutional higher education leaders on innovative and cost-effective solutions for IQA systems in universities.

Guided by this general objective, this case study aims, first, to describe the University of Bahrain's IQA system and highlight its principles and innovative elements. Second, it sets out to demonstrate the level of awareness of university staff of IQA, and the extent of their involvement in it. These are considered to be crucial elements of an effective IQA system. Third, the study endeavours to establish the effects of IQA on teaching and learning, graduate employability, and management. Finally, it identifies the internal and external factors that condition the effective functioning of IQA, and considers overall perceptions of the effectiveness of IQA at UoB.

In order to achieve the objectives, this study takes a multi-stakeholder approach. These stakeholders include academic and administrative staff, students, and senior academic and administrative leaders. The views of academic and administrative staff are investigated through two online surveys, specifically adapted to address the IQA instruments with

which academic and administrative staff are typically familiar. Semi-structured interviews were conducted with senior and middle-level academic and administrative leaders and students in order to capture the views of different stakeholders at UoB in more depth. Official documents and literature on Bahraini higher education, and UoB specifically, served as secondary data sources in describing the national and institutional contexts of the university's IQA system.

This study consists of five chapters. Bahrain's national higher education system and its external quality assurance (EQA) mechanisms are described in *Chapter 1*, while *Chapter 2* focuses on the institutional fabric of the University of Bahrain in terms of academic offer, strategic orientation, and governance structure. *Chapter 3* describes the university's IQA policies, instruments, and overall structures, highlighting, in particular, the role of IQA instruments in enhancing employability. *Chapter 4* sets out the findings of the academic and administrative survey questionnaires, interviews, and focus group discussions, using the data to examine staff awareness of the IQA system and their involvement in it. It also evaluates the effect of the IQA system on teaching and learning, employability, and management, discussing its internal and external conditioning factors and stakeholders' overall appreciation of its effectiveness. The conclusions are discussed in *Chapter 5*.

1. The national higher education system

This chapter describes Bahrain's national higher education system, including the recent development of the national quality assurance system, organized under the Higher Education Council (HEC) and the National Authority for Qualifications and Quality Assurance of Education and Training (NAQQAET). These two bodies are responsible for external quality assurance in Bahrain, work that involves institutional reviews, external programme reviews, and the national qualifications framework (NQF).

1.1 Higher education in Bahrain

Bahrain is a small, high-income country with a total population, as of 2013, of 1.3 million inhabitants. For many years, Bahrain has been at the forefront of public education in the Gulf region. By the late 1960s, the country had established a number of public higher education institutions (HEIs), such as the Teachers' College, established in 1966, the Gulf Technical College (1968), the College of Health Sciences (1976), the College of Arts, Science, and Education (1978), the Arabian Gulf University (1979), and the University of Bahrain (1986), a result of a merger between the Gulf Technical College and the University College of Arts, Science, and Education (Madany, 1988).

The number of private HEIs in Bahrain has increased since 2000, a trend accelerated by the economic and social needs of the country. Although public institutions were more affordable for students, the number of places available was limited. As public HEIs could not meet the growing demand for higher education, the establishment of private HEIs emerged as a possible solution. During the 2000s, Bahrain experienced a rapid expansion in the number of private HEIs. More than 10 private institutions were established by either local or foreign investors (Karolak, 2012). The expansion of private HEIs is expected to increase the competitiveness and advancement of the Bahraini higher education overall.

Table 1.1 Higher education institutions in Bahrain in 2015

Name	Year of establishment	Status	Qualification
Arabian Gulf University	1979	Public	BSc, MSc, MBA
University of Bahrain	1986	Public	BSc, MSc, MBA, PhD, BA, MA, AD
Ahlia University	2001	Private	BSc, MSc, MBA, PhD
The Kingdom University	2001	Private	MBA, BSc
Gulf University	2001	Private	BSc, MSc, MBA
University College of Bahrain	2001	Private	BSc, MBA
AMA International University	2002	Private	BSc, MSc, BA, MBA
Arab Open University/Bahrain	2002	Private	BSc, MBA
Applied Science University	2004	Private	BSc, MSc, MBA
RCSI Medical University of Bahrain	2004	Private	BSc, MSc
Royal University for Women	2005	Private	BSc, MSc, MBA
Bahrain Polytechnic	2008	Public	BSc, Diploma
Talal Abu-Gazaleh University College of Business	2012	Private	BSc

Source: Higher Education Council, 2015b.

Table 1.1 gives an overview of both public and private higher education institutions in Bahrain (Higher Education Council, 2015b).

1.2 National quality assurance system and instruments

In 2001, the Bahrain Executive Development Board (BEDB) identified education as one of six priorities for the country's economic development (Al-Alawi *et al.*, 2009). It started the Higher Education City project to create a higher education hub and ensure 'a technologically skilled workforce for the current and future labour market in Bahrain and the region' (Knight and Morshidi, 2011). Bahrain's 2002 draft constitution says that the state should encourage scientific research as well as providing educational and cultural services to citizens. Education, it continues, should be free and compulsory in order to eradicate illiteracy (AlSaleh, 2008). Such initiatives and undertakings demonstrate the commitment of the Bahraini government to improve educational opportunities and produce skilled graduates in the country.

Despite a large number of graduates from Bahraini public and private HEIs entering the labour market, many private institutions have, nonetheless, been found to have low standards of education due to the lack of formal supervision of their activities. Demand for universities to manage the quality of their graduates and academic programmes grew (Allen Consulting Group, 2009). At the same time, international agencies, such as UNESCO, the World Bank, and the United Nations Development Programme (UNDP), encouraged the widespread adoption of quality assurance in developing countries where higher education had expanded (Al-Alawi *et al.*, 2009). UNDP's regional bureau for Arab states funded a range of projects related to quality assurance to review the academic programmes of leading private and public universities and develop a regional database and quality indicators across programmes, staff, and finances. Increasing demand for quality assurance, from both Bahraini universities and international agencies, led the Bahraini government to establish the Higher Education Council in 2006, and the National Authority for Qualifications and Quality Assurance for Education and Training in 2008.

Higher Education Council

The Higher Education Council (HEC) was formed under the authority of the Minister of Education in order to implement higher education legislation passed in 2005. This stipulates that an academic accreditation committee should be established to develop academic criteria and conduct the institutional accreditation of Bahraini HEIs. The committee must consist of experts and specialists in higher education. Its members are appointed by the prime minister under Law No. 3 on Higher Education (Bahrain, 2005). The HEC's mandate is to monitor study programmes and thus improve the performance of universities (Higher Education Council, 2015a). In 2007, it adopted a new regulation on accreditation to address administrative affairs, scientific research, and student affairs beyond the programme review (Higher Education Council, 2007). It also adopted policies and procedures to manage the governance of the HEIs.

National Authority for Qualifications and Quality Assurance of Education and Training

Another important step for quality assurance was the formation of the National Authority for Qualifications and Quality Assurance for Education and Training (NAQQAET) in 2008. NAQQAET was created to establish quality standards for the whole education system, including higher education institutions. Two of the authority's five directorates are mainly focused on higher education institutions: the Directorate of Higher Education Reviews (DHR) and the General Directorate of the National Qualifications Framework (GDQ) (NAQQAET, 2015). The DHR's main responsibility is to conduct reviews of institutions and their programmes. Since institutional and programme reviews aim to evaluate stakeholders' capacity in the four functions of quality assurance (leadership and

management, teaching and learning, research, and community engagement) (NAQQAET, 2013), capacity development was considered as one of the main responsibilities of the DHR. The GDQ, on the other hand, is in charge of the administration and management of the development of the NQF.

National qualifications framework

The aim of the NQF is to ensure the design, consistency, and clarity of Bahrain’s qualifications meet national and international requirements (NAQQAET, 2013). The NQF was established by the Education and Training Reform Board (ERB) in 2012. Stakeholders, such as private and public HEIs, employers, and government bodies, have also been engaged in its development. The framework allows for the 10 NQF levels to be aligned with national and international qualifications, as described in *Figure 1.1* (NAQQAET, 2013).

Figure 1.1 National qualifications framework levels



National quality assurance instruments

The following mechanisms for external quality assurance have been developed in Bahrain: institutional review, programme review, and institutional accreditation. These mechanisms have played a major role in the development of internal quality assurance within Bahraini higher education institutions.

Institutional review

Institutional review aims to assess the effectiveness of an institution’s quality assurance system against a predefined set of quality indicators, comparable to international standards. The process is intended to identify the system’s strengths and those areas where there are opportunities for improvements (NAQQAET, 2009). Assessment is carried out by a peer review panel comprising international and regional experts in higher education. After receiving a self-evaluation report from an institution, the panel prepares a review report assessing the effectiveness of its institutional quality management systems. This report goes through a number of validation processes before being presented to the

NAQQAET board for approval and to the cabinet of ministers for endorsement. It is then posted on NAQQAET's website.

Programme review

Programme review focuses on assuring the quality of existing academic programmes within a particular discipline or subject area. Its purpose is to ensure that students graduate with the skills and knowledge necessary to contribute to the economic development of Bahrain. As with institutional review, universities prepare a self-evaluation report, which is submitted to NAQQAET's Directorate of Higher Education Reviews. Following review, a report is produced setting out whether or not each programme meets minimum standards, and making recommendations for improvement. All programmes within a college are reviewed simultaneously.

Programme reviews are carried out using four indicators, each of which has a number of sub-indicators:

- The learning programme.
- Efficiency of the programme.
- Academic standards of graduates.
- Effectiveness of quality management and assurance.

Institutional accreditation

Bahrain's Higher Education Council and the British Accreditation Council worked with international experts to develop standards and mechanisms for the international accreditation of Bahraini HEIs in 2015. However, as this is a new project, Bahrain's HEIs have just begun the process of accreditation.

2. Institutional environment

This chapter describes the development of the University of Bahrain, from the merger of two colleges which created it in 1986 to its present status. The academic offer of the university is outlined, while its governance structure and strategic orientation are discussed, with a particular focus on quality and the employability of graduates.

2.1 History of the University of Bahrain

The University of Bahrain was created in 1986 as the only national higher education institution in the Kingdom of Bahrain. It was created through the merger of two HEIs, the Institute of Gulf Polytechnic and the University College of Bahrain (Al-Alawi *et al.*, 2009). Gulf Polytechnic mainly offered engineering and business programmes, while the University College of Bahrain provided programmes in arts, science, and education. The merger was intended to provide students with better services and more resources. Today, the university is spread across three campuses: the Sakhir Campus (the main campus), Isa Town Campus, and Manama Campus in Salmaniya.

Since 1999, when the university lowered its admission criteria and began accepting students with a grade point average (GPA) of 70 per cent or above in their high school examination, the number of students at UoB has increased rapidly. Catering for the needs of a more diverse group of students, in terms of ability and attainment, meant a less efficient use of university resources. In response, the university introduced a test in mathematics, English, and Arabic, which high school graduates are required to pass. The results, together with the student's high school GPA, are used by the university to assess applications for particular programmes. Those unqualified for their chosen programme are directed to the College of Applied Studies where they can study for a diploma in any of UoB bachelor's programmes. Students who obtain a GPA of 3.00 out of 4.00 in the diploma programmes have the option of taking a bachelor's degree in their desired UoB College.

2.2 University statistics

Figure 2.1 illustrates the gradual increase in student enrolments at UoB. The figures indicate that the number of students enrolled at the university almost doubled, from 11,791 in 2008/09 to 20,332 in 2014/15. Student enrolment has increased particularly rapidly since 2011/12, with an average annual increase of 2,000 students per year. In 2014/15, student enrolment exceeded 20,000.

Figure 2.2 shows changes in the number of academic and administrative staff between 2009/10 and 2014/15 (University of Bahrain, 2015a). Despite a slight fall between 2009/10 and 2010/11, the number of academic staff has gradually risen, to 795 in 2014/15. The number of administrative staff also steadily increased between 2009 and 2012, reaching a peak of 1,210 in 2011/12. Numbers fell from 2012 onwards, to 1,119 in 2014/15.

Figure 2.1 Number of students enrolled at UoB from 2008/09 to 2014/15

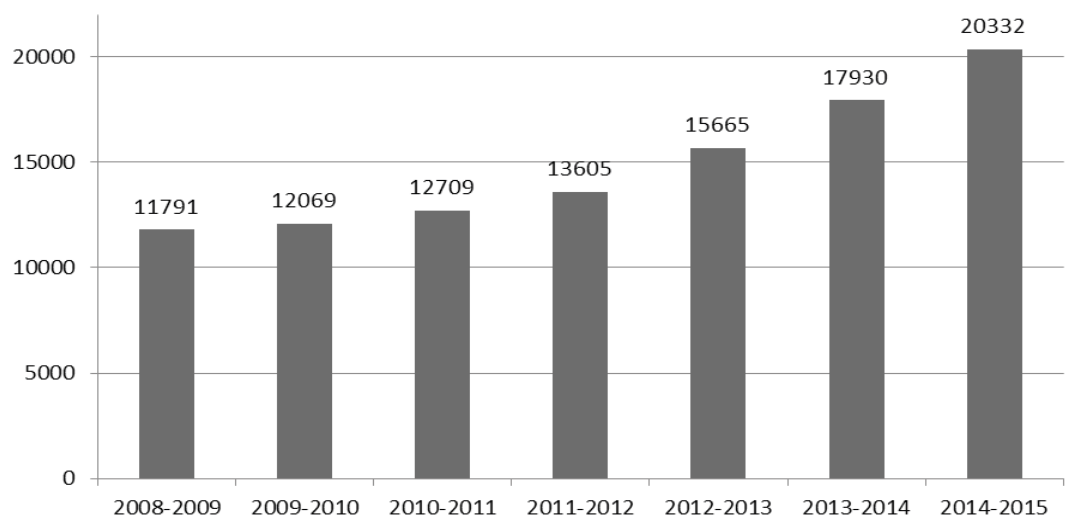
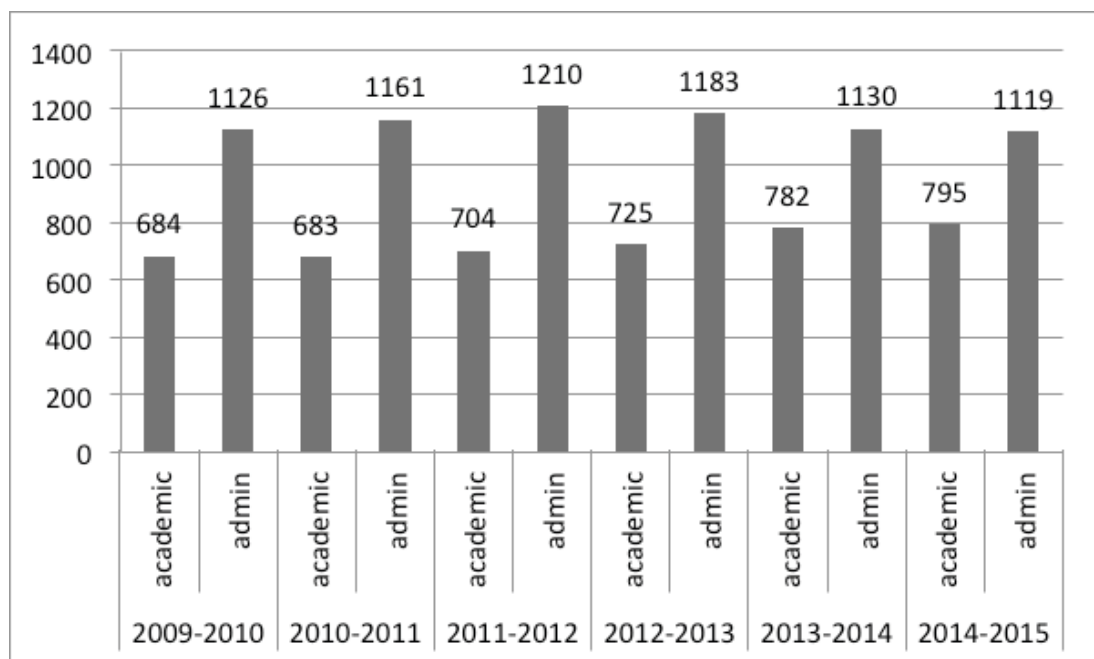


Figure 2.2 Number of faculty (teaching) and administrative staff at UoB between 2009/10 and 2014/15



The university consists of 10 colleges, as shown in *Table 2.1*, reflecting its multidisciplinary nature. Since it was created in 1986, the university has focused on the enhancement of graduate employability, developing numerous programmes with direct relevance to the labour market and the needs of society. A wide range of academic programmes are offered at both undergraduate and postgraduate levels.

