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King Saud University
1957

Vice Rectorate for Planning & Development

Deanship of Quality and Development

ITQAN 2020:

Electronic KSU – QMS

(Quality Management System)

Handbook 1

(4th Edition, May 2017)

Development and Quality Culture Series

Introduction

Dear Fellow KSUians,

It is my pleasure and honor to have worked with all my fellow KSU friends and colleagues to uphold and continue to enhance KSU as the pioneering premier institution in KSA in all aspects of quality management and accreditation.

Thanks to the efforts of all KSUians, KSU was re-accredited successfully for another 7 years into April 2024. 2016 was a momentous celebrated journey for KSU for conducting and submitting the whole re-accreditation exercise on the integrated electronic ITQAN KSU-Quality Management System in a 10 months' timeframe culminating in a paperless submission to the EEC-NCAAA (Education Evaluation Commission – National Center for Academic Accreditation and evAluation). 2016 also saw the successful application the ITQAN System for the Bi-annual Internal Audit and Assessment of 15 programs.

The never ending journey for quality continuous improvements is still evolving with the update of the KSU-QMS Handbooks 1 & 2 (4th Edition, May 2017) and the development of the Phase 2 ITQAN 2020: KSU Performance Management System (KSU-PMS). This integrated electronic ITQAN 2020 KSU-PMS platform, the de facto standard bearer of KSU is aimed at supporting and accomplishing

the KSA Vision 2030 via digital transformations to reduce quality fatigue and increased productivity through better quality-planning-information management and performance based management.

As we move towards the transformation of KSU 2030 within the KSA Vision 2030 using the ITQAN 2020 as the main integrated electronic platform for effective and efficient performance management across board, we at the Vice Rectorate of Planning and Development and its executive arm of the Deanship of Quality and Development pledges its continued support and assistance all academic and administrative units in all aspects of their quality-planning-information management and performance based management in KSU endeavors and educational offers.

Once again, we thank everyone for all continuous improvements and innovations efforts on the "Together towards Excellence" journey in many more fruitful and successful years to come. With your full cooperation and support KSU will and can strengthen and sustain its strives towards quality-planning-information excellence of the KSU 2030 "Towards Excellence".

Thank you.

Prof. Yousif Abdu Asiri, M.S., Ph.D.

Vice - Rector for Planning and Development

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Executive Summary

After embarking on its quality journey in 2009 and getting its first accreditation in 2010, KSU accomplished another first when it went through a digital transformation of its initial KSU-QMS that underscored its re-accreditation in 2017. The KSU 2016 self-study was successfully developed and submitted as electronic documents and evidences to EEC-NCAAA (Education Evaluation Commission – National Center for Academic Accreditation and evAluation) making KSU the first institution in KSA to go paperless through digitization of its quality and accreditation management and practices. It was a tough and long journey, and God willing, KSU with its unconditional and unconventional change commitment, has and will continue to succeed through its KSU family in support of the KSA Vision 2030 and KSU 2030. Quality is a never ending journey of conscientious re-evaluations, reflections and re-directions towards continuous and sustainable improvements and innovations. As such, the two ITQAN 2020: electronic KSU-QMS Handbooks 1 & 2 (4th Edition, May2017) represents the KSU internal mechanisms that concretizes and walk the talk of the QA way.

Accreditation, the buzz word of the 21st Century was and is still a dilemma to the HEIs (Higher Education Institutions) in the Kingdom of Saudi Arabia. Accreditation success is based on a strong and sustainable foundation of an Internal Quality Assurance (IQA) system and they are complementary and inseparable. In this EQA = IQA Equation and challenge, KSU continues to adhere to the key issues of "what to and how to" address the requirements of the EQA by the IQA. The KSU's two-tier approach of the "What" are the Standards and Criteria requirements and "How" of the challenge of its systematic mechanism and methodologies to achieve the "What". These generic quality strands and practices leads to the quality education of "fit for purpose" that revolves

around the key areas of teaching – learning – research, student – centric and learning outcomes focus, stakeholders, communities and social service centric focus, learning facilities and resources support, strategic and tactical mission, goals and objectives centricity, human and organizational resources development and information and metrics centricity. The "What" and "How" framework is based on the 4 "As" "Audit and Assessment leading to Assurance and later Accreditation" (certification of "fit for purpose" of quality which is the robust and solid foundation the ITQAN 2020: KSU – QMS.

In adhering to its simplicity philosophy and not reinventing the wheel, KSU maintained the basic blueprint standards, criteria and KPIs of EEC-NCAAA for the ITQAN 2020: KSU – QMS. It is topped up with a systemic and systematic, innovative but yet generic approach to its bi-annual audit and assessment by university appointed Board of Assessors. Its performance scoring approach to determine the performance level uses the internationally accepted MBNQA (Malcom Baldrige National Quality Award) of a set of standardized performance scoring criteria of A (Approach), D (Deployment), L (Learning) and I (Integration) for its process – based criteria. This is supported by a set of qualitative and quantitative indicators that serves as measures of performance that identifies its Le (Level), T (Trend), C (Comparison) and I (Integration). It is linked to the planning and information management systems that underlays the foundation for continuous improvements and innovations based on management through measurement and an evidenced-based mechanism. Ultimately, the linkages and integration of the quality-information-planning trio underscores the ITQAN 2020: KSU Performance Management System.

In a nutshell, the description of the handbook for the 5 Chapters is as follows:

Chapter 1	This chapter will provide an overall synopsis of Quality in relation to Accreditation requirements of EEC-NCAAA Institution and Programs Standards and Criteria and its assessment methodology.
Chapter 2	This Chapter concentrates on the approach used in developing the ITQAN 2020: KSU – QMS which a part of the ITQAN 2020: integrated electronic Strategic Performance Management System that also covers the e-QMS (planning Management System) e-PMS (Planning Management System) & its appending BSC (Balanced Scorecard) and the IMS (Information Management System). It highlights the principles under which the ITQAN 2020: KSU – QMS is developed. It provides details of the ITQAN 2020: KSU – QMS Quality Model, the bi-annual Internal Audit and Assessment and Annual Monitoring Process as related to the 5-Year Accreditation Cycle.
Chapter 3	This Chapter deals in-depth with the details of the ITQAN 2020: KSU – QMS in terms of its Standards, Criteria, Items that are the Process – based Criteria and KPI (Key Performance Indicators) that are the Results – based Criteria. It discuss the organization of the QMS in KSU, the development of the self-study, assessment by the institution, college, programs by the university appointed Board of Assessors. It provides examples of assessment of the Standards, Criteria and Items and the qualitative and quantitative KPI. It explains the ITQAN 2020: KSU – QMS Performance Scoring Guidelines of its Process – based and Results – based Criteria performance assessment in detail. It also provides an addendum of PDCA, ADLI and LeTCI evaluation factors and terminologies.

Chapter 4	This Chapter describes the core requirements and rationale of each of Standards, Criteria, Items and KPI, how to address the Standards, Criteria, Items and KPI and the evidence-based mechanism needed to justify the assessment of the Standards, Criteria, Items and KPI. It also provides a glossary of the key quality terminologies.
Chapter 5	This Chapter is dedicated to the KSU – IR (Institutional Research) Framework which is based on the AIR (Association for Institutional Research, 2017) roles and responsibilities, which is operationalized by the ITQAN 2020: Performance Management System.

The ITQAN 2020: KSU – QMS is meant to be the minimum requirement for Internal Quality Assurance as enshrined in the ITQAN 2020: KSU – QMS Handbooks 1 and 2 (4th Edition, May 2017) of King Saud University. As it is meant to be generic, it is applicable and scalable from the institution to the college and to the program levels. It is meant to be non-prescriptive, as it does not specify the systems, tools and techniques, frameworks or approaches used by the colleges or programs for the quality assurance The internal audit and assessment is meant to identify what and how the colleges or programs uses these approaches as the enablers to achieve performance based on the Standards and its accomplishment and achievements of its education endeavors.

Quality is not built and achieved in a single day. KSU's aspirations are built through this quality journey and the commitment of all members of the KSU family to continuous improvements and innovations. With this, KSU thank all its members for their conscientious time and efforts in their quality quests and strives.

Thank you.

King Saud University
Vice-Rectorate for Planning and Development
Deanship of Quality and Development

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Chapter 1 Quality and EEC-NCAAA Accreditation

Introduction

Quality and Accreditation flourished in the United States, Europe and the Asia-Pacific from the mid to the late 1990's and intensified in the Middle East towards the beginning of the 21st Century. The Kingdom of Saudi Arabia started with the NCAAA (National Commission for Academic Accreditation and Assessment) accreditation in 2009. On the merger of the Ministry of Education into one entity in 2016, the NCAAA is re-positioned under the EEC (Education Evaluation Commission) EEC-NCAAA (Education Evaluation Commission – National Center for Academic Accreditation and evAluation) to have oversight of the national standards for the Higher Education.

Quality as applied to higher education in the education industry had been emphasized in "What is Quality in Higher Education" by Diana Green (1994) that re-iterated the importance of the audit, assessment and accreditation to "Fit for Purpose". The purpose of the higher education institutions to implement these quality systems are for improving and managing the quality of the institutions through continuous improvement of its education products and services, education design and delivery quality and prevention of education "shortcomings" from standards. These were based on the major concepts and factors that were introduced by quality gurus, like Deming, Juran, Crosby, and Feigenbaum, Ishikawa and Garvin in one form or another in managing quality (Tummala and Tang, 1994). These quality concepts and factors had evolved into educational value creations for stakeholders with assessment criteria, core elements and values of various quality performance excellence models of MBNQA (Malcolm Balridge National Quality Awards) and EFQM (European Forum for Quality Management) & EQA (External Quality Assurance) (Puay et.al, 1998) and standards such as the ISO 9000 (Pun and Chin, 1999).

It is noted that the development of the original KSU-QMS developed in 2010 is based on the main mission and 9 strategic objectives of KSU 2030 Strategic Plan which underscore its "Towards Excellence" stance. As such, the 2017 ITQAN 2020: KSU-QMS will also conform to the KSU 2030 "Towards Excellence" and established its quality principles and fundamentals based on the KSU 2030 and the KSA Vision 2030.

To manage quality in KSU, a structured and systematic approach is needed to organize and manage the Quality Management System and mechanisms in KSU. The approach used in KSU is based on the following principles:

1. Quality is the role and responsibility of all members of the KSU Family as Quality is a single holistic and unified entity that creates and delivers on education value to the students, society and community.
2. Quality cuts across boundaries of all academic and administrative units that should contribute and commit to the same quality standard and quality actions affecting effective and efficient performance of the institution, colleges and programs.
3. Quality brings about and enhances sharing of data, information & knowledge and learning across all units to bring about a learning organization in KSU.
4. Quality is a seamless set of actions and activities that synergizes the philosophy, policies, processes, procedures and people of the institution as a single holistic entity guided by a singular set of mission and goals that streamlines and unifies the institution towards its commitment to the students, society and communities.

As the overall achievement of KSU is a culmination and aggregation of the achievements and attainments of each of the programs of the colleges that make up KSU, KSU is only strongest in where it is the weakest, and as such all programs and colleges in the KSU family should equally contribute and commit to KSU overall drive for quality performance.

The EEC-NCAAA forms the basic regulatory national standards that all higher education institutions and programs in KSA. As such, the EEC-NCAAA stipulations are statutory which means that they represent a legal requirement to fulfil and satisfy the minimum standards for quality in the academic assessment that leads to accreditation as it represents the highest regulatory agency in the

Kingdom of Saudi Arabia governing academic assessment and accreditation. This would inherently mean that they form the minimum requirements needed for academic assessment and accreditation. The institution or the higher education programs should use these as the minimum statutory instruments for conformance and compliance in the development of the institution, college and programs Internal Quality Assurance (IQA) within the requirements of the External Quality Assurance (EQA). It must be noted that in KSA, any institution, college or program that has been accredited by an international accrediting agency, they also need to seek accreditation by the EEC-NCAAA, the overarching accreditation agency in KSA.

In updating the 4th Edition Internal Quality Assurance (IQA) handbook of King Saud University (KSU), KSU continue to use the EEC-NCAAA as the blueprint for its standards & best practices as the minimum requirement for the ITQAN 2020: KSU e-QMS (King Saud University Electronic Quality Management System). The EEC-NCAAA requirements are used as the blueprint to develop the KSU eQMS. Practitioners of Quality Assurance in KSA are advised to read the 6 volumes for an in-depth discussion of the EEC-NCAAA requirements.

The ITQAN 2020: KSU e-QMS Handbook 1 (4th Edition, May 2017) is made up of 5 chapters. The main reference materials for the EEC-NCAAA requirements used in the development of the KSU e-QMS comes from the following documents whereby the institution, colleges and programs and administrative units should use as the main references and in-depth materials are as follows:

1. EEC-NCAAA Standards for Quality Assurance and Accreditation of Higher Education Institutions (October 2015)
2. EEC-NCAAA Standards for Quality Assurance and Accreditation of Higher Education Programs (October 2015)
3. EEC-NCAAA Self-Evaluation Scales for Higher Education Institutions (October 2015)
4. EEC-NCAAA Self-Evaluation Scales for Higher Education Programs (October 2015)
5. EEC-NCAAA Handbook for Quality Assurance and Accreditation in Saudi Arabia (Part 1), The System for Quality Assurance and Accreditation (October 2015)
6. EEC-NCAAA Handbook for Quality Assurance and Accreditation in Saudi Arabia (Part 2), Internal Quality Assurance Arrangements (October 2015)
7. EEC-NCAAA Handbook for Quality Assurance and Accreditation in Saudi Arabia (Part 3), External Reviews for Accreditation and Quality Assurance (October 2015)
8. EEC-NCAAA National Qualifications Framework, Kingdom of Saudi Arabia (October 2015)

Chapter 1 provides an overview of the EEC-NCAAA (October 2015 version) six volumes of institution and program standards and assessment fundamentals, requirements and methods and the NQF (National Qualification Framework). The later sections of this chapter provide a synopsis of the EEC-NCAAA standards, best practices and scales used for the accreditation of the institutions and higher education programs.