Table 2.1 Programmes offered by University of Bahrain and the total number of students and faculty members in 2015/2016

College	Programme(s)	Students*	Faculty*
College of Arts	<ul style="list-style-type: none"> • Five master's programmes in language and education, • Three postgraduate diplomas in education and counselling, • Ten bachelor's programmes in communication studies, social work, language, and cultural studies, • One associate diploma in cultural studies 	3555	171
College of Business	<ul style="list-style-type: none"> • One master's programmes in business administration, • Five bachelor's programmes in business 	5333	79
College of Science	<ul style="list-style-type: none"> • Four master's programmes, • Six bachelor's programmes in the natural and formal sciences 	824	91
College of Engineering	<ul style="list-style-type: none"> • One doctoral programmes, • Five master's programmes, • Eight bachelor's programmes in engineering 	3611	133
College of Physiotherapy and Physical Education	<ul style="list-style-type: none"> • Two PhDs programmes, • Three master's programmes, • Two bachelor's programmes in physical education and physiotherapy 	806	25
College of IT	<ul style="list-style-type: none"> • One master's programme, • Three bachelor's programmes in IT 	1488	73
College of Law	<ul style="list-style-type: none"> • One PhD programme, • Two master's programmes, • Two bachelor's programmes in law 	1981	39
College of Health Sciences	<ul style="list-style-type: none"> • Six bachelor's programmes, • Four associate diplomas, • Five diplomas in health sciences 	524	77
Bahrain Teachers' College	<ul style="list-style-type: none"> • Four bachelor's programmes, • Nine postgraduate diplomas, • Three certificates in education 	868	60
College of Applied Studies	<ul style="list-style-type: none"> • Eight associate diploma programmes in business, engineering, and IT 	1342	47

Source: University of Bahrain, 2015a.

*Note: Total number of students/faculty members in 2015/2016.

2.3 Vision, mission, and strategy

Vision

The university aims to be internationally recognized for excellence in student learning, innovative research, and community engagement that contributes to the economic vitality, sustainability, and quality of life in the Kingdom of Bahrain, the region, and beyond.

Mission

The current university mission placed a greater emphasis on building partnerships with the public and private sectors and the university's contributions to a global society. The basis

for its mission is clearly stated within the functions outlined in the decree that created the university.

Strategic orientation

The realisation of the university's vision and new mission has been plotted into the UoB strategic plan. The strategic plan consists of a set of goals, all of which are further broken down into strategic initiatives. In order to monitor the level of achievements for each goal, a set of key performance indicators (KPIs) have been developed including current performance, progress, and success criteria. These performance indicators are updated annually.

Before preparing a new strategic plan, UoB typically undertakes a SWOT analysis with the involvement of various stakeholders. This includes academic and administrative staff, students, employers, alumni, and parents. The following challenges were highlighted from the most recent SWOT analysis: the quality of graduates and research output. The identification of these challenges, in turn, led to the development of the UoB Strategic Plan 2009–2014 and, subsequently, its strategic plan 2015–2018.

UoB's 2009–2014 strategic plan had a set of five fundamental goals:

- Goal 1: Raising the quality of teaching and learning.
- Goal 2: Improving the quality and quantity of research.
- Goal 3: Building national and international partnerships.
- Goal 4: Aligning governance and administration with international best practice.
- Goal 5: Sustainable infrastructure and resources.

The first strategic plan reflected the externally driven nature of the strategic orientation with a frequent reference to the phrase 'international best practice' in its strategic initiatives. The obtainment of national and international accreditation was suggested as a way of improving the quality of teaching and learning (Goal 1). Also, it was recommended that international best practice was to be adopted when reviewing the quality of research outcomes (Goal 2). This strategic plan highlighted the function of building national and international partnerships as a basis for university development and innovation (Goal 3). The governance, administration, and support services were advised to align with international best practice (Goal 4). Lastly, as a strategy for sustainable infrastructure and resources, one of the strategic initiatives specified the responsibility of the university following best practices in deployment of resources (Goal 5). The strategic plan 2009–2014 therefore showed its tendency of relying on the international best practices in order to realise the institutional goals. Moreover, neither the goals nor the strategic initiatives addressed 'how' to implement institutional changes, only identifying 'what' to be changed for the development and innovation of the university.

The UoB's 2009–2014 strategic plan therefore provided the foundation of developing a new strategy for 2015–2018 with the following areas of focus:

- Goal 1: Advance excellence in teaching and learning,
- Goal 2: Advance research and innovation,
- Goal 3: Enhance programmes' quality,
- Goal 4: Foster student success,
- Goal 5: Enhance outreach and engagement,
- Goal 6: Strengthen infrastructure and resources,
- Goal 7: Streamline management process

The new strategic plan is more focused on 'how' to implement institutional changes through strategic goals and initiatives, complementing the problematic side of the previous strategic plan. In order to achieve excellence in teaching and learning (Goal 1), the new plan suggests adopting the student-centred approach as well as expanding faculty

development. According to the UoB strategic plan 2015–2018, the research activities are expected to increase by improving research infrastructure, funding opportunities and technical/administrative support (Goal 2). The alignment of the academic programmes with the market needs and national priorities is recommended for enhancing the quality of programmes (Goal 3).

Another notable difference between the two strategic plans is the inclusion of two additional strategies related to programme quality (Goal 3) and student success (Goal 4), all of which are closely related to teaching and learning (Goal 1). This indicates the UoB's strategic focus of teaching and learning over other areas.

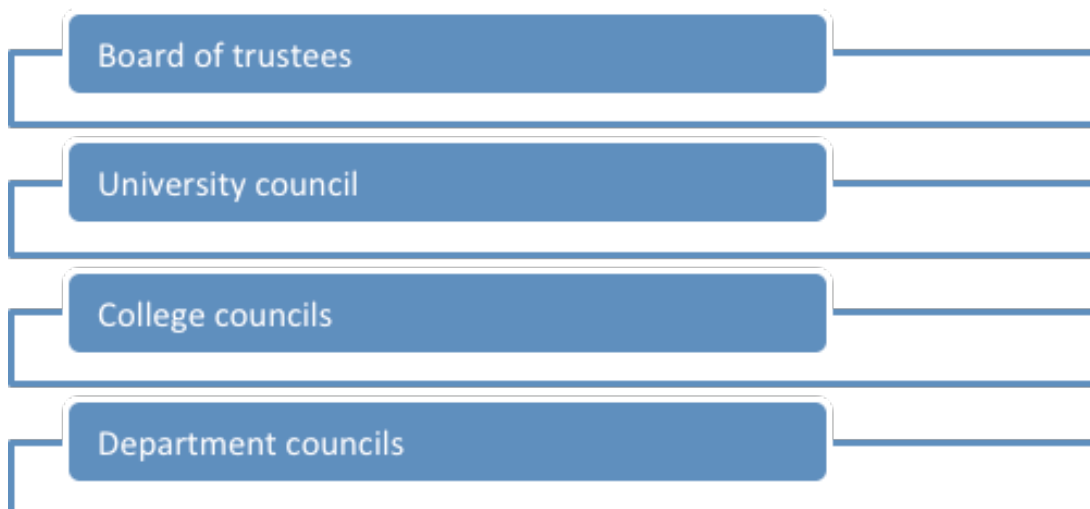
It is also interesting to note that the role of the governance and administration is embedded in various organisational activities such as teaching and learning as well as research in the strategic plan 2015–2018. On the other hand, the strategic plan 2009–2014 separated its function only in reference to administrative affairs such as developing the university database system and establishing rules and regulations. The new strategic plan states the enhancement of the research infrastructure and student success through the technical and administrative support. In addition, the development of faculty and support staff assessment systems is advised as one of the strategic initiatives for improved teaching and learning.

Lastly, the strategic plan 2015–2018 encourages the active participation of different stakeholders, acknowledging the importance of their roles to the development of the university. This can be observed in terms of enhancing outreach and engagement (Goal 5). This goal expands the engagement and outreach activities not just of students and alumni but also of faculty and staff. This is in contrast to the goal of building national and international partnerships (Goal 3) in the previous plan, which suggested increasing students' international exposure and alumni participation without any specific reference to the role of faculty and staff to achieve this goal.

2.4 Governance structure

UoB has a traditional governance and administrative structure, organized across four levels: a board of trustees, a university council, college councils, and department councils as illustrated in *Figure 2.3*.

Figure 2.3 UoB governance structure



Source: University of Bahrain, 2016.

The board of trustees consists of 10 appointed members who serve for four years on a renewable basis. As the supreme president of UoB, the King of Bahrain appoints the members of the board of trustees. The board is chaired by the minister of education, and the university’s president is a member, alongside high-ranking government officials, ministers, and representatives from the private sector. The board generally supervises the overall performance of the university and is responsible for decision-making on the policies and strategies which need to be in place in order for the university to achieve its objectives.

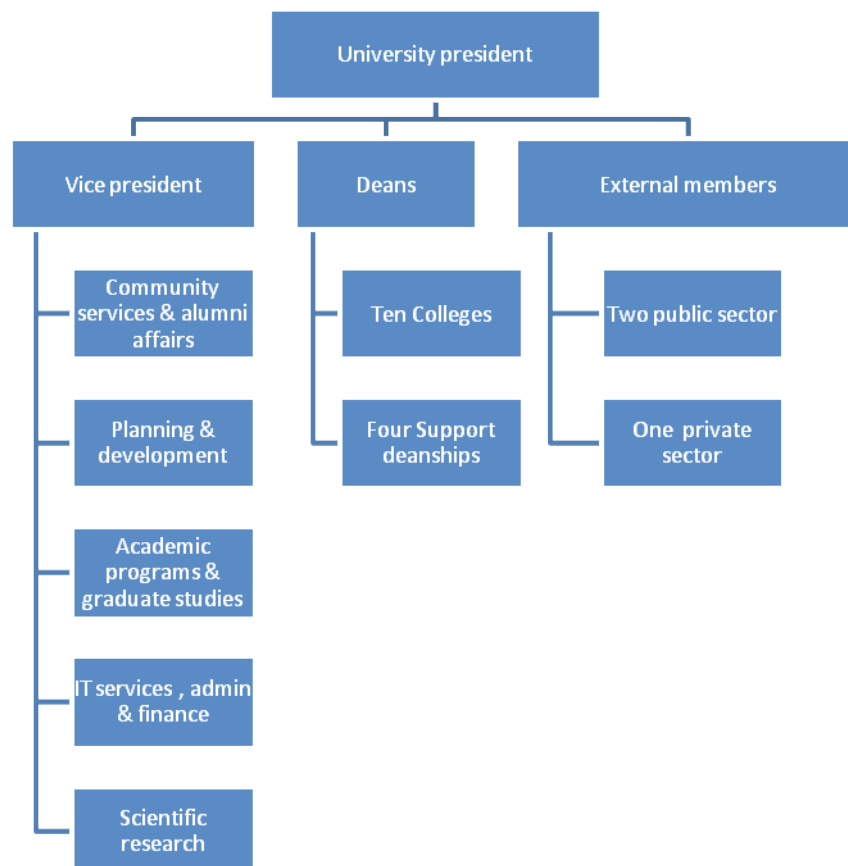
UoB’s university council is chaired by its president. It comprises five vice-presidents, deans, and three external members nominated by the president and approved by the board of trustees. They serve a three-year, one-time renewable term. The council acts as an executive authority to help the university president effectively manage academic and administrative affairs. It also proposes and/or amends university regulations, study plans, scholarships, and contracts with teaching personnel. The council is required to report all such activities to the board of trustees for approval.

Each college has its own college council, which supervises the activities of academic programmes and departments within each college. It is mainly concerned with issues relating to students and quality development, and the implementation of resolutions of university authorities, particularly the board of trustees and the university council.

The department councils make proposals with a specific focus on study programmes and research topics, examinations, and other extracurricular affairs.

After identifying several points for improvement within this structure, a goal was set within the 2015–2018 strategic plan (University of Bahrain, 2015b) to review and streamline the university governance process.

Figure 2.4 UoB University Council



Source: University of Bahrain, 2016.

3. The IQA system at the University of Bahrain

This chapter describes the development and current structure of the University of Bahrain's IQA system, before discussing how UoB has managed to balance centralization and decentralization through its IQA system. Documents on quality assurance (policy and manuals) are presented, as are quality assurance processes and the IQA instruments for teaching and learning, employability, and management.

3.1 The development of IQA at the university

Prior to the establishment of the IQA system at UoB, there were few formal procedures for academic processes such as the development of new academic programmes or periodic programme reviews. Academic programmes and courses lacked clearly stated objectives and learning outcomes, and there were no specific quality standards or regular performance measures for programmes. Nor were there any standard methodologies to support transparency in assessing the performance of the university.

Furthermore, there was no actual measurement of the contributions of programmes, or their graduates, to society. Decisions concerning each programme were made according to the needs of the department or college. There was little cooperation between the university and its stakeholders in the development of academic programmes, and what there was tended not to be either continuous or standardized. The revision of academic programmes was, therefore, subject to the perceptions and untested observations of academic staff.

UoB has undergone two successive waves of developments in its internal quality assurance practice (Al-Alawi *et al.*, 2009). The first wave started in the late 1990s and lasted until 2008. It was marked by the following major milestones:

- In 1997, the Centre for Measurement and Evaluation introduced a course evaluation survey to collect student feedback every semester.
- During 2003 and 2004, the UNDP organized QA training and programme reviews. They introduced outcomes-based assessments and reviewed three academic programmes through the British Quality Assurance Agency for Higher Education (BSc in Computer Science in 2003, BSc in Accounting 2004, and BSc in Chemical Engineering 2006).
- In 2005, the university prepared for international accreditation of academic programmes in the College of Engineering and the College of IT by the US-based Accreditation Board for Engineering and Technology (ABET).
- Between 2007 and 2010, a number of academic programmes obtained international accreditation: six engineering programmes were accredited by ABET in 2007/08, a chemistry programme (by the Canadian Society for Chemistry) in 2009/10, and three information technology (IT) programmes (by ABET) in 2009/10. The ABET accreditation process introduced self-assessment, continuous improvement cycles, and an outcomes-based approach (Al-Alawi *et al.*, 2009).
- In 2007, UoB participated in a pilot institutional review with the Bahraini Quality Assurance Authority and the Australian Universities Quality Agency.
- In 2008, UoB joined the Bahrain Centre for Excellence (BCE) programme to incorporate business excellence practices into its academic and administrative units. This included performance measurement and institutional self-evaluation.

The second wave in the development of quality assurance practices at the UoB began in 2009 when UoB established its University Quality Assurance and Accreditation Centre

(QAAC). The centre was created to support quality improvement initiatives within the university. Today, its mission is to promote excellence in educational practice and quality of services by creating a culture of self-evaluation and improvement at all levels of the institution. Quality assurance offices and committees were also developed, at college and department level, respectively. These structures were established to support quality assessment of academic programmes and supporting units.

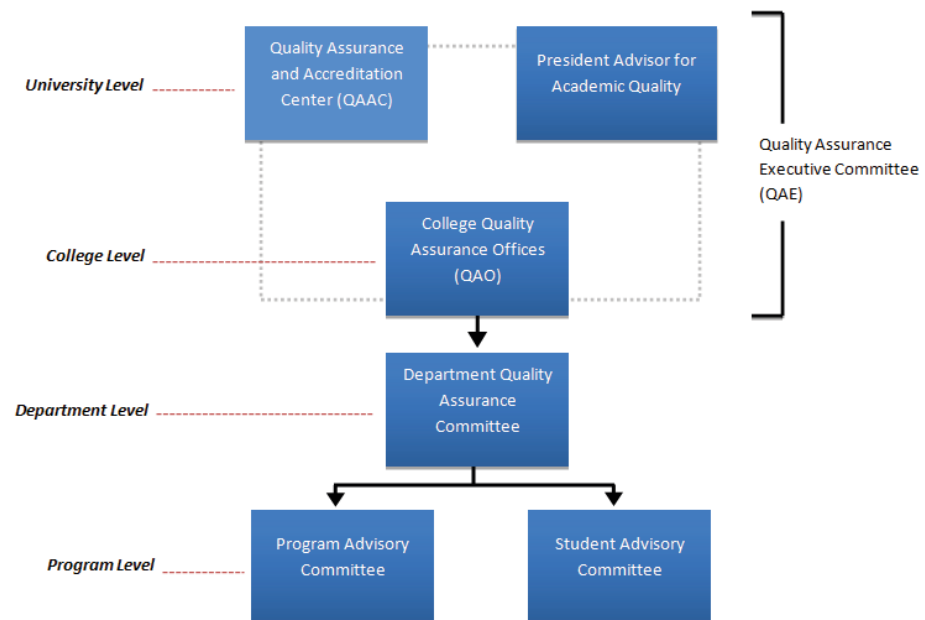
The quality assurance activities developed at UoB were based on the following procedures:

- a. Outcomes-based assessment focused on intended learning outcomes for both programmes and courses in order to have a measure of student success and compliance with market needs.
- b. The adoption of a continuous improvement cycle through self-assessment, with the involvement of key stakeholders such as students, alumni, faculty, and employers.
- c. The establishment of a quality structure.
- d. The documentation of standards, policies, and procedures for the implementation and sustainability of the IQA system.

3.2 IQA structure at UoB

Internal quality assurance processes at UoB are managed by a university-wide structure, though they are led mainly by the QAAC. The QAAC is an executive committee for quality assurance in charge of coordinating and monitoring overall quality assurance activity at the university. At a decentralized level, colleges and departments have the full authority and responsibility for the implementation of IQA tools in improving their programmes. Decentralization helps colleges and departments to maintain the quality of their programmes autonomously, through the improvement cycles, while centralization helps to maintain quality across colleges and departments.

Figure 3.1 UoB quality assurance structure



Source: AlHamad and Aladwan, 2016.

Engagement in the structure is encouraged through a system of incentives. Staff who are part of QAAC or who are in charge of quality assurance activities at college and department level are exempted from teaching two courses and provided with an incremental increase in salary. The heads of quality assurance committees are exempted from one course in

their teaching load. *Figure 3.1* shows the various units and positions formally affiliated with quality assurance.

The different units have different responsibilities, as described below.

Quality Assurance and Accreditation Centre

The QAAC is the core of the internal quality assurance structure. QAAC has three main areas of responsibility: assessment, compliance, and accreditation. Its overall role is to manage the quality assurance structure and ensure that each unit satisfies all relevant quality requirements, reporting directly to the president's office. At the beginning of the academic year QAAC establishes a timeline for activities related to IQA policies and procedures, and provides tools for data collection to the offices of the college quality directors. The director of QAAC is required to report to the president on academic and management structures established in order to satisfy quality assurance goals. These activities must be carried out in line with the quality assurance guidance of external agencies, such as NAQQAET and the Higher Education Council.

Quality Assurance Executive Committee

The Quality Assurance Executive Committee (QAE) is a university-wide coordination body at the top of the IQA structure. The purpose of the QAE is to monitor and evaluate the impact of the university's approach to quality assurance and improve its operations. The committee coordinates the compliance, assessment, and accreditation of overall IQA activities, including institutional and programme reviews. Led by the director of QAAC, its members comprise college quality assurance directors and the president's advisor on quality assurance and academic quality. Complaints and challenges are discussed in this committee, providing support for college quality assurance offices in implementing the IQA system. The QAE also acts as a hub for all IQA practice within the colleges, encouraging competition and cooperation to drive colleges towards improvement.

College quality assurance offices

The main responsibility of the college quality assurance offices is to implement quality assurance at college level. The offices discuss day-to-day issues that arise from the operation of programmes within the college. Each college has a quality director who chairs its respective office. The directors also sit on the QAE Committee, representing their respective colleges. They monitor QA activities within their colleges, including compliance, assessment, and accreditation activities. The directors meet with the chairs of the department quality assurance committees to ensure IQA instruments are being implemented and satisfy the requirements of the programme and course assessment cycle, and the self-evaluation and improvement action cycle. The offices report to the college dean as well as to QAAC.

Quality assurance committees

The quality assurance committees, formerly known as department accreditation committees, are responsible for steering the programme and course assessment cycle. Quality assessment committees work with the heads of academic programmes to implement quality assurance practice. This involves reviewing programme outcomes, objectives, course portfolios, and assessment and survey data, as well as producing self-evaluation reports. The committees also assist the department chair in developing an improvement plan based on the results generated. The college quality assurance office directors and the heads of the QA committees manage their programmes and courses through continuous improvement cycles approved by the university. The committees manage two quality sub-committees that support the programme assessment process, a programme advisory committee and a students' advisory committee, both described below.

Programme advisory committee

The programme advisory committee supports the development of programmes, providing programme specifications and helping to ensure the quality of graduates. The committee, which is usually composed of employers, alumni, and other external stakeholders, takes particular account of employers' needs in the development of programmes.

Student advisory committee

The student advisory committee consists of students currently enrolled at the university and acts as a representative body for them. The committee makes suggestions concerning particular programmes and courses, as to the quality of instruction, the faculties, and other requirements. It also coordinates extracurricular activities for students.

3.3 IQA policies and documents

UoB's quality assurance documents include quality policies and manuals. These set out lines of responsibility and authority and provide guidelines to support the IQA system at the university. Such documents were found to be well developed within the academic domain.

Quality policies

UoB's quality assurance and enhancement policy was developed by QAAC and outlines the university's approach to quality assurance, as well as its main principles and standards in both academic and administrative areas. The aim of the policy is to support the university's efforts to fulfil its vision, mission, and strategic goals by enhancing the effectiveness of its teaching and learning, research performance, and community service. The specific objectives of the policy specify that:

1. The university's quality assurance and quality enhancement policy should provide guidance in the development and implementation of internal and external quality assurance.
2. The policy must support any activities within the university in being consistent and responsive to the university's vision, mission, strategic goals, and initiatives.
3. The quality assurance system should be consistent with internationally recognized quality assurance standards, criteria, procedures, and practices.
4. University quality assurance should be well coordinated, continuously developed, and characterized by minimum bureaucracy in order to achieve maximum effectiveness.
5. Appropriate and transparent governance and management structures must be in place to guarantee continuous progress in supporting quality assurance and improvement measures.
6. The roles and responsibilities of all university stakeholders need to be clarified to ensure the continuous improvement of the university's operations. The university should assure that responsibilities are clearly defined, and staff, where necessary, appropriately trained.
7. The quality assurance system must be integrated comprehensively, clearly, and concretely at every level of operation in order to instil a quality culture in all parts of the university, for the benefit of students and staff and the local, regional, and national community.
8. The university should have in place arrangements for the collection, evaluation, and communication of feedback from stakeholders as to the quality of the services being monitored.
9. Academic standards of UoB awards and qualifications must be maintained, ensuring that the completion of each programme leads to those awards and qualifications.

10. Outcomes, results, and processes are to be evaluated by the highest external standards, including national and international benchmarking for both academic and administrative bodies.

In addition, the programme quality assurance and enhancement policy details the quality assurance processes each programme must follow within the university. The procedures set out in the policy are as follows:

1. The frequency of reviews, meetings, surveys, audits, and reports should be defined. The monitoring and review processes should be approved and supported by the university.
2. A periodic review should be conducted, focusing on: the validity and pertinence of programme educational objectives, and course and programme intended learning outcomes; the extent to which a programme's intended learning outcomes are achieved by the learners; and the effectiveness of the curriculum as well as the teaching, learning, and assessment methods used in the achievement of learning outcomes.
3. External stakeholders are encouraged to participate at key stages of the monitoring and review process through paper and electronic surveys or direct involvement with the programme advisory committee.
4. The university should ensure recommendations from previous reviews are acted upon. Programmes under review should develop action plans to address any shortcomings identified in the process.
5. The university should periodically obtain the feedback from external stakeholders as to the ongoing validity and relevance of its programmes and awards by one or more of the following measures: undertaking/using market research and needs analysis to identify any changes in the subject field or in employers' expectations and occupational standards; meeting with the programme advisory committee; and conducting employer/alumni surveys.

Quality manuals

Quality manuals, such as the *QAAC Manual* and *College Quality Assurance Director Manual*, guide the quality advisory committees at department level, the quality assurance offices at college level, and the QAAC at university level. They set out the key principles that guide quality assurance activities at UoB.

The university-wide assessment handbook, *IDEAS*, outlines and explains the rationale for an institution-wide, outcomes-based assessment process, as well as offering a step-by-step implementation plan. It includes:

- An overview of the outcomes-based assessment process and the concept of intended learning outcomes.
- Guidance on developing an assessment model, including procedures for developing the mission, objectives, and intended learning outcomes of programmes and support units.
- Criteria for selecting appropriate assessment methods.
- An overview of how to document and use the assessment results in developing a programme improvement plan.

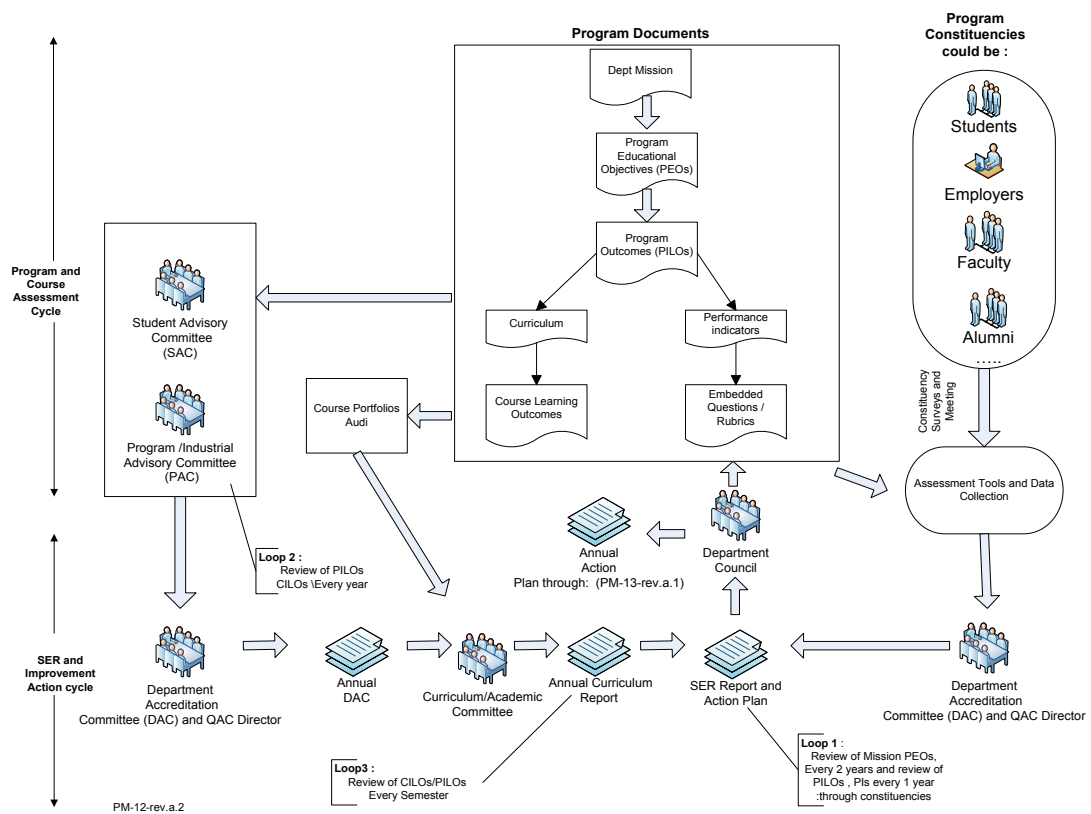
There is, as yet, no formal documentation of quality assurance processes in the administrative domains. Recently, resolutions were taken to improve the administrative components of the IQA system. For example, an internal audit charter was approved, describing the quality system as it obtained to administrative units. In order to implement the charter principles, the internal audit office has developed procedures to support the managerial and financial audit of university operations, risk management, and the governance system.

3.4 IQA processes

IQA processes concern compliance, assessment, and accreditation. QAAC attempts to ensure the compliance of both the university and its academic programmes with national standards, set by NAQQAET and/or the Higher Education Council. Assessment aims to ensure the continuous improvement of courses and programmes. QAAC is directly responsible for assessments, although they are implemented by college quality assurance directors and quality assurance committees. QAAC also supports the accreditation process by providing direction, data, evidence, and training. It must certify that academic programmes are adequately prepared before they undergo any external accreditation. One of UoB's strategic objectives is to obtain international accreditation for at least 70 per cent of its programmes. For the purposes of fulfilling the responsibilities associated with compliance, assessment, and accreditation, QAAC has developed three interrelated IQA processes: the programme and course assessment cycle (PCAC), the self-evaluation process, and the improvement action cycle.

The overall quality assurance process framework, including these three main processes, is shown in Figure 3.2.

Figure 3.2 Overall quality process framework



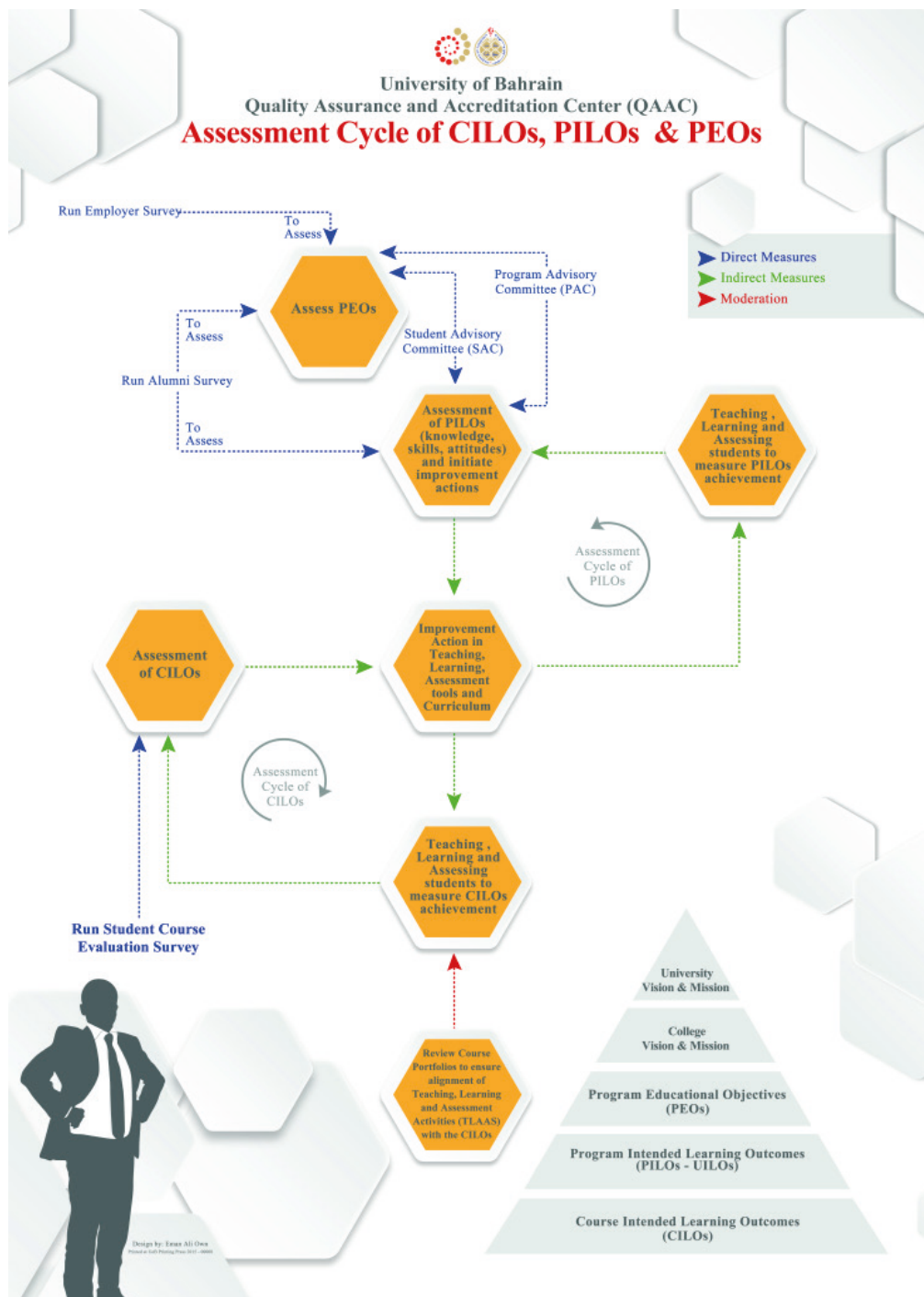
Source: QAAC, 2012.