1.1. EEC-NCAAA Standards and Criteria

The EEC-NCAAA in Saudi Arabia has developed a set of standards and criteria for quality assurance and accreditation of higher education institutions and programs in eleven general areas of activity. These are used as the overarching principles in developing the Standards for the as follows:

Institutional Context

1. Mission Goals and Objectives
2. Governance and Administration
3. Management of Quality Assurance and Improvement

Quality of Learning and Teaching

4. Learning and Teaching

Support for Student Learning

5. Student Administration and Support Services
6. Learning Resources

Supporting Infrastructure

7. Facilities and Equipment
8. Financial Planning and Management
9. Employment Processes

Community Contributions

10. Research
11. Institutional Relationships with the Community

1.2. Relationships between Standards for Institutions and Standards for Programs

The 5 main categories of 11 standards, 58 sub-standards and about 439 best practices and 45 sub-standards and 279 best practices for Institution and Program respectively have been developed for governance of the quality higher education institutions and programs. Both of these are covered in 2 separate documents titled: "Standards for Quality Assurance and Accreditation of Higher Education Institutions – Version of October 2015" for institutions and "Standards for Quality Assurance and Accreditation of Higher Education Programs – Version of October 2015" for programs. Figure 1.1 shows a sample of the similarity standards and criteria requirements of the institution and program. It is noted that they cover the same general areas of activity but there are some differences that reflect a total institutional overview on the one hand and the perspective of just one specific program on the other. In addition, for the EEC-NCAAA, some general institutional functions are not considered in a program evaluation but they are considered to contribute to the overall functioning and performance of the program.

Even though there are some distinctions between the institution and the program standards based on the EEC-NCAAA approach, it is noted that the program standards and criteria normally fall within the greater set of the institutional standards. All of the institutional standards with the majority of best practices are applicable to the programs as most of them relates to the basic fundamentals and principles of education. As such, KSU will treat them as a generic and singular set of standards and criteria within the framework of EEC-NCAAA as applicable to the institution or program.

Figure 1.1: Comparative of Institution and Program Standards and Criteria requirements

Institution Standard 4	Program Standard 4
The institution must have an effective system for ensuring that all programs meet high standards of learning and teaching through initial approvals, monitoring of performance, and provision of institution-wide support services. The following requirements are applicable to all programs. Student learning outcomes must be clearly specified, consistent with the National Qualifications Framework and (for professional programs) requirements for employment or professional practice. Standards of learning must be assessed through appropriate processes and benchmarked against demanding and relevant external reference points. Teaching staff must be appropriately qualified and experienced for their particular teaching responsibilities, use teaching strategies suitable for different kinds of learning outcomes, and participate in activities to improve their teaching effectiveness. Teaching quality and the effectiveness of programs must be evaluated through student assessments and graduate and employer surveys, with feedback used as a basis for plans for improvement.	Student learning outcomes must be clearly specified, consistent with the National Qualifications Framework and requirements for employment or professional practice. Standards of learning must be assessed through appropriate processes and benchmarked against demanding and relevant external reference points. Teaching staff must be appropriately qualified and experienced for their particular teaching responsibilities, use teaching strategies suitable for different kinds of learning outcomes, and participate in activities to improve their teaching effectiveness. Teaching quality and the effectiveness of programs must be evaluated through student assessments and graduate and employer surveys, with feedback used as a basis for plans for improvement.
Specific Criteria requirements for an institution as a whole relating to Standard 4 are specified under the headings of: 4.1 Institutional Oversight of Quality of Learning and Teaching 4.2 Student Learning Outcomes 4.3 Program Development Processes 4.4 Program Evaluation and Review Processes 4.5 Student Assessment 4.6 Educational Assistance for Students 4.7 Quality of Teaching 4.8 Support for Improvements in Quality of Teaching 4.9 Qualifications and Experience of Teaching Staff 4.10 Field Experience Activities 4.11 Partnership Arrangements with Other Institutions	Specific Criteria requirements for a particular program relating to Standard 4 are specified under the headings of: 4.1 Student Learning Outcomes 4.2 Program Development Processes 4.3 Program Evaluation and Review Processes 4.4 Student Assessment 4.5 Educational Assistance for Students 4.6 Quality of Teaching 4.7 Support for Improvements in Quality of Teaching 4.8 Qualifications and Experience of Teaching Staff 4.9 Field Experience Activities 4.10 Partnership Arrangements with Other Institutions

Source: Adapted from the EEC-NCAAA (Education Evaluation Commission – National Center for Academic Accreditation and evAluation), (2015), *"Handbook for Quality Assurance and Accreditation in Saudi Arabia, Part 1, The System for Quality Assurance and Accreditation"*, October 2015.

In general, activities relating to the standards fall into three categories.

- ***Those that are institutional and have no impact or only very indirect impact on programs.*** Examples include the management of extracurricular activities or the attractiveness of buildings and grounds. Even though the EEC-NCAAA do not consider these in looking at the application of the standards to programs, KSU takes a holistic approach towards the above that contributes to the conducive environment for teaching and learning and in developing a "total graduate".

- ***Those that are general institutional activities with a major impact on programs.*** Examples would be the provision of learning resources through a library or the processes for employment and promotion of teaching staff. These should be considered in evaluating a program as they impact on the program concerned e.g. whether the library provides the services needed for the particular program being considered, or whether appropriately qualified and experienced faculty and staff are available to teach in the program have major impacts. The quality of a program is affected by these things regardless of who is responsible for administering them. Evaluation of these functions in an institutional evaluation would be broader and consider the quality of management and services provided for the institution as a whole and how effectively they support all programs throughout the institution.

- ***Those that relate directly to the planning and delivery of programs.*** Examples would be the appropriateness of intended learning outcomes for students and the quality of teaching in the program. For an institutional evaluation these things should be looked at within all programs, and then a judgment made about strengths and weaknesses in the institution's programs as a whole.

The ***EEC-NCAAA definition of a program*** is as follows:

- A program is regarded as an integrated package of courses and activities in an academic or professional field leading to a qualification. However organizational

arrangements in institutions differ and there are sometimes questions about what should be considered as a program.

- A program includes all of the courses a student is required to take, including courses that are required by an institution or a college as well as those required by a department, and including any general education courses as well as those in a professional or academic field. It includes courses that may be offered as service courses by another department or college.

- A program offered on both men's and women's campuses are a single program and should be evaluated as such. However, since there may be significant differences in facilities, resources, experience of faculty, employment of graduates or other matters evidence should be obtained about what happens on each campus and any differences noted and considered in planning what should be done in response. Program reports should show both the evaluations for each campus and a combined result.

- A program offered on a remote as well as on an institution's main campus should be dealt with in the same way, that is, information should be obtained about the program in each location and then combined in a single report that identifies any significant variations.

1.3. EEC-NCAAA Evaluation Scale of the Standards and Criteria

High quality standards can only be achieved by action planned and undertaken within the institutions offering educational programs. In keeping with this, the approach to quality assurance and accreditation of institutions in the Kingdom of Saudi Arabia is based on self-evaluation in relation to generally accepted standards of good practices, verified by independent external review.

To support this approach the standards are supported by self-evaluation scales through which faculty and staffs responsible for programs rate their own performance using a "star" system. It is expected that these self-evaluation scales will be used by institutions and by those responsible for programs in their initial quality assessment, their continuing monitoring of performance, and in their more extensive periodic self-studies prior to an accreditation review by EEC-NCAAA Performances are assessed by allocating from zero to five stars indicating 6 levels of performance in accordance with the following descriptions:

Improvement Required

- **No Star** – The practice, though relevant, is not followed at all. A zero should be recorded on the scale.
- **One Star** – The practice is followed occasionally but the quality is poor or not evaluated.
- **Two Stars** – The practice is usually followed but the quality is less than satisfactory.

Good Performance

- **Three Stars** – The practice is followed most of the time. Evidence of the effectiveness of the activity is usually obtained and indicates that satisfactory standards of performance are normally achieved although there is some room for improvement. Plans for improvement in quality are made and progress in implementation is monitored.

High Quality Performance

- **Four Stars** – The practice is followed consistently. Indicators of quality of performance are established and suggest high quality but with still some room for improvement. Plans for this improvement have been developed and are being implemented, and progress is regularly monitored and reported on.
- **Five Stars** – The practice is followed consistently and at a very high standard, with direct evidence or independent assessments indicating superior quality in relation to other comparable institutions. Despite clear evidence of high standards of performance plans for further improvement exist with realistic strategies and timelines established.

1.4. Key Aspects of the Star System

- **Combining Ratings on Individual Items to Develop a Broader Evaluation** – The quality ratings of specific practices can be combined to guide broader judgments about an institution's performance in relation to the groups of items that are shown as components of each general standard, or to each broad standard as a whole. This can be done by averaging the number of stars, ignoring the items marked NA and counting items where the practice is relevant but not followed as zero.

  However, the individual items are not necessarily of equal importance and if individual items are combined to form an overall assessment consideration should be given to weighting certain items more heavily than others and adjusting the overall rating accordingly.

- **Aggregating Evaluations to Obtain an Institution-Wide Overview** – The rating scales enables the evaluations to be used for individual academic or administrative units, and when similar functions are carried out by a number of groups, to be aggregated to give an overview of the quality of that function for a college or for the institution as a whole. When aggregated in this way the scales should assist in the conduct of an institutional self-study, and provide useful information for external review panels as they carry out their independent institutional reviews.

  Combining ratings by simply averaging the number of stars can give a misleading impression if there are significant variations across the institution. Some sections within the institution might meet the standards and others might not. Because of this, comments should be made in evaluations identifying particular areas of strength and weakness when the level of performance varies significantly in different parts of an institution.

- **Priorities for Improvement** – An important outcome of the self-assessment carried out through the use of the rating scales is to identify areas for improvement. It is rarely possible

to do everything at once and priorities have to be established. One should indicate particular items that are considered the highest priorities for improvement.

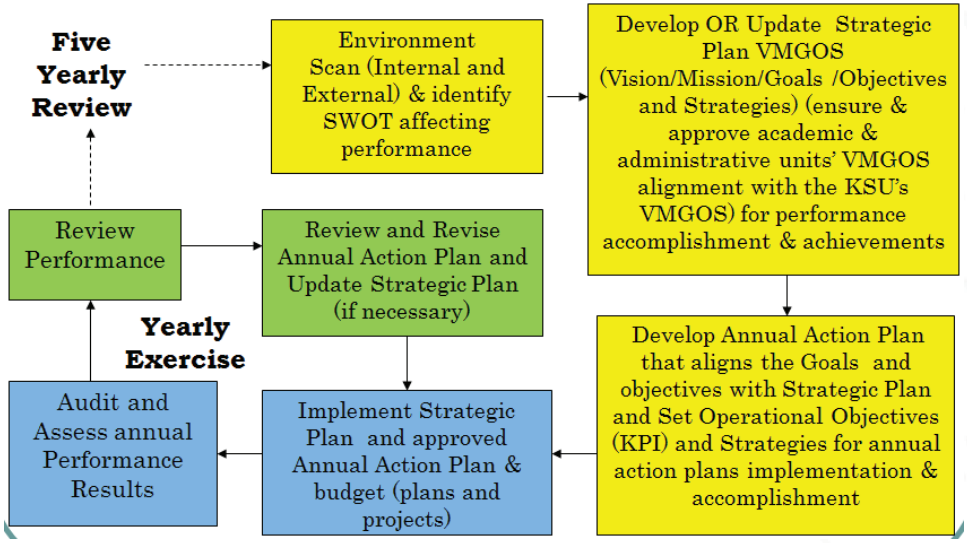
- **Indicators as Evidence of Performance** – As far as possible evaluations should be based on direct evidence that practices are followed, and that desired levels of quality are achieved rather than general post hoc impressions. This consideration of evidence need not be a major undertaking but it does require some advance planning and selection of indicators that will be used as evidence of performance. The performance indicators should be specified in advance and data gathered and considered as part of continuing monitoring processes.

1.5. Quality Planning and Review Cycle

The process of improving quality involves assessing current levels of performance and the environment in which the institution is operating, identifying strategic priorities for improvement and setting objectives, developing plans, implementing those plans, monitoring what happens and making adjustments if necessary, and finally assessing the results achieved. These steps involve a repeating cycle of planning and review. Major plans may involve a sequence of activities over a number of years, with a number of steps to be taken and results of each step assessed at stages within that longer term plan.

While the monitoring should be continuing, there are normally two time periods when more formal assessments take place, one annual as performance is monitored and adjustments made as required, and one on a longer term cycle in which major reviews are undertaken on a periodic basis, which can be two or three years cycle to review the strategic goals, objectives and targets. For issues relating to quality assurance and accreditation periodic assessments should be planned to coincide with the five-to seven cyclical external reviews for accreditation or re-accreditation conducted by the EEC-NCAAA (Education Evaluation Commission – National Center for Academic Accreditation and evAluation).

Figure 1.2: 5-Years Quality and Planning Cycle



Source: Adapted from EEC-NCAAA (October, 2015)

Although this planning and review cycle is presented as a set of steps in a linear sequence with set timelines, in practice steps may be repeated or changed in a flexible way in response to feedback and changing circumstances. For example, a review of performance may lead to a conclusion that goals or objectives need to be redefined and a new plan for development prepared as shown in the adapted version from EEC-NCAAA in Figure 1.2 above.

1.6. Developing a Strategic Plan for Quality Improvement

As noted above, a plan for quality improvement should include two major elements: (1) planning to progressively implement arrangements to meet accreditation requirements for quality assurance if these are not already in place, and (2) planning to deal with any problems identified in an initial self-evaluation, recommendations from internal and external reviewers resulting in the developmental plan that should be consolidated with that of the main strategic plan. All these should cohesively and subscribe in an integrated approach to accomplish the mission and goals of the unit. In an institution implementing quality assurance processes for the first time, involvement in quality assurance processes by different academic and administrative units may need to be phased in as experience is gained and faculty and staff become more confident about the processes involved. In considering these phases it should be recognized that they relate to a number of different levels of activity within an institution—to the institution as a whole (strategically), to academic and administrative units within it (tactically), and to individual programs or groups of programs managed by a department or college (operationally).

When applied to planning for quality improvement, some of the steps in this planning cycle have special meaning. For example, the scanning of the internal and external environment at the initial stage should include a thorough assessment of current quality of performance and an analysis of constraints and opportunities for development. At this stage a SWOT analysis (Strengths, Weaknesses – from internal factors, Opportunities and Threats – from external factors) can be a useful planning framework with the use of various tools like gap analysis and the Ishikawa fish bone method and models to identify each component of the SWOT.

A major development strategy will normally be phased in over a period of years with implementation, monitoring and adjustments through action plans on an annual basis. It is important to periodically step back and carry out a thorough review of the relevance and effectiveness of an institution's activities, and to periodically review the appropriateness and effectiveness of a program. The use of the PDCA (Plan, Do, Check and Act) or PDSA (Plan, Do, Study and Act) is the most fundamental improvement cycle that needs to be planned and managed.

A periodic self-study of an institution, a college or a program should be comprehensive, and should include a re-examination of the environment in which the institution, college or program is operating and any implications of changes or expected developments for the institution's activities to identify the Strengths and Weakness. A periodic self-study of an institution, college or program should consider all aspects of the institution, college or program educational value delivery and supporting infrastructure, facilities, services, and the quality of learning by students. In any periodic self-study a report should be prepared that includes an analysis of variations in original plans that may have occurred over the period, evaluations of the degree of success in achieving objectives, assessments of strengths and weaknesses and any new opportunities and threats that need to be addressed in future planning, and plans for responses to those assessments. The primary purpose of a periodic self-study is to support the institution, college or program own efforts at improvement, but reports developed are also used as a basis for the external reviews by the EEC-NCAAA or international accreditation agencies for accreditation or re-accreditation.

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Chapter 2 KSU Internal Quality Assurance Management

KSU Internal Quality Assurance Management

In keeping pace with today's dynamic education and research environment, coupled with increased competition and demanding job market for improved quality services and outstanding performance from graduates, the higher education institutions worldwide are focusing their attention on issues relating to quality assurance, performance management and strategic implementation within the general framework of total quality management. As a leading regional academic institution, King Saud University (KSU) is committed to continuous improvements and improving and innovative performance – on all fronts - in order to better serve and sustain its students' excellence and maintain its responsiveness to the betterment society needs as a whole. In this respect, since 2009, KSU has embarked on a set of vigorous initiatives and intent to promote integrated quality-information-planning and operational functions within its campus. This includes the enhancing its KSU – QMS (Quality Management System) Performance Excellence model into an integrated electronic ITQAN KSU eQMS in 2017 and introducing the ITQAN 2020 Performance Management System in line with the KSU 2030 and KSA Vision 2030. These are concentrated on enhancing the existing quality culture and training activities, establishment of the KSU performance measures and revamping the benchmarking system, improving on audit & assessment towards EEC-NCAAA and international accreditation programs.

2.1. Balancing the IQA = EQA Equation

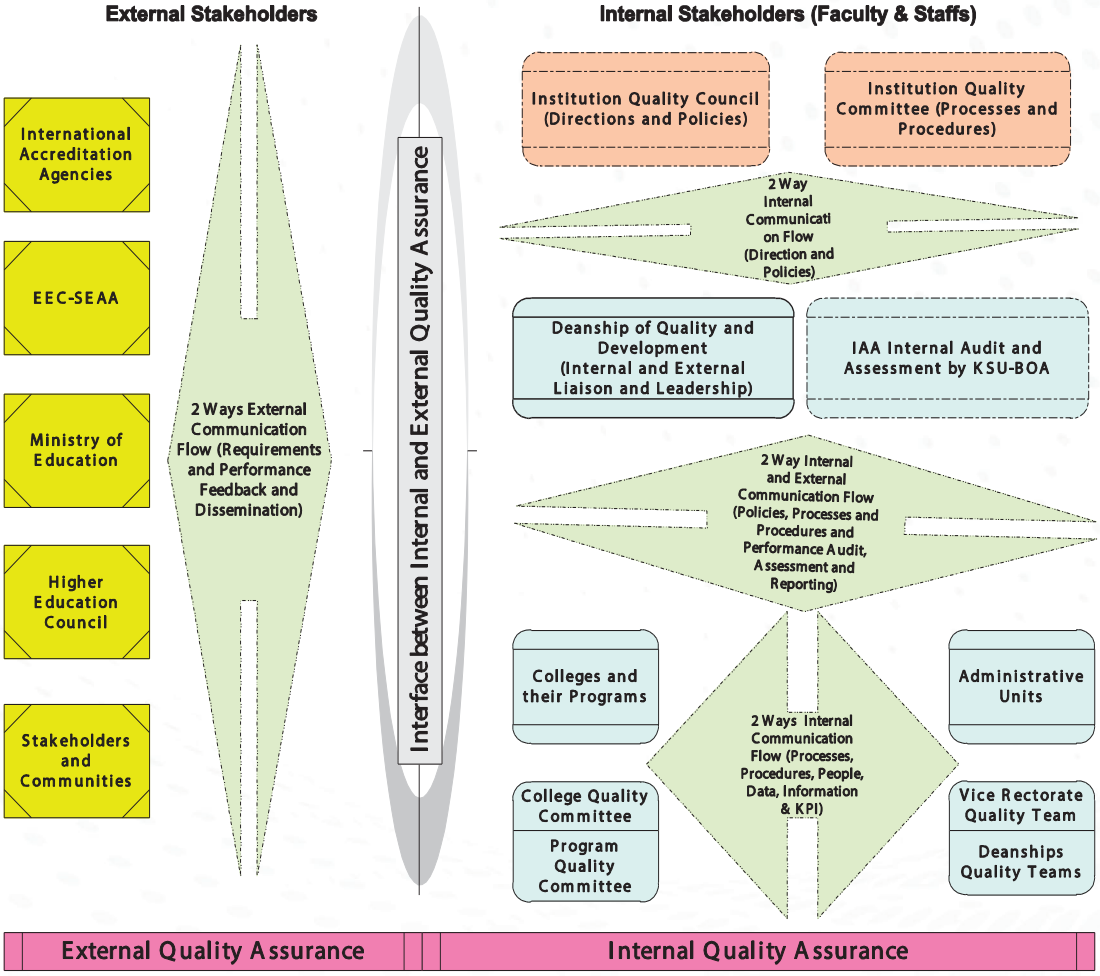
Quality and Accreditation are related and inseparable as a strong foundation in quality and best practices would pave the way to an institution, college or program accreditation through nationally or internationally accepted standards and criteria. At the same time, accreditation would mean that the institution, college or program has achieved a minimum level of nationally or internationally accepted set of standards and criteria as certification of the minimal achievement and attainment of the minimum level of quality set by the accreditation agencies. This does not mean that the institution, college or program aim at attaining the minimum but should aim for and go for and perform beyond the minimal threshold.

Strategically, KSU aims for the national accreditation standards and criteria and use these as the minimum requirement for its excelling in its quality endeavor. As such, the quality framework of KSU uses the EEC-NCAAA standards and best practices as the minimum requirement to build a strong foundation of quality that ultimately leads to EEC-NCAAA accreditation of KSU as an institution, its colleges and multifarious programs in their programmatic accreditation.

These aspirations led to the development of the KSU – QMS Quality Model in 2009. KSU would be using this model in mapping its overall strategic quality direction towards its aspirations and achievements into 2030 based on KSU Strategic Plan 2030 and the KSA Vision 2030. In its aspirations and achievements, it does not overlook the importance of the EEC-NCAAA requirements of which all programs and KSU as an institution would need to comply with as part of the accreditation requirements. This would mean that in developing the KSU – QMS (King Saud University Quality Management System), it is walking a tightrope of conformance and compliance and also in breaking out of the mold or to think out of the box to create its own IQA (Internal Quality Assurance) system and its appending sub-systems and systematic processes to manage the internal quality of KSU as an institution and also for all its colleges, programs and administrative units.

Based on this basic requirement of balancing the external requirements of the EQA and the internal requirements of the IQA, the KSU – QMS is meant to conform and comply while as the same time be part of the bigger KSU strive towards performance excellence while managing the details of the quality standards, criteria and key performance indicators. Taking this into consideration, and to streamline its quality processes and procedures, KSU maintains a set of standardized quality standards and criteria by using the institution's framework as the minimum set of quality requirements, as managing a college is like managing a mini university. Instead of having two sets of manuals, KSU will maintain a singular set of quality manual that can be used at the program level and at the same time accumulate and aggregate the programs and colleges performance into the institutional quality performance. The outcome of the KSU – QMS is meant to be simple, strong and sustainable as implicitly and explicitly discussed in the following sections and chapters. The result is a unique KSU – QMS system unique to KSU in the system and mechanisms used to manage its internal quality assurance.

Fig. 2.1: KSU Quality Management System Organization



In any quality systems and systematic processes, there are 2 main components: the **IQA (Internal Quality Assurance)** and the **EQA (External Quality Assurance)** (Figure 2.1). These two components though seemingly separated and independent of each other are inseparable and inter-dependent as:

- The IQA sets and forms the foundation of the full spectrum of Quality that starts with Quality Planning to Quality Definitions and Development, to Quality Implementation, to Quality Audit and Assessment and Continuous Improvements in the internal environment of the institution.

- The IQA represents the internal system and mechanisms under which the Institution, Colleges and Programs Performance are audited and assessed based on a set of Standards and Criteria set by a National body which in this case is the Education Evaluation Commission – National Center for Academic Accreditation and evAluation (EEC-NCAAA) which is one of the main players of the external component of the EQA.

- Not withholding that the EEC-NCAAA is a key player, other stakeholders' agencies like the Higher Education Council (HEC) and Ministry of Education (MoE) and other international accreditation agencies or professional bodies also contribute to setting the minimum nationally and internationally accepted standards and criteria of performance.

- Ultimately, a key component of the EQA is the stakeholders (students, graduates, alumni, employment markets, parents and community groups) who eventually determine whether the performance outcome of the institution, Colleges or Programs based on the IQA is "Fit for Purpose".

2.1.1. External Quality Assurance (EQA)

Normally, the key roles of the EQA are of the following nature:

- ***Regulatory function:*** The regulating agency of the country will set up a public entity to ensure that the roles, responsibilities and outcomes of the education provision of the institution conforms and complies to a minimum set of standards and criteria at the national or international level.

- ***"Fit the Purpose" function:*** To ensure that the educational product or service of the institution meets the minimum expectation of the stakeholders in that the outputs and outcomes are useful and can be used to enhance the developmental efforts of the stakeholders, society and communities.

In its first role, the regulatory function is normally within the realms of the governing or regulating agency of the country to ensure that the educational product or services meet the societal norms, needs, requirements and international standards. It must be noted that the standards and criteria of quality performance of EQA is normally defined and specified by a regulatory body, which is the Accreditation Agency under the auspices of a Ministry or a public body. In the Kingdom of Saudi Arabia (KSA), the regulating agency for EQA is the EEC-NCAAA with the Ministry of Education acting as the normal and direct supervising agency of the institution of which the institution reports to and is accountable for.

It is expected that the institution or a program will be given accreditation for a period of five or seven years, or conditional accreditation of 3 or 4 years. All types of accreditation represent meeting the minimum required standards and best practices attainment and performance of the EEC-NCAAA. This does not mean that the institution, colleges or programs will only prepare itself once every five or seven years. On the contrary, the institution, colleges or programs should perform an annual monitoring of its readiness and strive for continuous improvements or bi-annual audit and assessment or as continuous improvement is not a once off exercise done every five or seven years. The institution, colleges or programs must continuously and strenuously plan for and seek for continuous improvement which is a never ending journey due to dynamic internal and external changes. Within this context, the IQA functions as the mirror equivalence of the EQA.

In its second role, the "Fit for Purpose" function of the EQA is normally in the realms of the stakeholders and communities who have a "right" to ensure that what they "purchase" meets their minimum level of expectations. These expectations are normally defined as a minimum set of needs and requirements as specified by the stakeholders and communities who are affected by the institution's educational products or service. As such, the stakeholders' and communities' inputs and involvements need to be considered and incorporated into the re-development of the institution, college or program that meets the stakeholders, communities and societal needs and requirements.

The key stakeholders and communities that affect any quality system directly or indirectly, internally or externally are:

- ***Students*** – Stakeholder group that "purchases" and consume the educational products and services leading to a competent and qualified "total" graduate based on the NQF (National Qualification Framework) of KSA, and the upcoming SAQF (Saudi Arabia Qualification Framework, March 2017).

- ***Graduates*** – Stakeholder group that represents the "total" graduate who are intellectually, physically, emotionally, spiritually and morally competent to contribute to the development of the society and communities. This is normally the very vocal but powerful "alumni" group that can influence the public image of the institution, college or programs as they are the direct output and outcomes.

- ***Parents*** – This stakeholder group represents the parental guidance of the students and graduates who can normally influence the choice or specifications of the outputs and outcome specifications of their care.

- ***Employment Market*** – This is the stakeholder group that utilizes the outputs of the institution and evaluates the outcomes of the graduates' performance in terms of meeting the minimum specifications of knowledge, skills, behaviour and values conformity and compliance.

- ***Interest Group*** – This is the stakeholder group that indirectly influences the outputs and outcomes of the graduates from the civic and societal values and social norms that calls for one to be responsible contributors to societal and social development.

- ***Communities*** – This stakeholder group is within the contiguous loci where the institution, college or program is located, as one of the main roles of a higher education institute is to ensure that the communities are involved and the actions of the institution contribute to the well-being and development of the communities.

- ***Faculty and Staff*** – This stakeholder group that is basically internal to the institution represents the group the creates and delivers or support on the service and delivery of the educational products and services to the external stakeholders both direct that is the students and alumni and indirect being the parents, employment market, interest group and communities who expect the graduates to be highly competent, skilful and are upright and good citizen.

2.1.2. Internal Quality Assurance (IQA) of KSU

Based on the EEC-NCAAA blueprints and standards, KSU has developed its own unique approach to address the Internal Quality Assurance of KSU which is the KSU – QMS (King Saud University Quality Management System). The philosophical fundamental of the KSU – QMS which are unique and distinctive aspects of KSU – QMS (Table 2.1) is that it is meant to be:

- Simple as it uses the EEC-NCAAA standards and best practices as the blueprint for accreditation but has unique approaches to addressing the more sensitive issues of quality in a more objective approach and various mechanisms.