Programme and course assessment cycle

As Figure 3.3 shows, a programme and course assessment cycle involves monitoring the progress of students through the assessment of the intended learning outcomes (ILOs) of a course or programme, and the programme's educational objectives. Every faculty member is responsible for assessing their course ILOs and submitting a course portfolio every semester. The quality assurance committee (QAC) audits the portfolio

and programme ILOs every year to verify the requirements that have been included. The committee also meets annually with the programme and student advisory committees to assess the programme educational objectives and ILOs, thus reviewing the curriculum as well as course delivery. In addition, the QAC conducts alumni and employer surveys every two years to gather information to assess the effectiveness of programmes and their curricula. The college quality director meets with the QAC chair on a monthly basis to ensure programmes satisfy the requirements of the programme and course assessment cycle. The results of meetings on the effectiveness of programmes and curricula are included in a self-evaluation report, the results of which are, in turn, addressed through an improvement action plan, as shown in Figure 3.4.

Figure 3.3 Programme and course assessment cycle

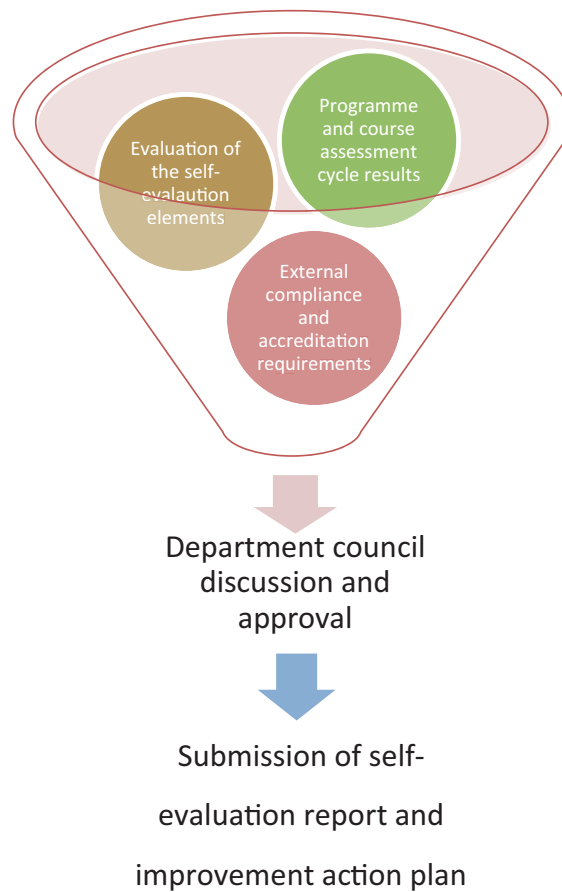


Source: University of Bahrain, 2015.

Self-evaluation cycle

Academic programme reviews at UoB are based on self-evaluation. Every semester, each programme is required to collect data on assessment results, curricula, faculty, students, facilities, research, management, and partnerships in order to compare performance levels with programme objectives and intended outcomes. The results of this process are collated in a self-evaluation report (SER). The QACs coordinate the process of self-evaluation and liaise with the department chair, who distributes tasks for the preparation of the SER. The SER is discussed by the department council which suggests actions for improvement. The SER and improvement action plan are submitted by the department, via the dean, to QAAC.

Figure 3.4 Process for producing the SER and improvement plan



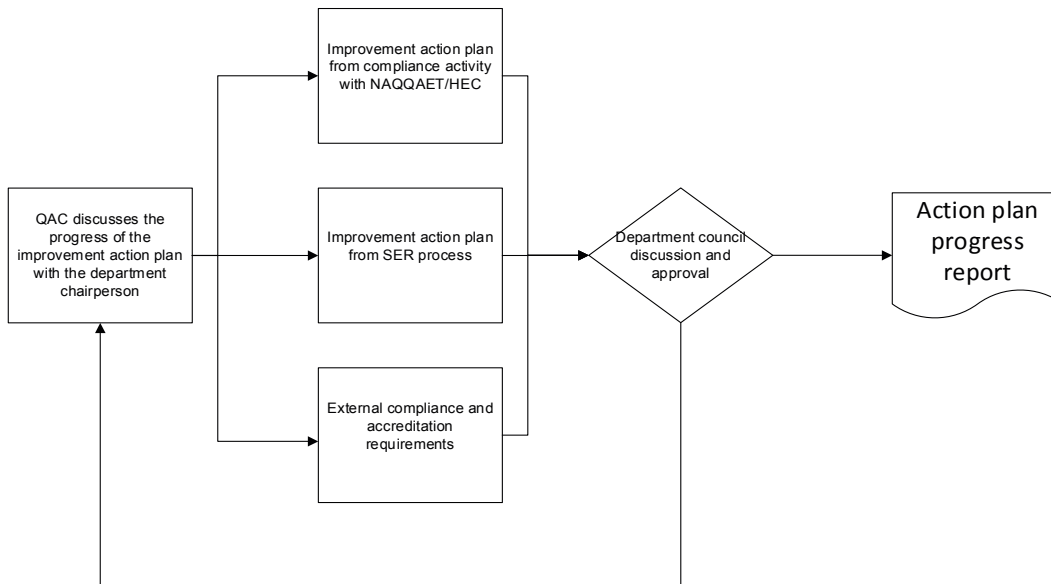
Source: AlHamad and Aladwan, 2016.

Improvement action cycle

After the first year of implementation of an improvement action plan, QAAC initiates the development of an action plan progress report (APPR). The college quality assurance directors request their quality assurance committee chairs to submit an APPR for each programme. The QAC assesses progress against the improvement action plan with the department chair in order to produce a progress report, which is then discussed, approved, and submitted by the department council to the dean. The quality assurance structure, including QAAC, the college quality directors, and the QAC, ensures that all the steps in the self-evaluation process are executed, including the production of improvement plans and follow-up in the form of an APPR. It should be noted that discussion and approval of the SER, the improvement plan, and the APPR take place in department councils to ensure

that all faculty members contribute to the evaluation and enhancement of programmes. The action plan progress reports are updated with additional material related to external compliance and accreditation requirements, such as programme reviews by NAQQAET.

Figure 3.5 Improvement action cycle



Source: AlHamad and Aladwan, 2016.

3.5 IQA instruments

A number of IQA instruments, relating to the enhancement of teaching and learning, graduate employability, and management, have been developed to support the three main IQA processes outlined above.

IQA instruments for teaching and learning

The IQA instruments for teaching and learning are programme evaluation, course evaluation, teacher supervision, programme self-evaluation, programme monitoring, and student workload assessment.

Programme evaluation

Programme evaluation assesses programmes in terms of admissions, resources, and student performance, on the basis of a programme's intended learning outcomes and educational objectives. While the department chair manages overall programme evaluation, academic staff are responsible for the assessment process. The primary tools for assessing a programme against its intended learning outcomes are examinations, quizzes, assignments, case studies, and reports or projects. Programmes are assessed against their educational objectives by employer surveys, alumni surveys, and exit surveys. They also provide indirect information on the achievement of programme ILOs.

Course evaluation

Course evaluation is conducted using three instruments: course ILO assessments, course evaluation surveys, and course portfolio audits. A course is evaluated in terms of course materials, teaching and learning activities, and assessments, based on its intended learning outcomes. The department chair manages the process of course evaluation every semester. Courses are also evaluated each semester through course evaluation surveys

which take place in all colleges, conducted by the Centre of Measurement, Evaluation and Analysis Directorate. This includes the evaluation and analysis of students, courses, and faculty. The results of the survey are submitted to the department chair, who circulates the results among the faculty members concerned, so that they can use them to improve their courses. Course portfolio audit contributes to course evaluation. Faculty members are required by the QAC to submit a course portfolio by the end of every semester. This is used as an indication of the level of achievement against course ILOs and programme educational objectives. All departments systematically maintain a course portfolio for each course as a mechanism for documenting teaching and learning activities. The department council will use programme achievement levels to decide whether, and to what degree, programme curricula require restructuring.

Teacher supervision

Teacher supervision at UoB takes place as part of the Professional Certificate in Academic Practice (PCAP) programme. The PCAP is a one-year training programme for teaching and learning. It aims to equip staff with the knowledge, skills, and attitudes they need to become highly professional, creative, and effective academics. A faculty member without teaching experience is required to join the PCAP programme, as are all junior assistant professors and graduate assistants. A range of formative and summative assessment strategies are used by the programme, providing opportunities to assess an academic's skills and competencies across a range of communication modes. The course was introduced by the vice-president for academic affairs, in collaboration with York St John University in the United Kingdom.

Programme self-evaluation

Programme self-evaluation aims to assess programmes and courses in terms of assessment results, curriculum, faculties, students, facilities, research, the strategic plan, management, and partnerships. All the self-evaluation elements are collated in the self-evaluation report, as shown in *Figure 3.6*. The chair of each programme manages the submission of the SER to QAAC. A self-evaluation report and an improvement plan are produced every two years.

Programme monitoring

The purpose of programme monitoring is to assess the progress of programmes as well as their achievement against their intended learning outcomes and educational objectives. Programme monitoring involves annual meetings coordinated by the department chair, with members of programme and student advisory committees, to discuss programme portfolio audits. The outcomes of the meetings feed into the programme and course assessment cycle and the self-evaluation process.

Programme monitoring also includes a programme portfolio audit, which reviews the course portfolios prepared by faculty members every semester. The audit aims to ascertain students' attainment against the university's intended learning outcomes (AlHamad and Mohieldein, 2013). The audits are analysed at department, college, and university level. At department level, the quality assurance committee reviews all course portfolios. At college level, the college quality assurance office director reviews a sample of the course portfolios to ensure the QAC has undertaken the course portfolios audit. At university level, the Quality Assurance and Accreditation Centre identifies reviewers to conduct the programme portfolio audit. This is conducted on a needs basis, which means there is no set frequency for audit cycles.

Student workload assessment

Student workload assessment is an IQA instrument to identify relevant curriculum and career activities for individual students. Academic faculty members review the performance of students and provide guidance to them on issues such as course selection and workload. Students are encouraged to visit their advisors for guidance on academic matters. The advisor ensures that students choose courses appropriate to the curriculum, and that are in line with their progression needs, grade point average, year of study, and capabilities. Registration forms are not approved unless signed and dated by both advisor and student.

IQA instruments for employability

The University of Bahrain is committed to enhancing the employability of its graduates. It uses a number of IQA tools for this purpose, including graduate tracer studies, employer satisfaction surveys, employer engagement, jobs market analysis, and student competencies assessments.

Graduate tracer study

Graduate tracer studies aim to investigate whether the university's graduates have gone on to employment in a field that satisfies their specialization, and whether they are equipped with the required knowledge, skills, and attitudes. Each department is responsible for tracing their graduates through alumni surveys. The results of the tracer studies are discussed by the department council and used to review curriculum, teaching and learning, and assessment methods for each programme.

Employer satisfaction survey

The employer satisfaction survey is conducted bi-annually using survey questionnaires. The purpose of the employer survey is to obtain feedback from employers as to the performance of graduates in terms of programme ILOs and educational objectives. Employer satisfaction is also evaluated in terms of the knowledge and skills of graduates in the workplace. The results of employer surveys are discussed by the department council and used in programme self-evaluation. They are also taken into consideration in the development of programme curriculum, teaching and learning, and assessment methods.

Employer engagement

Employer engagement is used to obtain employers' opinions as to the effectiveness of the programme in relation to the performance of the graduates. The involvement of employers is achieved through the annual programme advisory committee meeting. Their suggestions for improvement are discussed by the department council. Modifications are then made to study programmes to enhance their relevance to labour market needs.

Jobs market analysis

The purpose of jobs market analysis is to analyse the compatibility of programmes with the demands of the labour market and employment opportunities. The analysis is conducted by departments every four or five years, depending on the duration of a study programme, or when introducing a new programme. The department assigns an ad hoc committee to conduct the analysis and present the results to the department council. The results are reflected in the SER as well as in the strategic objectives of the department.

Student competency assessment

The student competency assessment aims to define the knowledge, skills, and attitudes that students need to have during their period of study, and measures their level of

achievement against the knowledge, skills, and attitudes set out in the course and programme ILOs. Course and programme assessments identify the level of academic achievement of individual students. Seventy per cent of students are required to achieve the course and programme ILOs. The department manages the implementation of this tool and the results are discussed by the department council and in the programme advisory committee meeting before the end of each academic year with a view to enhancing employment opportunities.

IQA instruments for management

The IQA instruments for management include unit self-evaluation, unit external evaluation, certification, target-level agreements, and service-level agreements.

Unit self-evaluation

Unit self-evaluation is used to assess the performance of administrative units in terms of goals, effectiveness, and resource allocation. It also helps to identify actions to improve the effectiveness of the unit. The directors of the administrative units usually produce annual reports and submit them to the vice-president for administrative and financial affairs. These reports present the unit's achievements using statistical data.

Unit external evaluation

Unit external evaluation involves the review of academic and/or administrative units by external bodies. External evaluation at UoB is conducted by either the National Authority for Qualifications and Quality Assurance for Education and Training (NAQQAET) or the internal audit office (IAO). NAQQAET evaluates the performance of both academic and administrative units. The IAO, an independent office that reports to UoB's board of trustees, prepares an annual audit plan that covers all administrative units. The office's tasks include compliance audit, performance evaluation, information system audit, and consultation services. Units use the audit results to develop an action plan and take any necessary corrective action.

Certification

The university has undergone numerous processes of certification. In 2006, the university considered submitting itself to ISO 9001:2000 certification, but, in the end, opted to implement the Bahrain Excellence Model (BEM) – BEM standards are equivalent to those of the European Foundation for Quality Management. Between 2009 and 2015, the university underwent annual evaluation of its progress towards implementing the model, achieving certification from the prime minister's office. The process of evaluation includes the submission of a report and a presentation to an evaluation panel made up of experts and representatives of the prime minister's office. This is followed by a visit from the evaluation panel.

Target-level agreements

Target-level agreements are negotiated between senior managers responsible for strategic planning and units of the university. The agreements are based on objectives in the university's four-year strategic plan, including goals, key performance indicators (KPIs), initiatives, detailed tasks, and measures. Each unit is required to implement the KPIs and negotiate with the strategic planning unit. The target-level agreements are developed through regular meetings under the supervision of the strategic plan office. The office also conducts joint meetings with all project managers, in the presence of the president, to monitor implementation against the agreed KPIs and timeline. The head of the office reports periodically to the university council on emerging challenges and achievements.

Service-level agreements

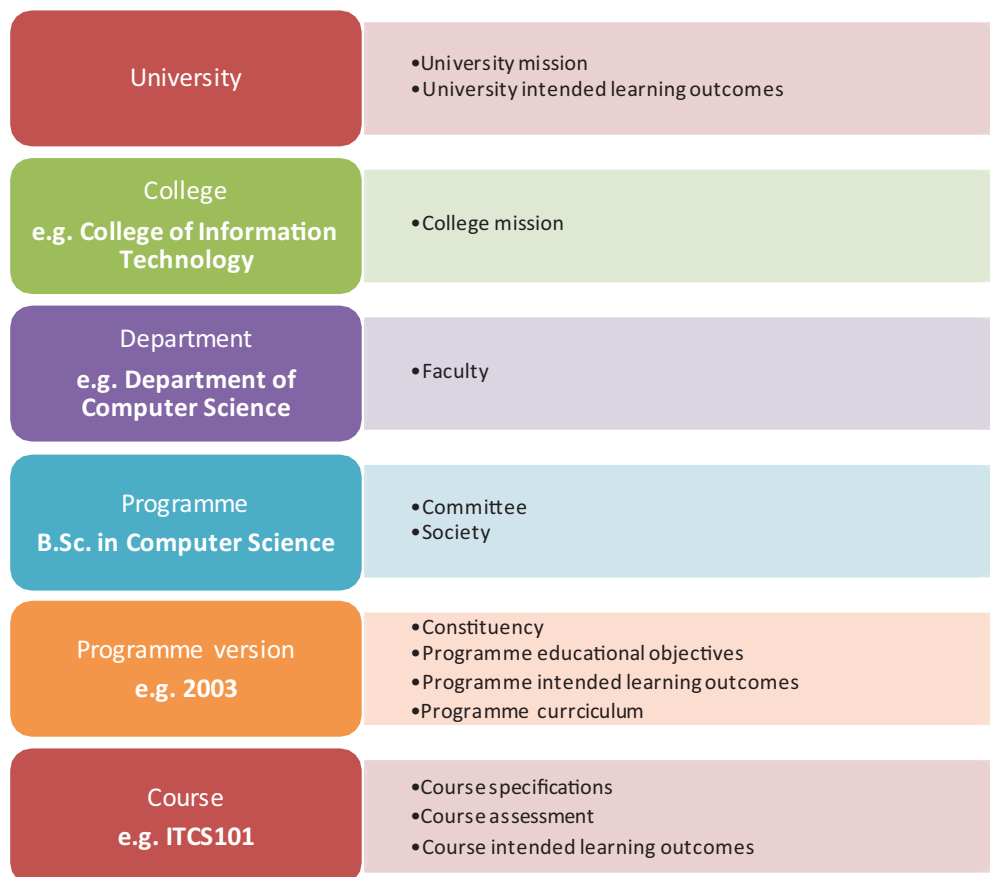
Service-level agreements are negotiated between university units and service providers to monitor the quality of their services and inform decisions on future contracts. They apply to services relating to maintenance, transportation, and facilities. Each service is managed by the concerned unit. For example, transportation is managed by the deanship for student affairs; airfares and hotel bookings are managed by the service department; and maintenance and housekeeping are managed by the maintenance department. All concerned units request log reports of work completed by service providers on either a daily or monthly basis.

Assessment information management system

An online assessment information management system (AIMS) was created to facilitate the collection of assessment data, and store programme and course specifications from across the university. The system is a repository for all the information necessary in assessing a programme and includes the results of surveys. The system includes the following:

1. Programme specification, including programme outcomes and objectives.
2. Programme curriculum, including course specifications and outcomes.
3. Faculty information for each programme.
4. Programme committees and stakeholder (or constituency) representatives.
5. Online surveys, including exit surveys, faculty surveys, alumni surveys, and employer surveys, and software for analysing the data.

Figure 3.7 System hierarchy chart

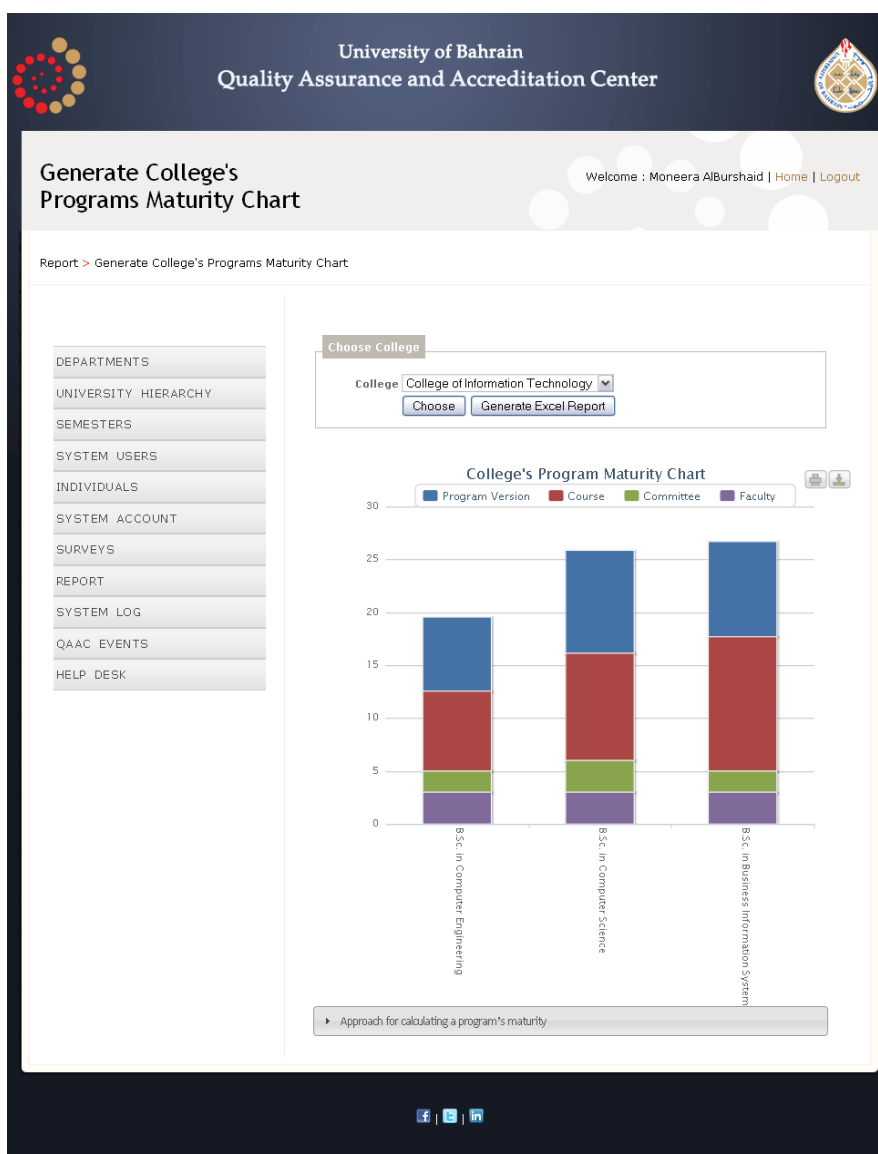


Source: Mohieldin, Al-Ammal, and Al-Burshaid, 2010.

This web-based system is accessible throughout the university. To facilitate follow-up processes, monitoring tools have been created to help departments update their information and/or data. This includes a maturity chart and various other tools. QAAC offers training sessions for staff members using the AIMS system.

AIMS is supported by a clear methodology, safeguarding the validity and integrity of the information. The system ensures the achievement of educational outcomes in each course and academic programme, and facilitates continuous monitoring through a dashboard showing the maturity of programmes (see Figure 3.8). Once programmes are completed and verified by the system, the information is made public and is available to stakeholders via the website. The website is a hub for knowledge transfer between academic departments and stakeholders. This has led to more effective policy-making and implementation.

Figure 3.8 AIMS maturity chart



Source: Mohieldin, Al-Ammal, and Al-Burshaid, 2010.

4. Findings from the empirical research

This chapter presents the findings from an empirical analysis of the perceptions of internal stakeholders with regard to the university's IQA system, tools, and instruments. The study is based on quantitative surveys, qualitative interviews, and focus group discussions.

4.1 Methodology

Two quantitative surveys were conducted, one with academic staff and one with administrative staff, to assess their awareness of the university's IQA policies and manuals, and their perceptions of how involved they were in them. The surveys also covered feedback, the use and usefulness of IQA instruments, the effects of IQA tools on teaching and learning, the employability of graduates and management, and the internal and external factors that condition the effectiveness of IQA.

Qualitative interviews were also conducted with senior and middle-level administrators, including the vice-president for academic affairs, the vice-president for IT, administration, and financial affairs, a member of the university council, deans and college chairs representing the College of Science (physics, medical physics, and biology), the College of Business (management and marketing), the College of Health Sciences, and the College of Arts (English studies), among others. The interviewees were questioned on the following:

- The role of quality and employability in the strategic profile of the university.
- The existing understanding of the nature of the evolution, structure, and specificities of IQA at the university.
- The effects of IQA on teaching and learning, employability, and management.
- Factors that condition the effectiveness of IQA.
- The overall evaluation of the IQA system and its contribution to university development.

Focus group discussions were then held to investigate the effects of IQA, with an emphasis on study programmes. These discussions involved selected programme heads from the physics, marketing, biology, and English studies departments. The departments were chosen to allow comparison between academic disciplines. The focus groups aimed to gather additional information on IQA activities at department and college level. The interviewees were asked about their experiences with IQA instruments and whether any changes to their programmes resulted from implementation.

Finally, a focus group discussion was conducted with student representatives, with the cooperation of the student advisory committee. Participating students were drawn from different academic fields, had various grade point averages, and were at different stages in their studies.

Detailed protocols were prepared from the interviews and focus group discussions, but no transcripts.

Datasets from both the quantitative and the qualitative research were then used in an integrated manner to triangulate the evidence and draw conclusions as to the level of awareness of IQA instruments among staff and students, their effects, and consequently the effectiveness of IQA systems on the quality of teaching and learning, management, and the employability of graduates.

4.2 Participation statistics

The survey questionnaire was disseminated to 795 academic staff, of whom 191 (24 per cent) responded, and to 1,119 administrative staff, 204 (18.2 per cent) of whom responded. A general description of the respondents to the online surveys, as well as of the participants of the interviews and focus group discussions, is provided below.

Survey questionnaires

Academic staff

Table 4.1 shows the disciplines of the academic staff who responded to the online survey. The majority of respondents were from the following colleges: Engineering and IT (25.65 per cent), Education (17.28 per cent), and Business and Management (12.57 per cent).

Table 4.1 Disciplines (academic staff)

Topic	Percentage of respondents
Social sciences	8.38%
Humanities (e.g. philosophy, religion, philology, etc.)	7.85%
Natural sciences (e.g. biology, chemistry, geography, etc.)	5.76%
Formal sciences (e.g. mathematics, informatics, statistics, etc.)	8.38%
Business and management	12.57%
Education (e.g. teacher training, cognitive sciences, etc.)	17.28%
Engineering and IT (e.g. materials engineering, computer science, etc.)	25.65%
Life and health (e.g. medicine, psychology, nursing, etc.)	9.95%
Law	4.19%
Others, namely nursing (1), environmental design (1), physical education (3), and English (7)	6.28%

In terms of position, almost half the academic participants were assistant professors (40.8 per cent), as shown in Table 4.2. This was followed by lecturers, at 31.9 per cent, while associate professors accounted for 10.5 per cent. Full professors and graduate assistants made up 4.2 per cent and 2.1 per cent, respectively, with 10.5 per cent holding other positions not specified in the survey.

Table 4.2 Positions (academic staff)

	Percentage
Full professor	4.2%
Associate professor	10.5%
Lecturer	31.9%
Assistant professor	40.8%
Graduate assistant	2.1%
Other	10.5%
Total	100%

Table 4.3 shows that committee or board membership was the most commonly reported leadership position of academic respondents, at 40.8 per cent. Just under a third (31.9 per cent) declined to answer. Other respondents reported being heads (or deputy heads) of programme, heads (or deputy heads) of department, and deans (or vice-deans) of faculty, at 16.2 per cent, 9.9 per cent, and 1 per cent, respectively.

Table 4.3 Leadership positions (academic staff)

	Percentage
Head (or deputy head) of programme	16.2%
Head (or deputy head) of department	9.9%
Dean (or vice-dean) of faculty	1%
Member of a committee or board	40.8%
I do not want to answer	31.9%
Total	100%

Table 4.4 illustrates the length of time staff have worked at UoB. Those who have worked there for less than five years accounted for the largest proportion (31.9 per cent), followed by those with five to 10 years' experience (28.8 per cent) and those with between 11 and 20 years' experience (25.7 per cent). A small proportion had worked at the university for more than 20 years (13.6 per cent).

Table 4.4 Length of work experience (academic staff)

	Percentage
Less than 5 years	31.9%
Between 5 and 10 years	28.8%
Between 11 and 20 years	25.7%
More than 20 years	13.6%
Total	100%

Administrative staff

Table 4.5 shows that most administrative staff respondents were engaged in student services, including registration, assessment, and counselling (22.06 per cent). Those from IT services and quality assurance/enhancement accounted for 14.22 per cent and 11.27 per cent, respectively. The rest were fairly evenly distributed with none of the departments accounting for more than 10 per cent.

Table 4.6 shows that 40.7 per cent of administrative staff respondents cited bachelor's degree as their highest qualification. Those with a master's degree accounted for 26.5 per cent of participants. Only 6.4 per cent held a doctoral degree, while those with only a secondary school diploma or vocational training accounted for 9.8 per cent and 4.4 per cent, respectively. The distribution shows that respondents to the online survey were largely from the more educated segment of administrative staff at UoB.

As Table 4.7 indicates, 31.4 per cent of administrative participants said they held a leadership position such as head of administration, unit, or section. Heads (or deputy heads) of section accounted for 18.1 per cent of participants, while heads (or deputy heads) of administration or units made up 7.4 per cent and 5.9 per cent, respectively.

The rest of the respondents (68.6 per cent) indicated that they did not hold a leadership position, and were employed as technicians, specialists, programmers, and so on.

Table 4.5 Fields (administrative staff)

Topic	% of respondents
Strategic/academic planning	3.92%
Financial management	4.90%
Quality assurance/quality enhancement	11.27%
Institutional research	0.49%
Facility management (including transport services)	5.88%
Human resource (administrative) management	5.88%
Academic staff development	1.96%
Student services (registration, assessment, counselling)	22.06%
IT services	14.22%
Public relations/marketing	5.88%
Legal affairs	1.96%
Research service	6.37%
Library	4.41%
International relations	0.49%
Institutional leadership	1.47%
Others	8.82%
Total*	100%

Note: Figures were rounded off to the nearest one decimal place. This explains why some totals () do not neatly add up to 100%. This however does not statistically affect the results.

Table 4.6 Highest educational achievement (administrative staff)

	Percentage
Secondary school diploma	9.8%
Vocational training	4.4%
Bachelor	40.7%
Master	26.5%
PhD/doctorate	6.4%
Other	12.3%
Total*	100%

Note: Figures were rounded off to the nearest one decimal place. This explains why some totals () do not neatly add up to 100%. This however does not statistically affect the results.

Table 4.7 Leadership positions (administrative staff)

	Percentage
Head (or deputy head) of administration	7.4%
Head (or deputy head) of unit	5.9%
Head (or deputy head) of section	18.1%
Other	68.6%
Total	100%

Table 4.8 shows that most administrative staff had either five to 10 years (39.2 per cent) or 11 to 20 years (33.3 per cent) of working experience at the university. Those who had worked for less than five years and more than 20 years accounted for 15.2 per cent and 12.3 per cent, respectively.

Table 4.8 Length of experience (administrative staff)

	Percentage
Less than 5 years	15.2%
Between 5 and 10 years	33.3%
Between 11 and 20 years	39.2%
More than 20 years	12.3%
Total	100%

Interviews and focus group discussions

Table 4.9 describes the interview and focus group discussion participants. Individual interviews were conducted with six academic and administrative leaders, including vice-presidents for academic programmes and graduate studies, and information technologies, administration, and finance. Three deans were selected from the College of Sciences, the College of Arts, and the College of Health Sciences. The dean of student affairs was also interviewed.

Table 4.9 Interview and focus group discussion participants

Actor to be interviewed	Type of interview
Vice-President for Academic Programmes and Graduate Studies	Individual interview
Vice-President for Information Technologies, Administration, and Finance	Individual interview
Dean of Student Affairs (representative of the university council)	Individual interview
Dean of College of Science	Individual interview
Head of Physics, Head of Biology, and Programme Coordinator for Medical Physics	Focus group
Dean of College of Arts	Individual interview
Head of English Language and Literature, with English language and literature programme coordinators	Focus group
Dean of College of Health Sciences	Individual interview
Head of Management and Marketing, with economics and finance programme representative	Focus group
Student representatives	Focus group

The focus group discussions involved 17 heads of academic programmes and 22 students. The academic focus group participants consisted of five heads from the departments of physics, biology, and medical physics, five from the Faculty of English Language and Literature, and seven from management and marketing.