- Strong and sustainable built on the rationale of audit & assessment that brings about development as compared with the goals and objectives that are measured and assessed for continuous improvements and innovations for long term sustainability.

Table 2.1: Key Features of the KSU – QMS for Quality Performance Management

Key Features of the KSU – QMS for Quality Performance Management
Standards, Criteria and Items for quality performance:
• 1 comprehensive set of Standards, Criteria and Items applicable for the institution, college and program, as the performance of the programs aggregates and summates into the college and ultimately the institution performance.
• There are 11 Standards and 58 Criteria based on the EEC-NCAAA institution and programmatic set which are classified as Process-Based Criteria.
• The 55 KPIs and Benchmarks are classified as the Results-Based Criteria.
KPI (Key Performance Indicators) for quality performance:
• KSU-QMS has two sets of KPIs:
➢ **A generic set defined by the institution for all programs and the institution as a whole.**
➢ **A set to be defined by the college and program specific and unique to its practices.**
• The generic set of KPIs are applicable across board to all programs which are aggregated and summated into the overall college and institution performance:
➢ **2 types of KPIs are used, Qualitative and Quantitative KPIs.**
➢ **The Qualitative set uses a survey instrument with defined parameters to determine the performance level criteria.**
➢ **The quantitative set uses the normal percentage, ratios or whole numbers to determine the levels of its performance ranges.**
Bi-Annual IAA (Internal Audit, & Assessment) and Annual Monitoring for quality performance:
• The institution and program conduct a Self-Study and prepare a Self-Study Report (SSR) and assess and score its own performance. The SSR is assessed by the university appointed KSU-BOA (Board of Assessors) for the bi-annual internal audit and assessment for a 5-year cyclical accreditation cycle. Normally there are two bi-annual audit and assessment of each program in a 5-year cyclical accreditation cycle.
• After the institution, college or programs has attained the accreditation, the period between the next accreditation cycle will be the annual monitoring whereby the institution, college or programs has to maintain and sustain their progressive annual quality continuous improvements as planned.
• Strengths, Opportunities for improvement and evidence are documented in the Self – Study Report (SSR) which is the main report used in both the bi-annual Internal Audit and Assessment and Annual Monitoring.

Planning for Quality:
• The SSR and the QPAR (Quality Performance Assessment Report) will be used as the basis of an annual operation plan for continuous improvement and innovation by the institution, college or program.
• The annual operation plan is linked to the roll-over of the institution or college strategic plan.
Assessment Approach (explained in detail in Chapter 3) for Quality Performance:
• The overall performance is based on the weighted scoring for both the Process-based and Results-based Criteria leading to a 1000 points scale system for institution and 828 points for programs.
• The overall performance of the institution, college or program is the summation both the Process-based Standards, Criteria and Items Values and the Results-based KPI performance scoring.
• A Six-levels Performance Scoring System using a weighted score approach is used to determine the performance of each Process-Based Criteria and Result-Based Criteria contributing to 80% of the overall performance achievement score.
• The performance of each criteria also takes into account the "goals set" and "goals achieved" leading to "development" and "effectiveness" being measured contributing to remaining 20% of the performance achievement score.
• The Items and Criteria are summated and aggregated into the determination of performance for each Standard which is the basis of the Process-based Criteria.
• The KPIs are the basis of the Results-based Criteria.
Assessment Time Frame:
• The annual monitoring is done electronically on the ITQAN 2020 on an annual basis that coincides with the annual academic planning cycle.
• This is supported by the bi-annual internal audit and assessment by the KSU-BOA which means that there will be at least two internal audits and assessment within the 5 – year accreditation cycle.
Reports on Quality Performance:
• Quality performance complies with a generic context and content format for the self-study and assessment report for the institution, college and program called the Self – Study Report (SSR).
• Quality performance assessment QPAR (Quality Performance Assessment Report) that parallels the self-assessment of the college prepared by the Board of Assessors after the bi-annual internal audit and assessment.
• The program SSR and QPAR aggregates and summates into the annual College Performance Report as a whole that, with all the colleges aggregating and summating into the Institution Performance Report.

2.1.3. Organization of the ITQAN 2020: KSU – QMS

The University wide IQA system has a University level Quality Committee that oversees quality policies and direction of the university. The Deanship of Quality and Development will develop and implement the university IQA system and mechanisms on the ITQAN System platform, and the quality specifications, policies, processes and procedures. The Quality Committee's key role is an advisory body that scrutinizes, advises and provides overarching guidance on the university wide ITQAN 2020: KSU – QMS (Quality Management System).

(a) The **Deanship of Quality and Development**, in its main liaison and leadership role in the university, has the roles and responsibilities of:

- Maintaining a leadership role in the forefront of performance management system through the ITQAN 2020: KSU – QMS, strategic implementation in KSU, in KSA and in the region. This will include the KSU Planning System to be introduced in 2017 and the KSU Performance Management System in 2019. Holistically, all the 3 components of the Quality-Information-Planning Systems form the ITQAN 2020: KSU Performance Management System.
- Conducting on-going researches to identify the state-of-art quality and performance management systems and systematic processes and quality indicators and academic standards for higher education institutes.
- Conducting on-going development of the ITQAN 2020: KSU – QMS, its Planning Management System and the integrated Performance Management System to maintain a top-class performance management system in quality management, information management and planning management systems and systematic processes at par with international standards and appropriate to KSU.
- Developing and maintaining the ITQAN 2020: KSU – QMS, its Planning Management System and the integrated Performance Management System as the quality performance management system of institution for the successful implementation by KSU.

- Collation, Processing & Provision and Disseminating data and information pertaining to quality and planning and support the development of the human resources in the academic and administrative units' quality and planning management to deliver on education value and performance excellence to the stakeholders.

- Supporting and servicing the academic and administrative units in their successful implementation of the ITQAN 2020: KSU – QMS its Planning Management System and the integrated Performance Management System in their respective units.

- Monitoring and managing the successful implementation by the academic and administrative units of the ITQAN 2020: KSU – QMS its Planning Management System and the integrated Performance Management System in their respective units.

(b) **KSU-BOA (Board of Assessors):** The KSU-BOAs are the university appointed internal audit and assessment teams with the following roles and responsibilities:

- Conducting the bi-annual IAA (internal audit and assessment) of the Colleges or Programs or the Administrative Units annually as per the ITQAN 2020: KSU – QMS Handbooks 1 & 2 (4th Edition, May 2017) for quality performance within the ITQAN 2020: KSU – QMS standards, criteria and guidelines for audit and assessment.

- Keeping their own minutes of the meetings when the team meets for the IAA of the Colleges, Programs or the Administrative Units.

- Auditing and assessing of the Colleges or Programs or the Administrative Units based on the ITQAN 2020: KSU – QMS Handbooks 1 & 2 and Performance scoring guidelines.

- Writing up a QPAR (Quality Performance Assessment Report) of the Colleges, Programs or the Administrative Units which is the internal audit and assessment report and submitting the QPAR to the Deanship of Quality and Development within the specified schedule for the IAA. The QPAR normally reflects the consensus of the members of the KSU-BOA.

- Liaising with the Deanship of Quality and Development for any clarifications of the ITQAN 2020: KSU – QMS, the Board of Assessors roles and responsibilities and the development of the QPAR.

(c) **Academic Units (The Colleges and Programs):** The academic units as represented by the colleges and programs are where the heart and soul of quality takes place. The management of quality and performance and achievement in the academic units is where quality begins but never ends that ultimately affect the institutional quality and performance standing and performance. As such, to successfully manage the quality performance in the academic units, there are 2 levels of responsibilities and accountabilities:

(1) ***College Quality and Planning Committee (CQPC)*** – The CQPC normally comprises of the Dean, Vice Deans of the College, Head of the College Quality and Planning Unit and the Chairpersons of the programs. Their main role is to map the direction of the college and the key standards and targets to be identified and to be achieved in their college strategic plan and annual operating plan. The full responsibility of the quality performance and achievements at the college level lies with this team as quality performance measures are based on the planning dimensions of mission, goals and objectives of the college.

(2) ***Program Quality and Planning Committee (PQPC)*** – The PQPC normally comprises of the Chairperson and a few selected faculty members of the program to map the direction of the program and the key standards and targets to be identified and to be achieved in their program strategic plan and annual program operating plan. The full responsibility of the quality performance and achievements at the program level lies with this team as quality performance measures are based on the planning dimensions of mission, goals and objectives of the program.

(d) ***Administrative Units which are the supporting service units:*** The academic units which are the colleges and programs are where the heart and soul of quality takes place and this is like the body. The working of the whole body is dependent on its arms and legs which are the administrative units that provide critical service support for the management of quality and performance and achievement in the academic units. The level and quality of the

services and supports rendered by the administrative units ultimately affects the colleges, the programs and the institutional, collegial and programmatic quality and performance standing and performance. As such, to successfully manage the quality performance in the administrative units which are mainly in the central institutional administrative Deanships and supporting units, there are also 2 levels of responsibilities and accountabilities:

i. ***Administrative Unit Quality and Planning Committee*** – The AUQPC normally comprises of the Dean and Vice Deans of the Administrative Units and the Head of Departments. Under the KSU organization structure, though the quality in each of the Deanship is under the Deanship administration and governance, their performance and is ultimately responsible and accountable for the service and support quality performance and service support rendered must be supportive of the academic units quality endeavours and accomplishment. Their main role is to map out the direction of the administrative unit and the key standards and targets to be identified and to be achieved in their administrative unit strategic plan and annual operating plan. The full responsibility of the quality service and support to the institution, college and programs performance and achievements at the administrative level lies with this committee.

ii. ***Department Quality and Planning Committee*** – The DQPC normally comprises of the Department Head and a few selected staff members of the department to map the direction of the department and the key standards and targets to be identified and to be achieved in their department strategic plan and annual program operating plan. The full responsibility of the quality service and support to the institution, college and programs performance and achievements at the department level lies with this committee.

(e) Responsibilities of the Academic CQPC & PQPC and Administrative AUQPC & DQPC in terms of overall performance management covering:

(1) Quality Management:

i. Preparing the Self – Study Report (SSR) of the Colleges or Programs or the Administrative units annually as per the ITQAN 2020: KSU – QMS Handbooks 1 & 2 (4 edition, May 2017) and Performance Scoring for quality performance.

ii. Keeping their own minutes of the meetings when the committees meet for preparing the SSR and getting the Colleges or Programs or Administrative Units ready for the biannual Internal Audit and Assessment or annual monitoring.

iii. The SSR which is a self-study report is prepared and written by the Colleges or Programs or Administrative Units is based on the ITQAN 2020: KSU – QMS Handbooks 1 & 2 for quality performance guidelines and Performance Scoring for quality assessment.

iv. Submitting the SSR to the Deanship of Quality and Development together with their performance scoring on a timely basis. The SSR normally reflects the consensus of the members of the committees and is written by all members of the committee.

v. Liaising with the Deanship of Quality and Development for any clarifications of the ITQAN 2020: KSU – QMS Handbooks 1 & 2, the updated NCAAA/EEC-NCAAA templates and requirements, the roles and responsibilities of committees and the development and preparation of College or Program or Administrative Units SSR.

(2) *Planning Management:*

i. The College or Administrative Unit CQPC and the AUQPC is in charge for the development and implementation of the unit's 5-year Strategic Plan and Annual Operation Plan as specified in the revised KSU Strategic Planning System Process & Protocols (Templates T1.0, T1.1 and T1.2 for the 5-Year Strategic Plan; Templates T 2.1 and 2.2 for the Annual Operation Plan; and the Templates T 3.1, 3.2 and 3.3 for the monitoring and management of the planning and performance.

ii. Monitoring and managing the successful implementation of the planning accomplishments and achievements of the unit's 5-year strategic plan and annual operation plan, and its performance.

iii. Ensuring that all activities and actions as planned are successfully implemented and measured and managed for performance.

iv. Preparation of the units' annual report on the ITQAN System, with the mains source of inputs from the quality & accreditation management and planning management form the performance management system in the ITQAN 2020 Performance Management System.

(3) *Information Management:*

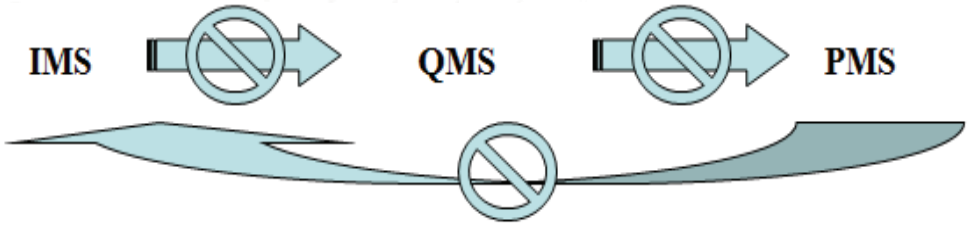
i. All units are to use the common set of templates, data, statistics and performance metrics pertaining to quality and planning management as provided through the ITQAN 2020 System, all of which needs to be reflected comprehensively and accurately in the units' annual report.

ii. Other additional templates, data, statistics and performance metrics needed and prepared by each units' specific needs and usage need to be provided accurately and correctly and be accountable by units itself.

2.2. Principles of KSU – QMS (KSU Quality Management System)

A Quality Management System (QMS) implemented under the paucity of a Planning Management System (PMS) and an Information Management System (IMS) that are not aligned has been the dearth and death toll of most QA systems and systematic processes that at best is paying lip-service to QA or just going through an annual or bi-annual internal audit assessment or a 5-7 year accreditation cycle that do not bring about improvements and innovations (Teay, 2007, 2009 and 2012). QA (Quality Assurance) without improvements and innovations, or that does not bring about learning and integration with other systems and systematic processes is a poor system at best that is not well planned and lacking of an evidence-based system as shown in Figure 2.2 (Teay, 2007, 2009 and 2012) which is disjointed and not integrated affecting the overall HEI performance.