4.3 Awareness of and involvement in the quality assurance system

This section addresses the level of awareness of internal quality assurance processes and tools among different stakeholders at UoB, as well as their level of involvement in the IQA system. The awareness and involvement of stakeholders is considered a major factor contributing to the effectiveness of IQA within a university. The viewpoints of academic and administrative staff were explored through the online surveys, while the findings from the interviews and focus group discussions provided additional insight into the level of awareness and involvement among those in university management positions, as well as academic staff and students.

Awareness of and involvement in quality policy and manuals

First, the survey questionnaires investigated the extent to which academic and administrative staff were aware of and involved in the quality policy and quality manuals.

Survey questionnaire data (academic and administrative staff)

Both academic and administrative staff indicated a relatively high level of awareness of the quality policies at UoB. According to *Table 4.10*, 75.7 per cent of academic respondents and about 68 per cent of administrative respondents agreed that the quality policies existed. Over half (54 per cent) of academic respondents and just under a third (31 per cent) of administrative respondents thought that they were useful to their work, while only 4.5 per cent of academic and 4.3 per cent of administrative staff believed they did not exist. However, a considerable number of both academic and administrative respondents (19.9 per cent of academic staff and 27.7 per cent of administrative staff) did not know whether or not quality policies existed at the university.

Table 4.10 Awareness of quality policies and quality manuals

		Quality policies	Quality manuals
Yes, these documents exist and they are useful for my work	Academic staff	54.5%	48.1%
	Administrative staff	31%	24.5%
Yes, but these documents are not useful for my work	Academic staff	10.9%	7.7%
	Administrative staff	12%	11.4%
Yes, they exist but I do not have to deal with them	Academic staff	10.3%	4.5%
	Administrative staff	25%	17.4%
No, my university does not have such documents	Academic staff	4.5%	12.2%
	Administrative staff	4.3%	8.2%
I don't know	Academic staff	19.9%	27.6%
	Administrative staff	27.7%	38.6%
Total*	Academic staff	*100%	*100%
	Administrative staff	100%	*100%

Note: Figures were rounded off to the nearest one decimal place. This explains why some totals () do not neatly add up to 100%. This however does not statistically affect the results.

There was a lower level of awareness of quality manuals among staff at UoB. Sixty per cent of academic respondents and 53.3 per cent of administrative respondents agreed that quality manuals or handbooks existed. Around a half (48.1 per cent) of academic respondents and a quarter (24.5 per cent) of administrative respondents thought they were useful to their work. Only 12.2 per cent of academic staff and 8.2 per cent of administrative staff thought that they did not exist. However, once again, a considerable number of both academic and administrative staff (27.6 per cent 38.6 per cent, respectively) did not know whether or not such documents existed.

These findings suggest that more communication with academic and administrative staff is necessary on both the quality policies and manuals.

Interview and focus group discussion data

The interviewees were asked about their understanding of what IQA is at UoB. The vice-president for academic affairs and graduate studies defined IQA as the processes and instruments for the enhancement of the quality of graduates. He said that the purpose of the IQA system was to internally monitor the programmes offered by the university, through documented systems, policies, and procedures, as well as to satisfy the standards of external quality agencies. The vice-president for information technology, administration, and finance related the objectives of IQA to the management processes of the university. Similarly, the dean of arts said that IQA is a follow-up and monitoring process to evaluate the performance of the college, based on internal policies and procedures. This suggests that stakeholders interpret the notion of IQA and its main purposes differently according to their position in the university.

The interviewees agreed that quality is essential in strategy and noted that, currently, quality plays an important role in the university strategic plan. The deans of the College of Health Sciences and the College of Science observed that quality in teaching and learning was the first of the university's strategic goals. Interviewees also mentioned the university's aim of achieving international accreditation for 70 per cent of its programmes.

When asked their opinion of IQA processes, the college deans reported that the quality assurance instruments were mainly used to improve the quality of programmes. They specifically referred to the Programme Quality Assurance and Enhancement Policy and the Academic Courses and Programme Regulations. The dean of arts said that a systematic approach was taken in developing systems and procedures for quality assessment. This approach included conducting surveys (indirect assessment) and assessing ILOs (direct assessment) when evaluating courses within each faculty.

Quality policies and handbooks appeared well known to respondents in leadership positions. The vice-president for IT, administration and finance reported the use of quality policies and procedures to support the quality of teaching and learning systems. The vice-president for academic affairs and graduate studies further suggested that the policies were used for external examination moderation, benchmarking, and accreditation of academic programmes. The guidelines for quality, developed at the university in the form of handbooks, were also familiar to respondents in leadership positions. The vice-presidents, deans, department chairs, and programme coordinators explicitly mentioned the IDEAS handbook, which explains the assessment of the university's courses and programmes. According to the interviewees, such handbooks were particularly useful for programme self-evaluations and for alumni, employer, and exit surveys.

Comparative analysis of awareness of and involvement in quality policy and manuals (by different stakeholder groups)

The majority of academic and administrative respondents said that the policies, strategic documents, quality manuals, and handbooks were available and useful to their work. Similarly, the vice-presidents, deans, and department chairs said that the university had established definite structures, policies, and procedures, such as the programme quality assurance and enhancement policy, as well as systematic assessment approaches. The vice-presidents, deans, and department chairs furthermore observed that these policies and documents were essential in raising the quality levels of programmes.

Involvement, feedback, and use and usefulness of IQA tools

The survey questionnaires also explored the involvement of UoB staff in the university's IQA tools. Staff were asked whether they received feedback from these instruments, whether they used this feedback in their work, and whether they found IQA instruments useful for their work.

Specific IQA instruments were presented in the questionnaires. Academic staff were asked about instruments relating to teaching and learning, employability, and management. The tools for teaching and learning were: 1) course evaluation, 2) programme evaluation, 3) teacher supervision, 4) programme self-evaluation, 5) programme monitoring, and 6) student workload assessment. The tools for employability were: 1) graduate tracer studies, 2) employer satisfaction surveys, 3) employer involvement in study programme revision, 4) jobs market analysis, and 5) student competency assessments. Administrative staff were asked about the following tools for management: 1) unit self-evaluation, 2) unit external evaluation, 3) certification, 4) target-level agreements, and 5) service-level agreements.

Survey questionnaire data (academic and administrative staff)

Table 4.11 describes academic staff involvement in these IQA tools, the extent to which they receive feedback from them, and their use and usefulness. It presents averages calculated from values associated with response categories on the Likert scale, from 1 (no involvement at all) to 5 (very high involvement).

The IQA tools with which academic staff were most involved were those directly related to teaching and learning, such as course evaluation (with an average of 4.2), programme evaluation (3.4), and programme self-evaluation (3.3). Academic staff were less involved in employability-related IQA tools, with jobs market analysis the lowest (2.0).

In terms of perceptions of feedback, and use and usefulness, the differences between different types of IQA tools were not as striking. However, academic staff still reported receiving more feedback from the IQA tools related to teaching and learning, with student course evaluations the highest (3.7). They reported receiving less feedback from the employability-related IQA tools, with employer satisfaction surveys providing the least (3.0).

Differences in the use of IQA tools for teaching and learning and employability were less evident still. Programme self-evaluation had the highest level of use (3.6), but it was followed closely by course evaluation, programme monitoring, and student competency assessment (3.5). Feedback from employer surveys was used the least (3.0).

Interestingly, differences in staff perceptions of the usefulness of IQA tools do not reflect the division between IQA tools related to teaching and learning and those related to employability. Academic staff viewed employers' involvement in programme revision as the most useful (3.6), closely followed by programme evaluation (3.5). Student workload assessment and some of the employability-related tools, such as graduate tracer studies and employer satisfaction surveys, were reported to be the least useful (all with averages of 3.0).

In general, academic staff were less likely to be involved in IQA instruments for employability, with the averages for all these instruments below 2.5. Perception of use appeared to be influenced both by level of involvement and by the amount of feedback received.

Table 4.11 Academic staff involvement, feedback, use and usefulness of IQA tools on teaching and learning and employability

	Academic staff			
	Involvement	Feedback	Use	Usefulness
Course evaluation	4.2	3.7	3.5	3.4
Programme evaluation	3.4	3.5	3.4	3.3
Teacher supervision	2.7	3.2	3.1	3.1
Programme self-evaluation	3.3	3.7	3.6	3.5
Programme monitoring	2.8	3.5	3.5	3.4
Student workload assessment	3.0	3.3	3.3	3.0
Graduate tracer studies	2.3	3.1	3.2	3.0
Employer satisfaction surveys	2.1	3.0	3.0	3.0
Employer involvement in study programme revisions	2.3	3.4	3.4	3.6
Jobs market analysis	2.0	3.3	3.3	3.4
Student competency assessment	2.5	3.5	3.5	3.4

*Note: Averages were calculated as follows: 1. A numerical value was attributed to response categories with, for instance, 5 = very much and 1 = not at all. 2. Averages were then calculated in the following way: (number of responses x 5) + (number of responses x 4) + (number of responses x 3) + (number of responses x 2) + (number of responses x 1) / the total number of responses.

Table 4.12 indicates that administrative staff were less involved in IQA tools for management, with all the averages below 3.0. The highest level of involvement was in unit self-evaluation (2.7). Certification was the IQA tool in which administrative staff were least involved (2.0). The instrument from which the lowest amount of feedback was received was also certification, supporting the suggestion of a close relationship between the level of involvement and the amount of feedback received.

In terms of the perceptions of use and usefulness, most staff rated the IQA instruments for management quite highly. Target-level agreements, unit external evaluation, and unit self-evaluation were well appreciated, with average values around 3.5. Service-level agreements were rated lower in terms of use and usefulness, nevertheless achieving averages of 3.1 and 3.2, respectively.

Table 4.12 Administrative staff involvement, feedback, use and usefulness of IQA tools on management

	Administrative staff			
	Involvement	Feedback	Use	Usefulness
Unit self-evaluation	2.7	3.5	3.4	3.4
Unit external evaluation	2.4	3.5	3.5	3.5
Certification	2.0	3.2	3.3	3.2
Target-level agreement	2.5	3.5	3.6	3.5
Service-level agreement	2.2	3.3	3.1	3.2

*Note: All figures are averages (see Table 4.11 for explanation).

Interview and focus group discussion data

The interviewees noted that academic staff were generally more involved in IQA instruments relating to the assessment of courses and programmes, including course evaluations and employer involvement in the revision of study programmes. According to the dean of science, every faculty member is required to evaluate their courses based on the achievement of the ILOs documented in the course portfolios. The dean of health sciences said that study programme revision involved employers and alumni from both the public and private sectors, including the Bahrain Defence Force Hospital, King Hamad Hospital, and private and public health centres. It was reported that the involvement of employers had prompted a number of positive changes in the quality enhancement of courses and programmes, thus supporting improvements to graduate employability. However, academic staff also noted that they received a relatively low level of feedback from employer satisfaction surveys and graduate tracer studies.

During the focus group discussions, the heads of the marketing, biology, and physics departments indicated that the involvement of employers (advisory committees), programme monitoring (portfolio audit), and programme self-evaluation were the most useful IQA tools for improving the quality and relevance of courses and programmes. Again, employer involvement in study programme revision was perceived as useful by heads of department. Jobs market analysis, however, was not mentioned during the focus group discussions. This was in line with the survey findings, which suggested that staff are little involved in jobs market analysis since it is usually only carried out when a new programme is being introduced. Although it should be conducted every four to five years in principle, in reality it is less frequently done.

The students, in their focus group, indicated that they were most involved in programme and course evaluation, tools in which they are active participants. They also indicated that they received the least feedback from the exit surveys and course evaluations. Although they had seen the results of evaluations of their particular courses, they reported that the feedback received was minimal.

Comparative analysis on the awareness and involvement of different stakeholder groups

As noted above, academic staff were more engaged in tools related to teaching and learning than they were in tools related to employability.

Administrative staff's level of involvement in IQA tools for management was lower in general than that of academic staff in tools for teaching and learning and employability. This suggests that IQA tools for management are, as yet, not fully integrated into the

university's IQA system and that the level of involvement of administrative staff in these tools needs to be enhanced.

While, in general, there seems to be a correlation between the level of staff involvement in a particular tool, the level of feedback received, and the use made of this feedback, there were some exceptions. A higher level of involvement, for example, did not always entail a higher perceived usefulness. The two IQA tools considered as most useful were employer involvement in the revision of study programmes and programme self-evaluation. Despite the lower participation of academic staff in employer involvement, it was still regarded as very useful.

4.4 Effects on teaching and learning, employability, and management

This section focuses on the effects of IQA tools on teaching and learning, employability, and management. The effects on each of these areas are discussed, with stakeholders' perceptions compared. The data are based on the questionnaires administered to academic and administrative staff, the interviews, and the focus group discussions with university leaders and students.

Effects on teaching and learning

The study sought to identify the effects of IQA tools for teaching and learning and employability on teaching and learning processes. A number of areas were considered: 1) overall coherence of a study programme, 2) content coverage of courses, 3) content coverage of study programmes, 4) teaching performance, 5) student assessment system, and 6) learning conditions. The perceived effects on teaching and learning were also investigated through interviews with leaders, as well as through the focus group discussions with department and programme heads and students.

Survey questionnaire data (academic staff)

Table 4.13 presents the responses of academic staff when asked about the effects of selected IQA instruments on teaching and learning. Overall, the IQA tools for teaching and learning and employability seem to have comparable levels of impact on teaching and learning, with all the average values located between 3.0 and 3.8. In general, academic staff seem to view them positively.

Overall, programme evaluation and self-evaluation, programme monitoring, and employer involvement in the revision of study programmes were regarded by the academic staff as having greatest effect on enhanced teaching and learning. The effects of programme monitoring seemed to relate principally to the practice of teaching and learning in class, as the instrument was perceived to contribute most to teaching performance, student assessment system, and learning conditions. Graduate tracer studies and student competency assessments were thought to have a moderate effect on teaching performance. Employer involvement in study programme revision was well appreciated for its effect on the coherence of study programmes and the content coverage of courses. Student workload assessment and employer satisfaction surveys were the IQA tools with the lowest perceived effect on teaching and learning in general.

Interview and focus group discussion data

The interviews and focus group discussions highlighted three instruments as having the greatest effect on improving teaching and learning practices at the university: 1) course evaluation, 2) programme self-evaluation, and 3) employer involvement in study programme revision.

The English, marketing, and physics focus groups found that course assessment (ILOs assessment) helped to evaluate outcomes and identify areas to be improved. According to the departmental heads, course assessment helped to identify the weaknesses of courses and programmes. The head of the marketing department noted that group projects and presentations had been added to several courses as a result of course assessment. The head of English said that the lack of course components involving speaking had been highlighted as a weakness through the course assessment process. Speaking exercises and assessments were introduced to the course as a result. The focus groups concluded that course assessment improved the content of courses. The physics focus group reported improvements to the medical physics programme following feedback from programme advisory committee members that students lacked hands-on experience. They suggested introducing more practical training and concentrated biology courses in order to bring students in line with the market demands. However, by contrast, the students reported seeing little improvement in the courses and programmes at the university as a result of course evaluation.

Programme self-evaluation was also viewed as a crucial tool for improving teaching and learning practice at the university. The head of the physics department suggested that this tool gave each department an overview of their programmes. The process of programme self-evaluation, he said, brought data together in a coherent manner. The head of marketing said that a fixed student faculty ratio had been introduced in the department following a self-evaluation which identified an unequal distribution of students between programmes. The number of students in each programme was thereafter fixed, using the student dropout statistics from the programme self-evaluation.

Employer involvement in study programme revision was also found to improve the content of courses significantly. Participants reported that the involvement of external stakeholders contributed to the alignment of curriculum design and teaching and learning methods with the professional orientation of the programme. For example, a cloud computing course was introduced in the information system programme for first-year IT students, while an information resource management course was dropped. The importance of the programme and student advisory committees was also noted by the different stakeholders at the university. The student focus groups suggested that the committee meetings helped to orient programme modifications to the needs of the market.

Comparative analysis by stakeholder group of the effects of IQA tools on teaching and learning

The survey results showed that all IQA instruments related to teaching and learning and employability had positive effects on the practice of teaching and learning at UoB. Programme evaluation and self-evaluation, programme monitoring, and employer involvement in study programme revision were thought by academic staff to be the most effective tools for enhancing the quality of teaching and learning, having a particular impact on the quality of study programmes and courses. The interview and focus group discussions indicated that the involvement of employers in the review of study programmes was also highly effective in enhancing programme content, teaching performance, and learning conditions. This suggests that increasing the involvement of different stakeholder groups in IQA tools, including those which support improvements to teaching and learning, may increase their effects.

Table 4.13 Effects of IQA tools on teaching and learning (academic staff)

	T&L IQA tools						Employability IQA tools					
	Course evaluation	Programme evaluation	Teacher supervision	Programme self-evaluation	Programme monitoring	Student workload assessment	Graduate tracer studies	Employer satisfaction surveys	Employer involvement in study programme revisions	Jobs market analysis	Student competences assessment	
Overall coherence of a study programme	3.4	3.7	3.3	3.7	3.8	3.1	3.6	3.2	3.7	3.4	3.4	
Content coverage of courses	3.4	3.6	3.4	3.6	3.7	3.1	3.5	3.1	3.7	3.2	3.5	
Content coverage of study programmes	3.3	3.6	3.3	3.6	3.7	3.1	3.5	3.1	3.6	3.1	3.5	
Teaching performance	3.5	3.6	3.5	3.5	3.6	3.0	3.4	3.0	3.2	3.3	3.4	
Student assessment system	3.4	3.5	3.4	3.4	3.5	3.1	3.2	2.9	3.5	3.3	3.4	
Learning conditions	3.4	3.6	3.4	3.5	3.8	3.1	3.5	3.1	3.6	3.5	3.3	

*Note: All figures are averages (see Table 4.11 for explanation).

Effects on employability

The effect of these same tools on employability was also investigated. This section presents data from the surveys, interviews, and focus group discussions, before offering a comparative analysis of the effects on employability by stakeholder group.

Survey questionnaire data

According to *Table 4.14*, the IQA tools designed to improve employability have more positive effects on employability than do instruments for teaching and learning. Academic staff regarded employer involvement in study programme revision as the most effective tool for improving graduate employability. This was followed by jobs market analysis and graduate tracer studies. Of the instruments for teaching and learning, programme evaluation and programme monitoring were reported to have the most positive impact on the employability of graduates.

Employer satisfaction surveys were considered to have less impact on employability than other employability-related IQA tools. This may be explained by the low level of involvement on the part of employers in some programmes. Physical education, marketing, and English studies all reported that they did not have a close relationship with employers. Moreover, employer surveys were often provided only to employers in senior leadership positions with no direct contact with UoB graduates, meaning their answers were less likely to reflect the performance of graduates and therefore have little effect on graduate employability.

Table 4.14 Effects of IQA tools on employability (academic staff)

Enhanced employability of graduates	
T&L IQA tools	
Course evaluation	2.9
Programme evaluation	3.3
Teacher supervision	2.9
Programme self-evaluation	3.0
Programme monitoring	3.3
Student workload assessment	2.8
Employability IQA tools	
Graduate tracer studies	3.4
Employer satisfaction surveys	3.1
Employer involvement in study programme revision	3.7
Jobs market analysis	3.5
Student competences assessment	3.2

*Note: All figures are averages (see *Table 4.11* for explanation).

Interview and focus group discussion data

The vice-presidents, deans and department chairs acknowledged the importance of the IQA instruments for graduate employability. The dean of science said that these IQA instruments enhanced the employability of graduates as the knowledge and skills desired by employers were reflected in the outcomes and objectives of the programme.

The dean of health sciences observed that the programme advisory committees regularly updated the programme intended learning outcomes in accordance with the graduate competencies stipulated at national level by the National Authority of Qualifications and Quality Assurance for Education and Training. The committees' suggestions led to changes being made to programmes in terms of teaching methods and, where necessary, learning environments. The dean of arts cited suggestions made by the Information Affairs Authority, which led to the introduction of new courses on a programme. Another example was the introduction of a new MSc programme in nutrition on the suggestion of the programme advisory committee. It was reported that such developments improved the quality of the programmes as well as the employability of graduates.

However, participants also reported that the changing nature of the jobs market, combined with ineffective tracking of graduate performance, meant that suggestions were not always fully reflected in university programmes in time. The vice-president for administrative and financial affairs acknowledged there was no effective system for continuously tracking the performance of graduates in the labour market. He also suggested that the advisory committee be made up of individuals who directly supervise UoB graduates rather than those in leadership positions whose views may not reflect the realities of graduate performance.

Comparative analysis by stakeholder group on the effects of IQA tools on employability

The academic staff survey demonstrated that the tools for employability had a greater impact on employability than the tools for teaching and learning. In particular, employer involvement in study programme revision, programme monitoring, and jobs market analysis were identified as the most effective tools for improving graduate employability. The positive effects of such tools were acknowledged by most of the stakeholders who took part in the interviews and focus group discussions, including academic staff, vice-presidents, deans, and department heads.

These tools were regarded as more effective when they provided the views and feedback of a variety of stakeholder groups, through different data collection processes. Programme monitoring does this by assessing the objectives and outcomes of programmes through a series of processes, including external audits and departmental self-evaluation. Jobs market analysis offers a comprehensive approach to evaluating the demand for a programme in the market, while the involvement of employers in the revision of study programmes ensures direct and continuous contact with both alumni and employers. It can be concluded, therefore, that IQA instruments can increase graduate employability by encouraging the direct involvement of different stakeholders in the assessment and development of programmes, and that they are viewed as more effective if they bring together data from different stakeholder viewpoints.

Effects on management

Management-focused IQA tools were investigated to assess their effects on management at the university. This section presents data from the surveys, the interviews, and the focus group discussions before offering a comparative analysis by stakeholder group of the effects of these tools on management.

Survey questionnaire data (administrative staff)

Table 4.15 presents the perceptions of administrative staff as to the effects of management-related IQA tools on management. Most of the instruments were believed to have improved university strategic planning, with target-level agreements rated the highest. Participants also felt that strategic planning was enhanced through unit self-evaluation, unit external evaluation, and certification (all three receiving averages of 3.5). Unit self-

evaluation and unit external evaluation were perceived to have helped administrative staff make evidence-based decisions. In addition, unit self-evaluation was believed to have contributed positively to the service orientation of the university and its administrative operations, while target agreements were also seen to have had a positive impact on service orientation (with an average of 3.4). Overall, service-level agreements were believed to have had least effect on university management.

Table 4.15 Effects of IQA tools on management (administrative staff)

	Unit self-evaluation	Unit external evaluation	Certification	Target agreements	Service-level agreements
Improved strategic planning	3.5	3.5	3.5	3.6	3.2
More evidence-based decision-making	3.4	3.3	-	-	-
More service orientation	3.4	3.2	3.3	3.4	3.2
Effectiveness of administrative operations	3.4	3.3	3.2	3.3	3.2

*Note: All figures are averages (see Table 4.11 for explanation).

Interview and focus group discussion data

During the interviews, the vice-president for administration and finance indicated that the university lacked the capacity to measure the performance and effectiveness of its management system. While administrative units are required to submit an annual report, there are no measures in place to evaluate their performance against set objectives. He stated that service-level agreements between administrative units and senior management should be refined in order to increase the effectiveness of the management system.

The vice-president for academic affairs and graduate studies, on the other hand, felt that the university had a clear procedure in place to identify target agreements between academic units and senior management within the strategic planning unit. This tool was considered to be the most effective IQA tool for management, as there was a follow-up process which assessed the extent to which performance objectives were achieved. This was based on measures agreed between the units and the strategic planning unit.

The deans for science and health sciences pointed out that the IQA system was not as well-developed within administrative units as it was within academic units. They felt that the administrative tools and processes currently in place were supporting the development of academic units rather than administrative ones.

Comparative analysis by stakeholder group on the effects of IQA tools on management

Data from the administrative staff survey suggest that target-level agreements contribute the most to improved strategic planning, while service-level agreements contribute the least. This supports the argument of the vice-president for administration and finance, who felt there was a need for clearer performance measures in service-level agreements between administrative units and senior management. Both vice-presidents highlighted the need for strategic plans to increase the performance and effectiveness of management operations at administrative level, suggesting that performance measures existed only in academic units.

4.5 Conditioning factors

This section describes the internal and external conditioning factors for UoB's IQA system. Internal conditioning factors were investigated by the triangulation of data generated by the survey questionnaire, the interviews, and the focus group discussions. The study focused on the following internal conditioning factors: 1) leadership support, 2) financial incentives for staff contributions, 3) the support of students, 4) the visibility of measures derived from internal quality assurance procedures, 5) solid data information systems, 6) transparent information on internal quality assurance procedures, 7) scientific evaluation of IQA procedures, and 8) the active participation of all stakeholder groups in IQA procedures.

The analysis of external conditioning factors was based entirely on qualitative data from the interviews. Participants were asked about their perceptions of the role of external quality assurance and university autonomy.

Internal factors

The academic and administrative survey questionnaires were used to investigate both the existence and the importance of internal conditioning factors for the IQA system at UoB. This information was then triangulated with the interview and focus group discussion data. A comparative analysis of the internal conditioning factors, as perceived by different stakeholder groups, is provided below.

Survey questionnaire data (academic and administrative staff)

Table 4.16 shows that both staff groups viewed all the internal conditioning factors as important, although academic staff, overall, tended to give them slightly higher values. While academic staff gave all the conditioning factors scores of around 4.0, administrative staff considered leadership support and financial incentives to be more important than the other factors, with scores of 4.3 and 4.1, respectively.

For academic staff, transparent information on IQA procedures was seen as the most important internal factor for the effective functioning of the IQA system at UoB, while administrative staff rated leadership support the highest. Leadership support and financial incentives were regarded as among the most important internal factors by both staff groups. Both saw the visibility of measures derived from IQA procedures as one of the less important factors, with administrative staff at its lowest score of 3.6.

When it came to assessing the existence of internal conditioning factors, both academic and administrative staff gave ratings consistently lower than those given for importance. They rated leadership support the factor with the greatest presence within the university.

Factors considered to be of high importance were not necessarily recognized as present in the IQA system. For example, although transparent information was viewed as the most important factor for an efficient IQA system by academic staff, it was not one of the factors considered most present at UoB, with an average score of only 2.7. Similarly, while both academic and administrative staff rated financial incentives as important, both groups agreed that it was the factor with the least presence in UoB's IQA system, giving it an average score of 2.1 and 2.2, respectively. However, leadership support was seen by administrative staff as both highly important and highly present at the university.

Table 4.16 Academic and administrative staff responses on conditioning factors

	Academic staff		Administrative staff	
	Importance	Existence	Importance	Existence
Leadership support	4.0	3.2	4.3	3.0
Financial incentives as a top-up of the salary for contribution of staff	4.0	2.1	4.1	2.2
Support by students	3.9	2.5	3.7	2.7
Visibility of measures derived from internal quality assurance procedures	3.9	2.7	3.6	2.6
Solid data information system	4.0	2.5	3.7	2.6
Transparent information on internal quality assurance procedures	4.1	2.7	3.8	2.5
Scientific evaluation of internal quality assurance procedures	3.9	2.6	3.8	2.8
Active participation of all stakeholder groups in internal quality assurance procedures	4.0	2.6	3.8	2.7

*Note: All figures are averages (see Table 4.11 for explanation).

For academic staff, transparent information on IQA procedures was seen as the most important internal factor for the effective functioning of the IQA system at UoB, while administrative staff rated leadership support the highest. Leadership support and financial incentives were regarded as among the most important internal factors by both staff groups. Both saw the visibility of measures derived from IQA procedures as one of the less important factors, with administrative staff at its lowest score of 3.6.

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Interview discussion data

The vice-president for academic affairs and graduate studies indicated that leadership support from the president's advisor for academic quality was key to the effective implementation of IQA tools. The dean of health sciences also identified leadership support as a central internal factor, particularly emphasising the role of QAAC in promoting continuous communication and support, under the supervision of the president's office. Interviewees also reported that support from the president enhanced the quality of academic programmes.

In addition to the list of conditioning factors used in the survey questionnaires, the deans considered other internal factors to be important to the effective operation of the IQA system. These included the availability and accessibility of quality policies and documents, as well as solid information on graduation, transfer, and dropout rates.

The issue of autonomy and the level of decentralization was also raised by the vice-presidents and deans. The vice-president for administrative and financial affairs, the dean of arts, and the dean of student affairs all reported that the dissemination of information generated from IQA tools was problematic, and raised concerns about the accountability of stakeholders. This, in turn, constrained the development of effective governance and management arrangements for the IQA system, they said. The dean of arts argued that the lack of autonomy meant 'a lot of centralization which slows processes down'. The dean of health sciences too felt that 'autonomy is a must'. Participants, overall, believed that a higher level of decentralization supported faster, more efficient decision-making.

Comparative analysis by stakeholder group on internal conditioning factors

The survey findings show that both academic and administrative respondents acknowledged the importance of internal factors for the effective operation of the IQA system. In particular, the survey responses showed that leadership support was seen by both academic and administrative staff as one of the most important internal factors. This view was reflected in the qualitative data gathered from the interviews with the vice-presidents and the deans, who agreed that leadership support was important for the effective functioning of the IQA system.

Leadership support was also acknowledged by both academic and administrative respondents to be the conditioning factor which was most present in the university's IQA system. Both groups agreed that financial incentives for contribution of staff were the least present, despite the fact that the administrative respondents considered this to be the most important factor.

External conditioning factors

The analysis of the external conditioning factors was entirely based on qualitative data from the interviews and focus group discussions. A comparative analysis of the external conditioning factors, as perceived by the different stakeholder groups, is provided below.

Interview discussion data

The vice-presidents and deans felt that the effectiveness of the university's IQA system was conditioned by the local quality assurance authority (NAQQAET) and by international accreditation. The vice-president for academic affairs and the deans of science, health sciences, and arts noted that the external quality assurance system imposed by NAQQAET included compliance with the demands of the national qualifications framework (NQF), as well as requirement of programme and institutional reviews. These were identified as key elements influencing the IQA system at UoB. For example, the dean of science reported that the physics department had established ILOs for its courses through the NQF exercise. The dean of arts remarked that course ILOs were modified to align with the assessment activities of NAQQAET and to satisfy NQF thresholds.

The interviewees also saw international accreditation as important in ensuring the quality of programmes and maximising the effective functioning of the IQA system. According to the deans and the vice-president for academic affairs and graduate studies, the most significant moment in the development of the university's IQA system was achievement of its first international accreditation, from the Accreditation Board for Engineering and Technology. The vice-president said that international accreditation processes led to the development of a quality culture within colleges and in the university as a whole. The

deans of arts and health sciences noted that the techniques used to assess teaching and learning in their respective programmes were developed first according to international practice, before being adapted to the university's own needs.

Comparative analysis by stakeholder group on the external conditioning factors

The different stakeholder groups were in agreement as to the positive effect of external quality assurance in improving and supporting UoB's internal quality assurance. NAQQAET's role, in areas such as institutional review and programme accreditation, was viewed very positively by the university's leaders, as was the role of international accreditation.

4.6 Overall appreciation of the effectiveness of IQA system

Survey questionnaire data (academic and administrative staff)

Academic and administrative staff were asked about the main paradigm underlying internal quality assurance activities at the university. As Table 4.17 shows, the two staff groups demonstrated quite different understandings. While academic staff largely regarded compliance with external standards as the most dominant paradigm (41.3 per cent), administrative respondents felt it was improvement of the university (30.8 per cent). This can be explained by the fact that academic staff contribute significantly to the course and programme assessments requested by NAQQAET and are, therefore, more knowledgeable about external requirements. Academic staff identified the second main paradigm as improvement (20.6 per cent), while for administrative staff it was compliance with external standards together with enhanced organizational learning (19.9 per cent). Accountability to stakeholders was seen by 10.9 per cent of administrative staff as the dominant paradigm of UoB's IQA system, compared to 7.9 per cent of academic staff. Control was placed relatively low by both academic and administrative staff, with the averages of 10.3 per cent and 10.9 per cent, respectively.

Table 4.17 Main paradigm of IQA instruments and processes

	Academic staff	Administrative staff
Compliance with external standards	41.3%	19.9%
Accountability to stakeholders	7.9%	10.9%
Enhanced organizational learning	17.5%	19.9%
Improvement	20.6%	30.8%
Control	10.3%	10.9%
Other	2.4%	7.7%
Total*	100%	100%

Note: Figures were rounded off to nearest decimal place. This explains why some totals () do not neatly add up to 100%. This however does not statistically affect the results.