Figure 2.2: Non-alignment of the IMS, QMS and PMS

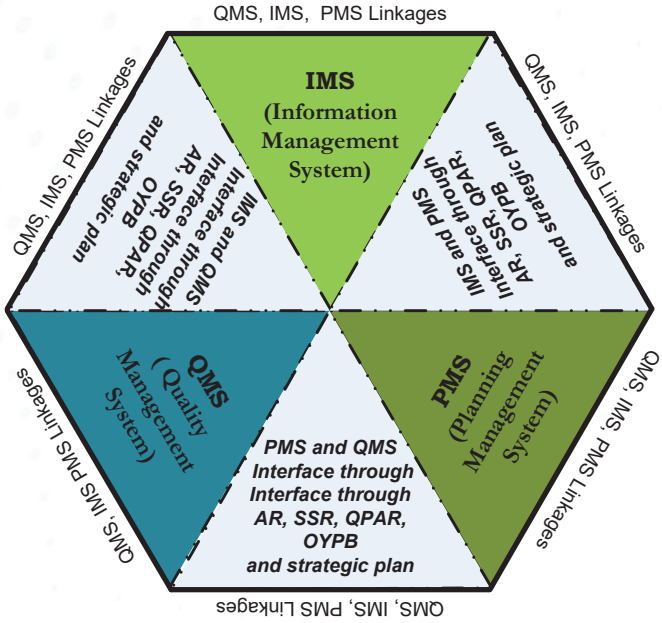


To capitalize on effective and efficient QA, quality management should be linked to the planning and information management systems and systematic processes through the strategic integrated linkages of the quality-information-planning trio that underscores the foundation for continuous improvements and innovations based on management through measurement and an evidenced-based mechanism and accomplishing the HEI's mission, goals and objectives as planned (Figure 2.2). All key educational processes, support and administrative services, facilities and infrastructure are aligned together to achieve the strategically planned value proposition of the

institution. This requires the internal systems and systematic processes' imperatives that the triangularization of planning-information-quality be managed holistically and in an integrated approach rather than independently. This trio forms the 3 core systems and systematic processes of an Integrated QMIPS (Quality Management, Information and Planning Systems and systematic processes) (Teay, 2007, 2009 and 2012) (Figure 2.3). Basically the strategic components of the Quality-Planning-Information Management Systems and systematic processes Trio are:

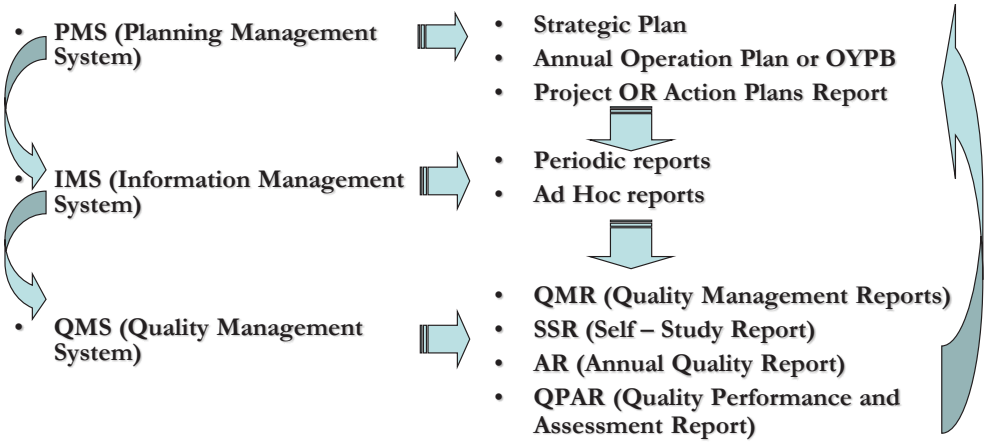
Figure 2.3: Integrated quality-planning-information trio

Figure 2.4: Integrated linkage of the QMS, IMS and PMS



This meant that a full-blown SPMS (Strategic Performance Management, System) needs to be created and put into operation to ensure that linkages and interactions of the QMS (Quality Management System), IMS (Information Management System) and PMS (Planning Management System) are fully aligned and are congruent with each other (Figure 2.4). The key components linking and aligning them are the Annual Reports (AR), Self-Study Report (SSR), Quality Performance Assessment Report (QPAR) and One-Year-Plan-Budget (OYPB) at all levels of the programs, colleges and aggregated into the Institutional reports of performance for performance monitoring and management (Figure 2.5).

Figure 2.5: Strategic Performance Management and Reporting System - Linkage



The above shows the key relationship across the 3 main sub-systems of the PMS, IMS and the QMS. Technically, the flow should start with the PMS, followed by the statistics, information and data of the IMS that brings about a planned and evidence-based QMS

The above shows the key reports that should underscore the key formal reports that forms the key links across the 3 sub-systems of PMS – IMS – QMS and these are the minimum reports that the institution, college, programs or administrative should maintain.

Source: Adapted from Teay, Shawyun (2009), *Strategic Performance Management System*, International Edition, 4th Edition, January 2009, Assumption University Digital Press, Bangkok, Thailand

The key linkages of the 3 strategic components of the SPMS (Strategic Performance Management System) are via their key reports linkages (Figure 2.5). The specific detailed description of these 3 main components of the SPMS and key reports are discussed below:

- **The QMS (Quality Management System Model)** – Rouse and Putterill (2003) identified the performance triplet as: performance measures, performance analysis and performance evaluation that corresponds to Altman's (1979) three component of evaluation, data analysis and performance measures that should exist in all performance systems and systematic processes which is the architecture of the QMS. The QMS (Quality Management System) that serves as a wedge to avoid the slippage back to square one is the core of the quality management system of the institution which is based on the Processes and Results Criteria performance evaluation framework of MBNQA (Teay, 2007). The scoring guidelines integrated the MBQNA's ADLI (Approach, Deployment, Learning and Integration) together with a "development" and "effectiveness" aspect as the threshold of continuous improvement. The QMS, if managed effectively can stop the HEI's performance to slip and the ADLI leads to its continuous journey up the slope towards its strategic direction. The QMS based on the MBNQA framework (NIST, 2015) has 2 main areas of Process and Results leading to the overall audit and assessment of the performance measurement and management as defined in the PMS.

  Rationally, the QMS:

  i. Addresses all matters related to the Internal Quality Assurance (IQA) and the External Quality Assurance (EQA) of the institution as per the established minimum requirements of the standards, criteria, items and key performance indicators at the institution, colleges and programs levels and the administrative units.
  ii. Ensures that the Quality Assurance (QA) in the institution, colleges, programs and the administrative units is efficiently and effectively maintained and managed.
  iii. Ensures that all policies and regulations pertaining to QA at the institution, college, programs and the administrative units are properly documented, analyzed and disseminated and is properly maintained and managed as per the Strategic Performance Management System.

Normally the outputs of the QMS are as follows:

a. ***Quality Management Reports (QMR)*** – These are the basic Course Specifications & Reports, Program Specifications & Reports, Field experience Specifications & Reports that are generated for Course / Field Experience & Program Management, KPIs & Benchmarking Trend Analysis reports and other statistical reports on a semester or annual basis that underscore the basic quality management process and protocols of the units.

b. ***Annual Report (AR)*** – At the end of each academic year, an annual performance report is crucial to ensure that all targeted goals & objectives are measured and managed for performance and analysed and reported to identify future planned actions to address gaps in performance. The AR normally summarizes the key achievements of the institution, college, programs or administrative units based on what they have planned to do in the Strategic Plan and the Annual Operation Plan. This will document all the actions and activities normally reported in detail in the Project Report and report on the key performance measures set and targeted and achieved for that academic year.

c. ***Self - Study Report (SSR)*** – The SSR will detail the self-study of the institution, college, programs or administrative units for an academic year reporting the performance based on the standards, criteria, items and key performance indicators. This is prepared and assessed internally by the institution, college, programs or administrative units themselves of their biannual performance and achievements and is reported in the bi-annual SSR or the accreditation SSR.

d. ***Quality Performance Assessment Report (QPAR)*** – The QPAR is the audit and assessment report filed by the university appointed KSU-BOA (Board of Assessors) to audit and assess the performance of the institution, college, program and administrative units. This will serve as the annual independent internal review of the performance of the institution, college, program and administrative units to determine its performance and continuous improvements.

- **PMS (Planning Management System)** – The PMS represents the strategic direction of the institution, college, program or administrative units which specifies their key vision, mission, goals and objectives that are achieved through their strategies. These define clearly and specifically the strategic direction that the institution, college, program or administrative units intends to achieve as defined in their strategic plans supported by their annual operation plans that continuously evolve to achieve their strategic direction. The goals identify "what to achieve based on its mission" and the objectives identify "what are the measurements of its achievements".

  Rationally, the PMS:

  i. Addresses all matters related to the Annual Operation plan based on the strategic plan and other planning reports of the institution, colleges and programs and the administrative units,
  ii. Ensures that the performance measures of the performance management system are collated, analysed and disseminated in the institution, colleges and programs Annual Report and are used as the metrics for the planning and budgeting parameters in the annual operation plan and budget,
  iii. Ensures that the planning system of the institution, colleges and programs and the administrative units is efficiently and effectively maintained and managed as per the Strategic Performance Management System.

  Basically, the core of the planning system of the university is to ensure that all the main management reports: AR, PR or APR, SSR and the plans are streamlined, are coherent, are consistent and are aligned with each other and ensuring that planning at all levels is based on concrete data and evidence. The AR, PR or APR, SSR and QPAR from the QMS are used as the key inputs to develop the AOP (Annual Operation Plan) and OYPB (One-year-plan-budget) in the PMS or ensure consistent, coherent and comprehensive integration through the basic management fundamentals of the budget that is based on the strategic and operation plans. These are developed from the output and outcome audit and assessment with the input captured and collated from the IMS through the SID (statistics, information and documents) module supporting quality assurance.

Normally the 2 main outputs of the PMS are the institution, college, programs or administrative unit are the:

a. ***Strategic Plan (SP)*** – The Strategic Plan is a longer term plan covering 5 to 10 years that maps out the strategic direction of the institution, college, programs or the administrative units, all of which should be aligned with the institution strategic plan, the KSU 2030.

b. ***Annual Operation Plan (AOP) or the One-year-plan-budget (OYPB)*** – The AOP or OYPB is an annual plan that maps out the tactical and operational aspects of the performance to be achieved in each academic year, all of which culminates and aggregates from the strategic plan. A corresponding component is the annual budget that is based on the annual operation plan of the resources needed to implement all the different projects that are planned to accomplish and achieve the overall mission and goals of the college, programs or administrative units.

c. ***Project Report (PR) OR Action Plan Report (APR)*** – The PR or APR normally goes in-depth into the reporting of the details of each of the project or action plan developed, implemented and measured in terms of performance achievement. It is noted that all these project or action plan reports serve as the evidence based mechanism of the actions and activities of the institution, college, programs or administrative units that aggregates and culminates into the Annual Report (AR) which is the APR (Annual Program report) for the program management.

- **The IMS (Information Management System)** – The IMS represents the networks and database system developed to collect, collate, store, process and disseminate key data, facts, information in the SID module. This supports the evidenced based decision making and the performance measurement based on its defined goals and objectives. This forms the core of the information and statistics management system of the university to ensure that the planning and decision making of the units are supported by an evidence-based mechanism whereby the units can retrieve the rich database of the ITQAN system to serve the needs of all the internal and external stakeholders. Rationally, the IMS serves as the rotating PDCA concept of Plan – Do – Check – Act that has evolved into the newer ADLI concept of Approach – Deployment – Learning – Integration as expounded in the 2015 MBNQA Education Criteria for Performance Excellence (NIST, 2015) and used by KSU.

Rationally, the IMS:

i. Addresses all matters related to statistics, information and data (SID) base of the DWH (Data warehouse) supporting the institution, colleges and programs and the administrative units data and information needs,
ii. Ensures that the statistics, information and data (SID) in the administrative units, the institution and the academic units of the colleges and programs is efficiently and effectively maintained and managed for processing into usable information by all units,
iii. Ensures that the statistics, information and data (SID) are properly documented, analysed and disseminated to facilitate an evidence-based decision making mechanism for the institution, colleges and programs and the administrative units informed decisions making.

Normally the main outputs of the IMS are:

a. Periodic reports as required of the QMS and PMS,
b. Ad hoc reports generated through the use of BI (Business Intelligence tools) to support specific informed decision making or actions taken,
c. The intermediary data marts from the main DWH used as inputs to various modules for the QMS and PMS.

2.3. ITQAN 2020: KSU – QMS Quality Model

In the organizational strive for quality improvements for the whole organization and all its units; the desired outcome is the achievement of organizational performance excellence. In striving towards the path of excellence, based on their quality drives, there are two main performance management models that are internationally accepted and which had been adapted and widely used, which are:

- ✓ **MBNQA (Malcolm Baldrige National Quality Model)** (NIST, 2017) – This is one of the leading Performance Excellence Management Model used worldwide or adapted for national use in many countries. Its Performance Excellence Framework has two main components of "Process" and "Results". The 6 "Process" criteria consists of Leadership, Strategic Planning, Customer Focus, Measurement, Analysis and Knowledge Management, Workforce Focus and Process Management all leading to the 7th Criteria of "Results". The unique aspect of the MBNQA is that it has a set of Education Criteria for Performance Excellence, of which the ITQAN 2020: KSU-QMS is based on.
- ✓ **EFQM (European Forum for Quality Management)** (EFQM, 2017) – This is another key Performance Excellence Model widely used in the EU (European Union). It is similar to the MBNQA in that it has also two main components of "Enablers" and "Results". The "Enablers" consists of Leadership, People, Strategy, Partnership and Resources, with 4 sets of "Results" of People results, Customer results, Society results and Key Results.