Table 4.18 shows academic and administrative staff perceptions of the overall workload generated by IQA instruments and processes at UoB. IQA instruments and processes appear to have created more work for academic staff than for their administrative counterparts. More than one in five (21.4 per cent) of academic respondents viewed their workload due to IQA as 'very high', compared to 11.5 per cent of administrative staff. Divergence was also in evidence in the proportion of academic and administrative respondents who chose 'none at all'; or 'I do not know'. A fifth (20.5 per cent) of administrative respondents chose one of these options, while only 10.3 per cent of academic respondents did so. This difference in perception may be explained by the fact that, in general, administrative

staff are much less involved in IQA activities than academic staff, since UoB's IQA system focuses heavily on teaching and learning.

Table 4.18 Overall workload generated by IQA instruments and processes

	Academic staff	Administrative staff
Very high	21.4%	11.5%
High	33.3%	30.1%
Moderate	23.8%	28.8%
Low	11.1%	9%
None at all	0.8%	4.5%
I do not know	9.5%	16%
Total*	100%	100%

Note: Figures were rounded off to nearest decimal place. This explains why some totals () do not neatly add up to 100%. This however does not statistically affect the results.

Despite the difference in perceptions of workload generated by IQA instruments, *Table 4.19* shows that a large proportion of both academic and administrative staff nonetheless view the overall benefits of IQA as 'high', with averages of 34.1 per cent and 31.4 per cent, respectively. The benefits were rated 'very high' by 13.5 per cent of academic staff and 9 per cent of administrative staff. A relatively large proportion (20.5 per cent) of administrative staff said that they 'did not know' about IQA activities at the university, compared to just 7.9 per cent of academic staff, reflecting the relative lack of involvement of administrative staff in IQA processes and instruments. It is interesting to note, however, that a greater proportion of academic staff viewed the overall benefits of IQA as 'low' (17.5 per cent compared to 9.6 per cent of administrative staff).

Table 4.19 Overall benefits with IQA instruments and processes

	Academic staff	Administrative staff
Very high	13.5%	9%
High	34.1%	31.4%
Moderate	23.8%	26.9%
Low	17.5%	9.6%
None at all	3.2%	2.6%
I do not know	7.9%	20.5%
Total	100%	100%

Table 4.20 suggests that opinions varied as to the contribution of IQA to improved management decisions, with responses fairly well distributed across the scale. This was particularly true of academic staff, 23.8 per cent of whom viewed its contribution as 'high', 21.4 per cent as 'moderate', and 23 per cent as 'low'. Overall, administrative staff seemed to take a more favourable view of the contribution of IQA, with 28.8 per cent rating it as high and 23.1 per cent as moderate. However, more than one in five (21.2 per cent) administrative respondents did not know about the contribution of IQA to management decisions.

Table 4.20 Contribution of IQA to improved management decisions

	Academic staff	Administrative staff
Very high	10.3%	8.3%
High	23.8%	28.8%
Moderate	21.4%	23.1%
Low	23%	12.2%
None at all	5.6%	6.4%
I do not know	15.9%	21.2%
Total	100%	100%

Table 4.21 illustrates the contribution IQA was perceived to have made to the overall improved effectiveness of the university. Once again, administrative staff seemed to view the contribution of IQA processes in a more positive light with the highest proportion (27.6 per cent) rating it as having contributed ‘much’. The most popular answer among academic staff (30.2 per cent) was that it was ‘moderately’ effective. Once again, administrative staff were less aware of the contribution of IQA processes than were academic respondents, with 18.6 per cent of administrative staff answering ‘I do not know’, compared to 13.5 per cent of academic staff. Overall, however, it seems that both academic and administrative staff viewed the contribution of IQA to overall improved effectiveness in a positive way.

Table 4.21 Contribution of IQA to overall improved effectiveness

	Academic staff	Administrative staff
Very much	14.3%	12.2%
Much	16.7%	27.6%
Moderately	30.2%	24.4%
Little	18.3%	13.5%
Not at all	7.1%	3.8%
I do not know	13.5%	18.6%
Total*	100%	100%

Note: Figures were rounded off to nearest decimal place. This explains why some totals () do not neatly add up to 100%. This however does not statistically affect the results.

Interview and focus group discussion data

Compliance with external standards and improvement emerged from the interviews as the two dominant paradigms of the university’s IQA system. The vice-president for academic affairs considered improvement to be the main paradigm, while the deans of science and health sciences cited compliance with external standards, perhaps unsurprisingly since they are required to satisfy external standards to improve their programmes. The dean of arts stressed the link between the development of quality assurance at the university and its obligation to meet the quality standards of the national authority.

In terms of overall workload, senior management felt that tasks relating to IQA should not be considered a separate workload. Instead, they argued, the work should be seen as integral to the responsibilities of both groups of staff. The vice-president for academic affairs said that academic staff viewed IQA work as part of their day-to-day activity. The vice-president for administrative and financial affairs also said that administrative staff should consider IQA activities as part of their job, although job descriptions do not specify IQA tasks. The dean of health sciences felt that quality was already a part of the culture, and no additional effort was required in order to incorporate this into the teaching system.

The dean of science, however, observed that academic staff felt IQA-related activities to be burdensome. He suggested that faculty members on the quality assurance committee should be released from teaching responsibilities for one course, just as chairs or directors of quality assurance committees or offices were.

The vice-president for administrative and financial affairs said that the overall benefits of the IQA system to the university were clearly visible. Some interviewees considered the well-defined IQA system to be a contributing factor to the overall strength of the university. The dean of health sciences thought that quality policies and procedures helped programmes at UoB obtain international accreditation from prominent agencies and promoted evidence-based decision-making. Furthermore, the centralized management of standards, policies, and procedures maintained the uniformity of quality development across programmes, thereby maximising the overall benefits of the IQA system.

Comparative analysis by stakeholder group of the overall effectiveness of IQA systems

There were differences among stakeholders as to the main paradigm of UoB's IQA system. While academic staff tended to view the system as being chiefly about compliance with external standards, administrative staff felt the main paradigm to be improvement. These tendencies were reflected in the interview and focus group discussion findings, as these two factors were frequently cited as the main paradigms of UoB's IQA system by those in senior management positions.

When it came to perceptions of IQA-related workload, there was a divergence of opinion between senior managers and staff. Senior managers felt that IQA work should be seen as integral to the responsibilities of academic and administrative staff, and not as additional workload. Many academic staff, however, felt burdened by IQA-related work. This may be because the teaching workload of academic staff has not been adjusted to compensate for their involvement in IQA activities or because IQA is not considered an integral part of the teaching and learning process. In this sense, IQA work may be seen as supplementary to the main tasks of academic staff at the university. As noted earlier, financial incentives are an important factor in an effective IQA system – one which is not yet present at the university.

Nevertheless, the overall benefits of IQA were perceived as high by both academic and administrative staff. Senior managers attributed the high benefits to the centralization of the IQA system. They claimed that these benefits can be maximised through a well-defined IQA system supported by IQA policies and procedures. This contrasted with some of the more critical views expressed when the issues of autonomy and the decentralization of responsibilities for IQA were discussed. It was argued that the effective functioning of IQA demanded a considerable level of decentralized authority, at both department and college level.

5. Summary and conclusion

Internal quality assurance at the University of Bahrain developed from a need to support the international accreditation of selected study programmes. As national standards for higher education have long been in the development process in Bahrain, international accreditation has been used as an interim measure to ensure the effective functioning of quality assurance in Bahraini HEIs (Al-Alawi *et al.*, 2009).

UoB has designed its IQA system with a set of interrelated processes and tools in order to support institutional decision-making regarding quality enhancement. The system is largely focused on the regular revision of study programmes and courses by internal and external stakeholders in order to enhance their labour-market relevance. Employers are actively engaged in the university's study programme reviews, as are graduates of the university.

To support its IQA processes, the university has developed a decentralized, yet centrally coordinated, support structure for IQA, with distinct responsibilities for each unit. In order to guide and harmonize IQA processes, the central University Quality Assurance and Accreditation Centre prepares policies, tools, and timelines, which are implemented at college and department level. Data are analysed at all levels and the results reported to the university's senior leadership team.

This chapter summarizes the key findings of the study and makes a number of recommendations, both for UoB and for other HEIs, within and beyond the Kingdom of Bahrain.

5.1 Summary

Most stakeholders at UoB are aware of the existence of IQA policies and manuals. However, many appear less familiar with the IQA instruments related to employability and management than they are with tools for teaching and learning. This aligns with the finding that the university's IQA tools have a greater impact on teaching and learning than they do on graduate employability or managerial effectiveness.

Programme monitoring was seen as the most effective of the IQA tools for teaching and learning, influencing both the content of programmes and courses and the practice of teaching and learning. The involvement of employers in study programme revision was also reported to have a considerable impact on teaching and learning, although its effect was limited to the level of study programmes and courses. In particular, employer involvement had a positive impact on the coherence of study programmes and the content coverage of courses. Programme evaluation and self-evaluation seemed to have a direct effect on teaching and learning practice, producing improvements to teaching performance and learning conditions. Student workload assessment and employer satisfaction surveys were considered by academic staff to be the least effective IQA tool for teaching and learning.

The employability-related IQA tools were perceived to have had a greater impact on graduate employability than had the tools for teaching and learning. The involvement of employers in study programme revision was reported to have the most significant effect on graduate employability. The interviews and focus group discussions highlighted the importance of involving the direct supervisors of students, those in the best position to inform students of the essential skills required by the labour market as well as the areas in which they need to improve. Although programme evaluation and monitoring were thought to enhance the employability of university graduates, the effects of these tools were considered to be lower than those of employer involvement. It can thus be

concluded that the effects of IQA tools on employability can be maximised by creating a close relationship between the labour market and academic programmes.

IQA instruments for management were considered less well developed than other tools, and, as yet, not connected to overall management processes. Administrative staff regarded target-level agreements as the most effective tool in operation. This instrument was seen to be particularly effective in supporting strategic planning. By contrast, service-level agreements were considered to have the least effect on university management. This was thought to be a result of a lack of tools with which to measure the effectiveness and performance of management system processes. Interviewees indicated that performance measures existed only in agreements between senior management and academic units. This suggests the importance of a follow-up process to support the improvement of administrative staff performance at UoB.

The study considered the internal factors which could contribute to the success of the IQA system at UoB. Leadership support and financial incentives were viewed by both academic and administrative staff as the most important. While academic and administrative staff acknowledged both the importance and the presence of leadership support in the university's IQA system, financial incentives were not seen as highly present, despite the level of importance attributed to them. The vice-presidents and department heads who took part in the interviews and focus group discussions acknowledged the contribution of QAAC and the president's advisor to the effective functioning of the university's IQA system. Interviewees also mentioned autonomy and decentralization as critical factors in an effective IQA system. The emphasis given to autonomy by participants suggests that decision-making based on IQA results remains too centralized.

With regards to external conditioning factors, the data gathered from the interviews and focus group discussions suggest that two factors, the local quality assurance authority (NAQQAET) and international accreditation, have had the biggest impact on the university's IQA system. These factors drove the university to undertake quality assurance practices, thereby shaping the institutional culture for quality enhancement.

The study also found that staff considered the main paradigms of the university's IQA system to be compliance with external standards (academic staff) and improvement (administrative staff). There were differences of perception too in terms of workload, with academic staff tending to view their IQA-related workload as larger than administrative staff did. This may be because academic staff see IQA work as additional rather than integral to their main tasks. The university should, therefore, either include quality tasks in academic job descriptions or consider reducing the teaching workloads of those who are actively involved in IQA tasks (for instance, course and programme evaluation).

Finally, the survey questionnaire data demonstrate that the university's IQA system is viewed positively by both staff groups. It is acknowledged to have contributed much to the overall effectiveness of the university. The interview data suggest that the centralized coordination of the IQA system at UoB has been an important factor in making the system a success and, thus, in improving the overall effectiveness of the university.

5.2 Conclusions

Three innovative features can be identified from the data generated by this study, each of which underpins the effectiveness of UoB's IQA system.

- **Integration of policies, processes, and instruments for IQA** – The effectiveness of the system is enhanced by the integration of policies, processes, and instruments for IQA. The quality framework at UoB consists of IQA instruments, including programme evaluation, course assessment, and self-evaluation. These instruments are implemented in an integrated manner when the intended learning outcomes

of courses and programmes are assessed. The integration of these IQA tools is supported by documented policies and procedures which clearly outline the responsibilities of different stakeholders in the assessment process. The integrated approach involves all faculty members in the IQA system and, therefore, maximises the impact of IQA on teaching, learning, and employability.

- **A balance between central coordination and decentralized responsibility** – The overall monitoring of tasks is conducted centrally, with the director of the university's Quality Assurance and Accreditation Centre responsible for ensuring policies and procedures are observed. This means that IQA instruments and processes are continuously monitored at a centralized level, with a clear timeline for every college, ongoing meetings with the college quality assurance office director, annual meetings with deans and chairs, and internal programme audits. At a decentralized level, the colleges and departments have full authority and responsibility in the implementation of IQA tools for the improvement of their programmes. Support is provided through continuous capacity-building at all levels, from university to colleges and departments. While decentralization helps colleges and departments to maintain the quality of their programmes through continuous improvement cycles, centralization helps to maintain quality across colleges and departments.
- **Establishment of an effective information management system** – The UoB established an information system which promotes communication between different stakeholder groups. Quantitative and qualitative data are regularly collected from departments, colleges, and the university using IQA instruments. Information is also obtained from junior and senior students, alumni, and employers. All this information is collected, analysed, and reported through a self-evaluation and improvement action cycle. The university uses a comprehensive web-based assessment information management system (AIMS), which facilitates e-participation and allows all stakeholders to access information through the Internet. This ensures the transparency of IQA instruments and procedures. The IQA system is perceived as more legitimate as a result of enhanced stakeholder participation in decision-making processes and interaction between the university and its stakeholders.

The following recommendations are proposed for the future policy direction and development of the IQA system at UoB:

- **Encourage communication among staff** – More communication among academic and administrative staff is necessary on both the quality policies and manuals. There are still a considerable number of academic and administrative staff who are not aware of the main IQA documents. To promote communication, quality meetings should be conducted annually, involving faculty members and senior management. There should also be a follow-up process once feedback has been given in order to maximise the impact of assessment and ensure the actions necessary for improvement are taken.
- **Integrate IQA tools for management into the overall IQA system** – Staff and management do not currently see IQA tools for management as part of IQA at the university. In particular, administrative units should be encouraged to participate in the IQA system through involvement in the implementation of resolutions, policies, and procedures.
- **Promote awareness and involvement** – The impact of IQA tools was greater when there was stakeholder involvement. The study highlighted the divergent perceptions of leaders and academic staff as to the nature of IQA-related tasks. Leaders view them as integral to academic work, while academic staff view them as supplementary tasks for which some financial incentive might be appropriate. This different understanding of IQA instruments needs to be clarified, with the final decision communicated to both administrative and academic staff. Job descriptions

and renewal contracts could include quality tasks as a part of the normal duties of academic staff. Financial incentives could be formally arranged to promote the accountability of stakeholders.

- **Integrate administrative and academic units into IQA structure** – The structure and process of the IQA system need to be modified to provide for better integration of both administrative and academic units. This requires a centrally coordinated structure, including the strategic planning office, the internal audit office, and the Quality Assurance and Accreditation Centre. It could be achieved by creating a deanship directly answerable to the president's office.

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The case study

The rapid expansion and privatization of the higher education sector in Bahrain led to a growing need to ensure the quality and relevance of the education on offer. This was addressed by developing a national quality assurance system, followed by a national qualifications framework. These, in turn, facilitated the development of internal quality assurance (IQA) within the institutions. The University of Bahrain (UoB) – the country's only national higher education institution (HEI) – established a well-coordinated, yet decentralized structure for IQA, which aims to make quality assurance an integral part of the university's functioning.

Conducted within the framework of an international research project implemented by the UNESCO International Institute for Educational Planning (IIEP), this case study focuses on how the IQA system at UoB was developed from external quality assurance mechanisms, and how the system has impacted the quality of education and the employability of graduates.

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