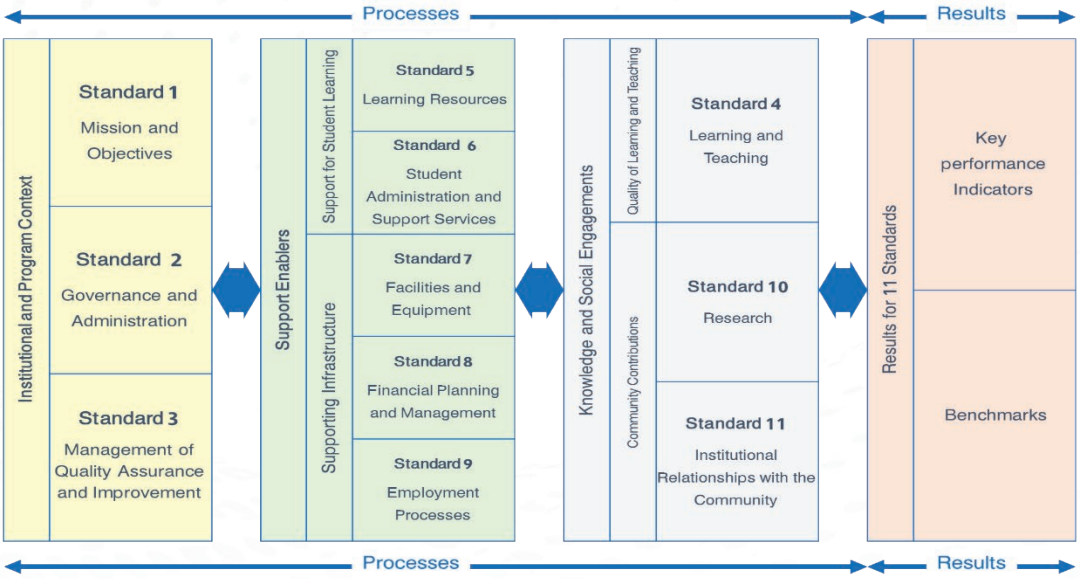
These two Performance Excellence models are normally used in its original form or with nations adapting these models to their national context in about 100 countries worldwide. This worldwide acceptance underlies the pervasiveness of nations trying to encourage and motivate their national organizations or businesses to strive for performance excellence in whatever they do. It is noted that these two models are very similar in the 3 main areas of:

(a) Similar thematic focus of Leadership, Strategic Planning, People and Customer focus supported by Process and Resources Management, all of which are result-driven.
(b) Having two main components of "Process or Enablers" and "Results".
(c) Assessment that is rationalized through the "ADLI (Approach, Deployment, Learning and Integration) for process based criteria and LeTCI (Level, Trend, Comparisons and Integration) results based criteria for MBNQA" and "RADAR for EFQM" both of which represent a systematic and progressive scoring methodology based on a set of criteria for each scoring range, all of which totals to 1000 points in both systems and systematic processes.

In developing a Quality Management Performance Excellence Model for King Saud University (Figure 2.6), there are two main components that must be determined:

- ✓ The Standards, Criteria and Items that forms the basis of the requirements for audit and assessment for performance excellence, of which the EEC-NCAAA's Standards, Sub-Standards and Sub-sub-Standards or best practices have been selected as the blueprint for the KSU – QMS (Quality Management System) in 2010 and the electronic ITQAN 2020: KSU-QMS. The 11 Standards form the Process-based Criteria with a set of complementing 11 Results-based Criteria in the ITQAN 2020: KSU-QMS Quality Model.
- ✓ The performance evaluation and scoring methodology uses the ADLI for the Process-based Criteria and the LeTCI for the Results-based Criteria as adapted from the MBNQA.

Figure 2.6 KSU-QMS Quality Model © 2010 King Saud University



As shown in Figure 2.6, there are three main contextual groupings of the ITQAN 2020: KSU – QMS Standards as:

1. **Institutional and Program Context** – This is the main "umbrella" or supra component that provides strategic directions to link together the other operational components. Leadership is needed to spearhead the commitment to quality improvements and innovations that affects performance excellence throughout the whole organization governance and administration, supported by the omnipotent and pervasive Quality Management System. As such, Standards 1, 2 and 3 are put under this institutional and program context.
2. **Support Enablers** – A key set of competence and capabilities that support the success of the academic elements are the key support enablers. These would consist of the support infrastructure of facilities and equipment to upkeep a conducive teaching and learning environment, financial management which serves as the life blood feeding to all elements of the organizational resources, infrastructure and facilities. This also includes the support for student learning of the learning resources and students services which are critical and central to the success of the student learning experiences. But it must be recognized that the human resources focus of engaging and empowering the "human capitals" through development and motivational efforts to push forward the frontiers of performance excellence is a driver.
3. **Knowledge and Societal Engagements** – This represents the heart and soul of the institution of quality teaching and learning by the human capital to push forward the frontiers of teaching, learning, research and societal contributions through knowledge development, creation and sharing for the benefits of societal development.
4. **Results** – This is based on the mantra of "management through measurement" in the beliefs that measurements of performance of the key educational processes in the Standards 1 to 11 can support better management of the educational values and commitment to the stakeholders based on the institution's strategic intent, its vision, mission & values and goals and objectives. These are shown by their KPI (Key Performance Indicators) and Benchmarks for comparative performance.

In the ITQAN 2020: KSU – QMS Quality Model, there are 2 main sets of components: the "Process" itself that defines the standards, criteria and items that brings about the "results" in the form of the key performance indicators and their appending benchmarks.

- **"Process"** refers to the methods, systems and systematic processes, mechanisms or techniques the institution, college, programs or administrative units use and improve to address the standards, criteria, items and key performance indicators requirements in the KSU – QMS Quality model. The four factors used to evaluate process are Approach, Deployment, Learning, and Integration (ADLI).

  - ***"Approach"*** refers to:
    - The methods, systems and systematic processes, mechanisms or techniques used to accomplish the process.
    - The appropriateness of the methods, systems and systematic processes, mechanisms or techniques to the requirements of meeting the standards and its best practices.
    - The effectiveness of the use of the methods, systems and systematic processes, mechanisms or techniques.
    - The degree to which the approach is repeatable and based on reliable data and information (i.e., systematic).

  - ***"Deployment"*** refers to the *extent* to which:
    - The institution, college, programs or administrative units approach is applied to all levels of the unit(s) in addressing requirements relevant and important to the HEI.
    - The institution, college, programs or administrative units approach is applied consistently to all levels of the unit(s).
    - The institution, college, programs or administrative units approach is used by all appropriate work units at all levels of the unit(s).

  - ***"Learning"*** refers to:
    - Refining the institution, college, programs or administrative units approach through cycles of evaluation and improvement and innovation.
    - Encouraging breakthrough change to the institution, college, programs or administrative units approach through innovation.
    - Sharing refinements, improvements and innovations with other relevant work units and processes in the institution, college, programs or administrative units to all levels of the unit(s).

- ***"Integration"*** refers to the *extent* to which:
  - The institution, college, programs or administrative units approach is aligned with the organizational needs identified in the institution, college, programs or administrative units Organizational Profile (which is the mission, goals, objectives, values, educational products & services and other Process Standards, Criteria and Items.
  - The institution, college, programs or administrative units' measures, information, and improvement systems and systematic processes are complementary across processes and work units at all levels of the unit(s).
  - The institution, college, programs or administrative units' plans, processes, results, analyses, learning, and actions are harmonized across processes and work units at all levels of the unit(s) to support organization-wide goals, objectives, values, educational products & services.

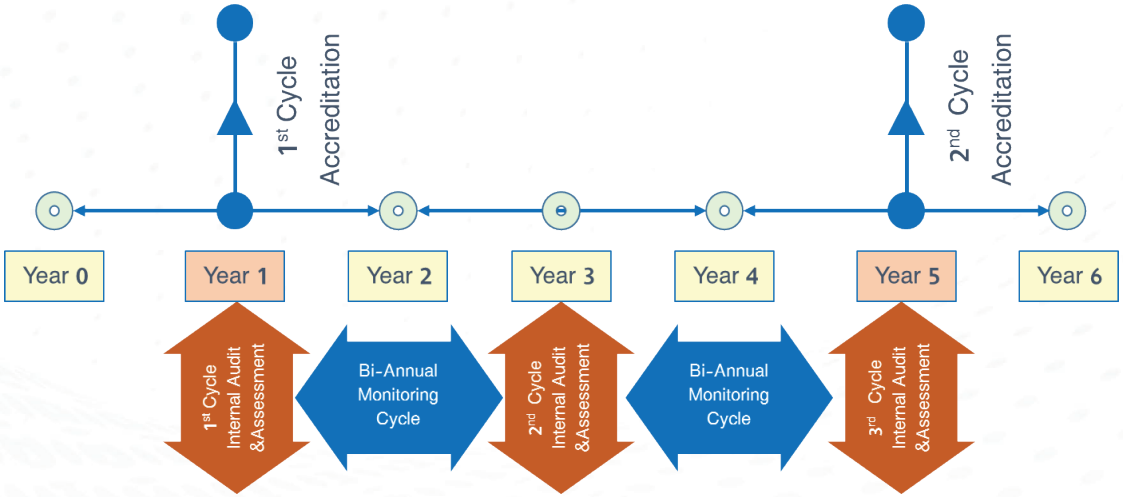
- **"Results"** refers to the organization's ***outputs and outcomes*** in achieving the requirements of the processes above. The four factors used to evaluate results are:

  - The institution, college, programs or administrative unit's current level ***(Le – Level)*** of performance and its performance trend ***(T – Trend)*** over a time period.
  - The time period that normally covers a minimum of 3 periods will include the rate (i.e., the slope of trend data) and breadth (i.e., the extent of deployment) of the institution, college, programs or administrative units' performance improvements.
  - The institution, college, programs or administrative units' performance relative to appropriate comparisons ***(C – Comparisons)*** and/or benchmarks to determine a comparative and analytical set of performance achievements.
  - The linkage (***I – Integration)*** of the institution, college, programs or administrative units results measures (often through segmentation) to important student and stakeholder; program, educational offering and service; mainly the institution, college, programs or administrative units as described in the Institutional Profile and in Process Items.

2.4. KSU Bi-Annual Internal Audit and Assessment and Annual Monitoring Cycles

The ITQAN 2020: KSU – QMS is the main system used by KSU to manage the quality within the KSU system that covers the institution, colleges and program. As all colleges and programs in KSU and KSA have to be accredited by EEC-NCAAA, which requires that all colleges and programs have an IQA and that the college and programs have external reviews, it is the essential that the colleges and programs use ITQAN 2020: KSU – QMS as their de facto internal quality management system.

Figure 2.7: Principle of Internal Audit and Assessment and Annual Monitoring and Accreditation Cycles



The ITQAN 2020: KSU – QMS quality management processes are divided into two main sets of cyclic sub-processes that consist of:

- **Bi-Annual Internal Audit and Assessment Cycle** –The ITQAN 2020: KSU – QMS provides both the fundamentals of an IQA and requisite external review as this is done through the IAA (Internal Audit and Assessment) processes, and is assessed by an independent university appointed KSU Board of Assessors. This Internal Audit and Assessment is a bi-annual exercise to ensure continues improvements of the College or programs. This inherently means that a college or a program undergoes a minimum of 2 cycles of IAA in a 5 years mandatory EEC-NCAAA accreditation, and is interspersed with an annual monitoring cycle (Figure 2.7).
- **Annual Monitoring Cycle** – The main monitoring normally takes place at the core of the educational processes which is represented by the colleges and the programs and their programs offerings as imposed by their own quality and planning committees. This is essential as the institution is able to understand and synthesizes all the programs' offerings to ensure and assure that they achieve the institution's vision and mission, goals and objectives and that of the college. As such, the annual monitoring process is aimed at capturing the quality PDCA (Plan, Do, Check and Act) feedback loop on an annual basis to ensure that the quality drive is maintained and sustained through continuous improvements from one IAA and accreditation cycle to another. It does not necessitate a full internal audit and assessment as required for the cyclical bi-annual IAA or 5-years accreditation period. But it does need to ensure that the periods in between the IAA and accreditation cycles still sustain the continuous improvements that culminate in each IAA or accreditation Cycle. The main similarities and difference of the Internal Audit and Assessment and the Annual Monitoring is shown in Table 2.2 as follows:

Table 2.2: Similarities and differences of Bi-Annual Internal Audit and Assessment and Annual Monitoring

Key Differences	
Bi-Annual Internal Audit and Assessment	**Annual Monitoring**
■ Is a full scale exercise that takes place bi-annually with a minimum of two IAA cycles before the college or program goes for the EEC-NCAAA accreditation once every 5-year.	■ There will not be a full audit and assessment but an annual monitoring of improvements or changes made as planned for each academic year.
■ A full university appointed KSU Board of Assessor is used to audit and assess the college or program to provide a systematic external review to the college and program based on the ITQAN 2020: KSU – QMS and as required by the EEC-NCAAA.	■ The college or program committees will ensure that there are continuous improvements as planned in the action plans as this is only an annual monitoring exercise with the review of required course or program management reports performance metrics.

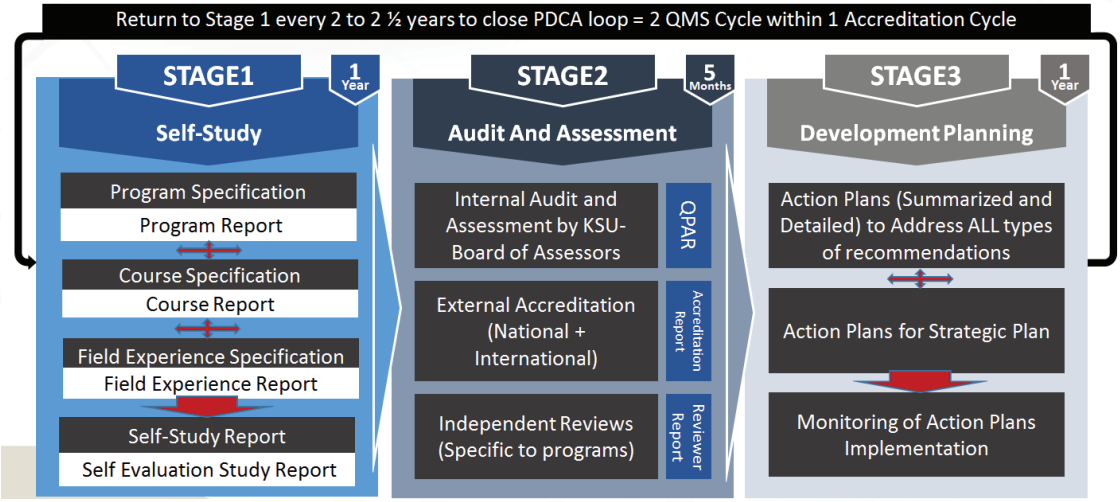
Key Similarities	
Bi-Annual Internal Audit and Assessment	**Annual Monitoring**
■ The full scale exercise is based on the ITQAN 2020: KSU – QMS with a full write-up of the SSR to report on the past years performance together with the Performance Scoring that shows the performance of each academic year leading up to the bi-annual IAA or accreditation cycle.	■ In the annual monitoring, the course and program management specifications reports and performance metrics are used without the need of a full SSRP or performance scoring.
■ Both the SSR and the Performance Scoring has to be submitted to the Deanship of Quality and Development prior to the planned bi-annual Internal Audit and Assessment.	■ The basis for annual monitoring is to ensure that actions and activities had been planned and executed for each academic year.
■ Key reports that for the IAA on the ITQAN System platform are: • Annual Program Report (APR) • Course & Program Management Specifications & Reports • Self-Study Report Program • Performance Metrics • Performance Scoring • Program annual action plans • Resulting in the QPAR developed by the KSU-BOAs	■ Key reports used for the annual monitoring on the ITQAN System platform are: • Course & Program Management Specifications & Reports • Performance Metrics

2.5. KSU-QMS 3 Stages Approach for quality and accreditation management

2.5.1. 3 Stages of ITQAN 2010: KSU-QMS © 2015

The ITQAN 2020: KSU-QMS is the main component of the strategic quality-information-planning trio that underscores quality and accreditation management of KSU, colleges and programs. Focus on both international accreditation and national accreditation brought about a rancorous danger of status quo or hibernated actions, the issue of the need for continuous improvements through a QMS, the misconception that the QMS is an additional new system that increases quality fatigue and burden undermining the normal academic teaching, learning and research responsibilities.

Figure 2.8: 3 Stages of KSU Quality Management System



To avoid such misconception and quality fatigue, in the design of the ITQAN 2020: KSU-QMS, the basic principles are:

1. To avoid misconception of a completely new system, the basic EEC-NCAAA fundamentals and standards & best practices requirements, templates and tables, KPIs (Key Performance Indicators) and statistics, are maintained and used "as is" without modifications.
2. To adapt an internationally used evaluation scheme of its processes and results performance of which the MBNQA is selected as the key audit and assessment methodology in its internal audit and assessment of the programs' performance.

These two arch principles have led to KSU to identify a 3 staged QMS approach (Fig. 2.8) as follows:

1. **Stage 1 "Self-Study"** – This stage is normally started by the programs with the intention of applying for EEC-NCAAA accreditation where the program develops the SSRP (Self-Study Report for Program) and SESR (Self-evaluation Study Report). All these are supported by the required CS (Course Specifications) and CR (Course Report) which must be prepared on a semester basis for each course section and an aggregated CR, PS (Program Specifications) and PR (Program Report) which must be prepared on an annual basis to record and assess the annual program performance, FES (Field Experience Specifications) and FER (Field Experience Report) that is used to manage the 3 credit field experience. All these are key evidences in support of the 5-year cycle EEC-NCAAA accreditation or the bi-annual IAA (Internal Audit and Assessment). All these include the statistical tables and KPIs and other supporting documentary evidences as part of the total self-study package. The main templates used to the quality management are based on the same templates provided by EEC-NCAAA (Table 2.3) based on the main "Eligibility requirements" of EEC-NCAAA (Table 2.4).
2. **Stage 2 "Audit and Assessment"** – once the Self-study is completed, it is submitted to EEC-NCAAA for accreditation or re-accreditation purposes. The same SSRP and SESR is used for the mandatory bi-annual IAA exercise by the university appointed KSU-BOAs (Board of Assessors) or it can be used by independent reviewers external to the units and as appointed by the academic units themselves. The key outputs are the accreditation reports from accreditation agencies, the QPAR (Quality Performance Assessment Report) from IAA and the reviewer's report from the independent reviewers.

3. **Stage 3 "Developmental Planning"** – After the accreditation (national or international), the IAA or the internal reviews by external experts, the key reports outputs are used as a consolidated set of strengths and opportunities for improvements that are used as the basis to prepare the developmental plan. This developmental plan is part of the overall action plans in support of the academic units' strategic plans. This is to ensure that all actions plans are synchronized and synthesized for the singular intent of the accomplishment of the units' mission, goals and objectives.

Table 2.3: Key EEC-NCAAA Templates used for accreditation and ITQAN 2020: KSU-QMS

Attachment	Document # and Name	Page #
# 2	D4. EEC-NCAAA Key Performance Indicators	57
# 3	T4. Program Specifications	66
# 4	T3. Annual Program Report	79
# 5	T6. Course Specifications	100
# 6	T5. Course Report	108
# 8	T7. Field Experience Report	127
# 7	T8. Field Experience Specifications	117
# 9	T12. Self-Study Report for Programs (SSRP)	133
# 10	T11. Self-Study Report for Institutions (SSRI)	198
D.2.I	Self-Evaluation Scales for Higher Education Institutions, V3, Muharram 1437H, October 2015.	Document
D.2.P	Self-Evaluation Scales for Higher Education Programs,V3, Muharram 1437H, October 2015	Document

Source: EEC-NCAAA Handbook for Quality Assurance and Accreditation Part 2, Version 3, Muharram 1437H, October 2015.

Table 2.4: EEC-NCAAA Eligibility Requirements Templates

Attachment	Document # and Name	Page #
# 1	Eligibility requirements for accreditation of a higher education institution	42
# 2	Eligibility requirements for an application for accreditation of a higher education program	49

Source: EEC-NCAAA Handbook for Quality Assurance and Accreditation Part 3, Version 3, Muharram 1437H, October 2015.

2.6. ITQAN 2020: KSU Internal Audit and Assessment Process and Protocols

The bi-annual IAA (Internal Audit and Assessment) in Stage 2 of the 3 stages QMS approach follows a two years cycle that follows the 5-years Accreditation Cycle, which means that there will be two IAA cycles within a 5-years accreditation cycle. The IAA is meant to provide the following:

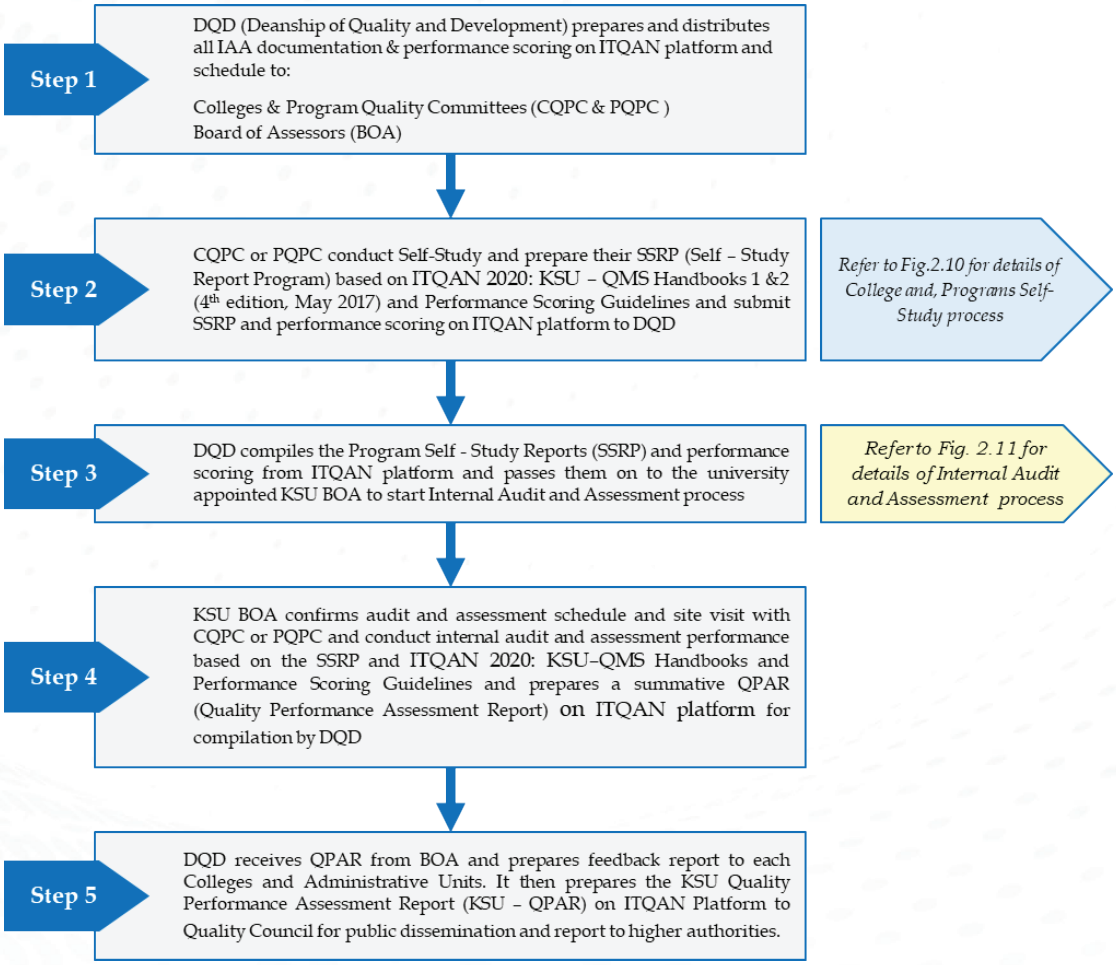
- Full preparation of the college or programs in developing the EEC-NCAAA Self-Study Report that is required for the EEC-NCAAA national accreditation.
- To ensure that the IQA of the college or programs as represented by the ITQAN 2020: KSU – QMS provides a set of formative and summative periodical evaluation of the performance of the college or programs over the periods of a two-year cycle leading up to an application for EEC-NCAAA accreditation.
- To ensure that the IQA of the college or programs as represented by the ITQAN 2020: KSU – QMS provides a set of statistical and documentary evidence or data set showing continuous improvements over the period of a two-year cycle leading up to the application for EEC-NCAAA accreditation.
- To ensure that the IQA of the college or programs as represented by the ITQAN 2020: KSU – QMS provides a systematic approach in the management of quality with a PDCA feedback control system that serves as the base for continuous improvements and innovations over the period of a two-year cycle leading up to the application for EEC-NCAAA accreditation.

As noted in Figure 2.8, the internal audit and assessment in Stage 2 is normally conducted on a bi-annual basis before the college or programs decide to go for the 5-year cyclical EEC-NCAAA accreditation on a basis. It must be noted that the EEC-NCAAA requires the following:

- That all college and programs have an IQA to ensure that there is a systematic approach in the quality management of its education offers.
- That the college and programs have an external review of their educational offering which is achieved by the Board of Assessors in the bi-annual Internal Audit and Assessment on all aspects of the required EEC-NCAAA 11 Standards and best practices.
- That there are continuous improvements and statistical and documentary evidence substantiating these improvements meeting the vision, mission, goals and objectives as committed to the stakeholders and as planned in the strategic plan of the college or programs.
- That there is an annual report on the progress made or achieved based on the annual performance monitoring and review.

The process flow and supporting activities for the Internal Audit and Assessment of both the Deanship of Quality and Development (DQD), the KSU-BOA and the collegial programs committees of CQPC (College Quality and Planning Committee and PQPC (Program Quality and Planning Committee) are shown in Figures 2.9 – 2.11.

Figure 2.9: KSU IAA (Internal Audit and Assessment Process (Master Flow)



2.6.1. KSU Internal Audit and Assessment Process (Master Flow – Figure 2.9)

Step 1:

- The Quality Deanship prepares and distributes ITQAN 2020: KSU–QMS Handbooks 1 and 2 (4th edition, May 2017) and Performance Scoring Guidelines and Bi-annual Audit and Assessment Schedule to:
  - Colleges & Program Units (CQPC & PQPC)
  - Board of Assessors
- The ITQAN 2020: KSU–QMS Handbooks 1 and 2 (4th edition, May 2017) and Performance Scoring Guidelines will define:
  - The Standards, Criteria, Items and KPI and scoring guidelines and documents to be used in doing the self-study resulting in the College or Program Self – Study Report Program (SSRP).
  - The format in writing the SSRP of EEC-NCAAA and on the ITQAN Platform.

Step 2:

- Each College or Program will conduct an audit and assessment of their own program based on the ITQAN 2020: KSU–QMS requirements. This will define what and how the Performance Scoring of the Standards, Criteria, and KPI will be used and how to assess their performance based on the Performance Scoring guidelines of each of the Standards, Criteria, Items and KPI. The outcome of this will constitute the Program Self – Study Report (SSRP) and performance scoring done by the CQPC & PQPC.

- At the Program, the Program SSRP and performance scoring is conducted by the PQPC, and each program should prepare its own SSRP for review and approval by CQPC. The Programs' SSRPs and performance scoring will be consolidated by the College for internal use only. The CQPC will consolidate all the programs' SSRPs and performance scoring for review by CQPC. These will be submitted to the Deanship of Quality and Development for the mandatory bi-annual audit and assessment by the KSU-BOA

- The CQPC can invite the KSU-BOA to audit and assess its own College SSR and performance scoring. Only the College SSR and performance evaluation will be submitted to Deanship of Quality and Development is needed as agreed upon.

Step 3

- Upon receiving the College or Program SSR, Deanship of Quality and Development will compile the College or Administrative Unit Internal Quality Audit and Assessment Performance Report (SSR) evaluation reports and passes them on to the Board of Assessors

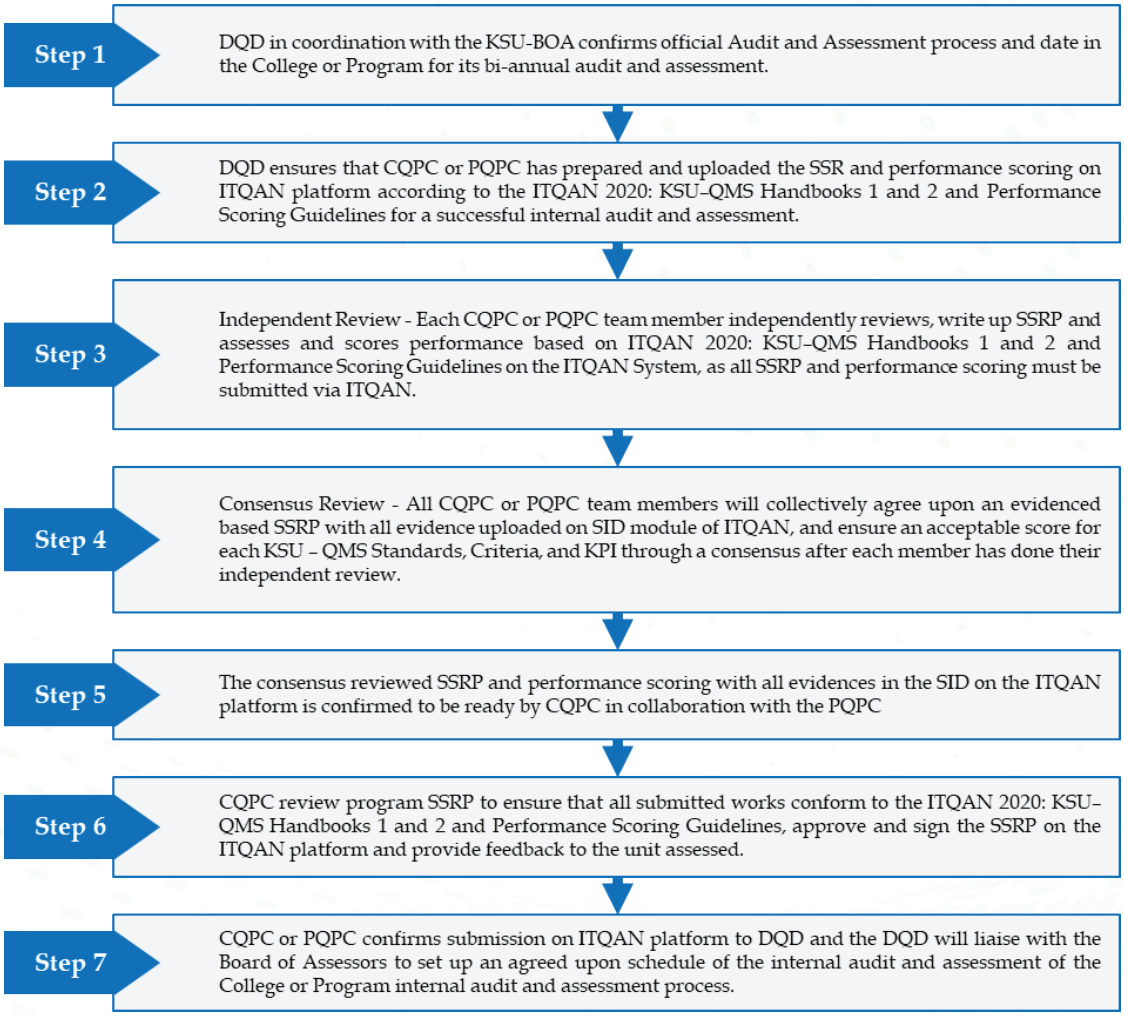
Step 4

- Upon receiving the College or Administrative Unit Self – Study Report (SSR) and performance scoring, the Board of Assessors will review all documents and confirm the date and place whereby the internal audit and assessment will be conducted.
- On the appointed date and place, Board of Assessors will evaluate the performance of the College or Program based on ITQAN 2020: KSU–QMS Handbooks 1 and 2 and Performance Scoring Guidelines.
- On completion of the audit and assessment, the Board of Assessors will prepare the QPAR (Quality Performance Assessment Report) for compilation by Deanship of Quality and Development.

Step 5

- Upon receiving the QPAR, the Deanship of Quality and Development will remit the QPAR to each College or Program concerned.
- At the end of the Academic Year Internal Audit and Assessment cycle, the Deanship of Quality and Development will prepare the KSU Quality Performance Assessment Report (KSU – QPAR) to the KSU Quality Council for public dissemination and report to higher authorities.

Figure 2.10: College or Program Self-Study Assessment and SSR Process Flow



2.6.2. College or Program Self-Study Assessment and SSR Process Flow (for CQPC and PQPC) – Process applicable to College or Program level (Figure 2.10)

Step 1:

- The Chair (or its appointed representative) of the CPQC or PQPC (normally the Dean of the College or Program) will initiate the internal audit and assessment by calling for a meeting of the members of the CPQC or PQPC to inform them of the requirements, processes and procedures of the College or program audit and assessment for the academic year by the Board of Assessors.
- The CPQC or PQPC Chair will confirm the audit and assessment dates with Program chairs.

Step 2:

- The CPQC or PQPC ensures that the college or program base their audit and assessment on ITQAN 2020: KSU–QMS Handbooks 1 and 2 (4th Edition, May 2017) and Performance Scoring Guidelines and all other documents to CPQC or PQPC members as prepared and provided by the DQD. (Note that the internal audit and assessment at the Program level will culminate in the College level SSR. As such, the same flow is applicable to both the College level and the Program level self-study process.

Step 3 (Independent Review):

- When preparing the independent review, each of the CPQC or PQPC members will conduct the audit and assessment independently with minimal consultation with the other team members.
- Each of the CPQC or PQPC members can use the EEC-NCAAA templates and Performance Scoring on the ITQAN platform for their SSRP and performance scoring of the audit and assessment.

Step 4 (Consensus Review):

- Once all the CPQC or PQPC team members have completed their independent review in Step 3, the Chair of the CPQC or PQPC will set up a date for the consensus review.
- At the consensus review, all the CPQC or PQPC team members will collectively discuss and agree upon an acceptable evidenced based SSRP and performance score for each Standard, Criteria, and KPI through a consensus. The consensus is imperative to an impartial and fair indicator for each of the Standard, Criteria, and KPI as different members can assign different performance review and assessment score depending on his/her perspectives. This is whereby the Performance Scoring guidelines of the ADLI & LeTCI will be a critical support to justify a score.
- Once all the CPQC or PQPC team members have reached a consensus for all the self-study performance, KPIs and assessment, the CPQC or PQPC will finalize the SSR and performance scoring for submission to DQD on the ITQAN platform.

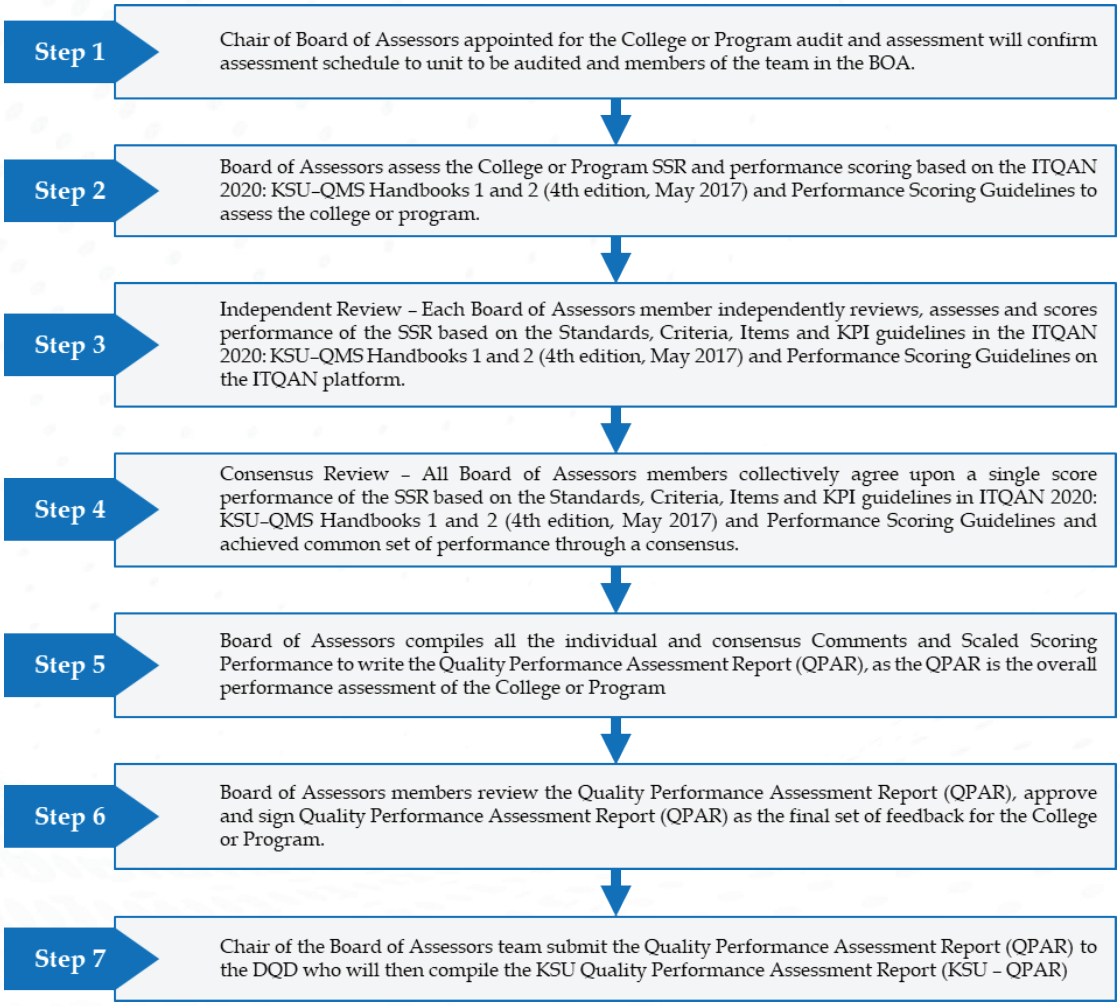
Step 6:

- For the Program SSRP, the PQPC team will review and approve the SSR by attaching their signature to the SSR signifying responsibility and accountability in the fair, just and impartial audit and assessment of their college or programs performance.
- The signed SSR will be submitted to the College CQPC for review that the whole self-study and its SSR and performance scoring are in compliance with the ITQAN 2020: KSU–QMS Handbooks 1 and 2 and Performance Scoring Guidelines, and provide feedback to the PQPC as needed.

Step 7:

- The CQPC or PQPC will submit to DQD the approved and signed SSR and performance scoring on the ITQAN platform, as the internal audit and assessment by the KSU-BOA will be conducted from the ITQAN System.
- The Quality Deanship will then contact the Board of Assessors that the college or program is ready for internal audit and assessment of the College or Program at an appointed date and time.

Figure 2.11: KSU – Internal Audit and Assessment Process Flow by Board of Assessors



2.6.3. KSU Internal Audit and Assessment Process Flow by Board of Assessors (Figure 2.11)

Step 1

- The Chair of the Board of Assessors will initiate the audit and assessment by calling for a meeting of the members of the Board of Assessors to inform them of the requirements, processes and procedures of the College or Program audit and assessment for the academic year as requested by the DQD.
- The Board of Assessors will confirm the audit and assessment date with the College or Program concerned via the DQD.

Step 2

- The Board of Assessors will review the ITQAN 2020: KSU–QMS Handbooks 1 and 2 (4th edition, May 2017) and Performance Scoring Guidelines and all other documents submitted by the College or Program on the ITQAN platform for the audit and assessment.

Step 3 (Independent Review)

- Each of the Board of Assessors members will conduct the audit and assessment of the College or Program independently with minimal consultation with the other team members based on the ITQAN 2020: KSU–QMS Handbooks 1 and 2 (4th edition, May 2017) and Performance Scoring Guidelines on the ITQAN platform.
- Each of the Board of Assessors members can use the Performance Scoring Worksheet as the worksheet to arrive at a percentage score for each of the Standard, Criteria, and KPI based on the scoring guidelines and to tabulate the total performance score for that unit.

Step 4 (Consensus Review)

- Once all the Board of Assessors members have completed their independent review in Step 3, the Chair will set up a date for the consensus review.
- At the consensus review, all the Board of Assessors members will collectively discuss and agree upon an acceptable set of evidenced based performance and scoring for each Standards, Criteria, and KPI through a consensus. The consensus is imperative to an impartial and fair indicator for

each of the Standards, Criteria, Items and KPI as different members can assign different percentage and score depending on his/her perspectives. This is whereby the worksheet Performance Scoring Worksheet will be a critical guide and support to justify a score.

- Once all the Board of Assessors members have reached a consensus for all the performance of the college or program according to the ITQAN 2020: KSU–QMS Handbooks 1 and 2 (4th edition, May 2017) and Performance Scoring Guidelines, the team will prepare the Quality Performance Assessment Report (QPAR) for that College or Program on the ITQAN platform.

Step 6

- The Board of Assessors members will review and approve the Quality Performance Assessment Report (QPAR) by attaching their signature to the Quality Performance Assessment Report (QPAR) signifying responsibility and accountability in the fair, just and impartial audit and assessment of the College or Program.
- The signed Quality Performance Assessment Report (QPAR) will be submitted to the DQD on the ITQAN Platform for documentation and feedback to the unit assessed.

Step 7

- The Board of Assessors secretary will submit the Quality Performance Assessment Report (QPAR) to DQD which will then compile and consolidate all the Quality Performance Assessment Reports (QPAR) of all the Colleges and Programs into the KSU Quality Performance Assessment Report (KSU – QPAR) that will be disseminated to the public and reported to higher authorities as the Institution Annual Quality Performance Assessment Report.

2.7. Annual Program Monitoring Process by the College

As the bi-annual Internal Audit and Assessment is used for the conduct of a full internal audit and assessment of the college programs on a bi-annual basis where they have to undergo a minimal of two internal audit and assessment cycle in a 5-years cyclical accreditation period, the periods in between the 1st and 2nd internal audit and assessment and 5-years accreditation cycle is considered the "monitoring period" (Fig. 2.7). This section describes the annual monitoring procedures for the college and programs and covers key areas of annual monitoring as follows:

- Definition of monitoring;
- Aims of monitoring;
- Responsibilities in monitoring;
- Use of evidence to support monitoring and Checklist of Supporting Evidence;
- Stages in the Monitoring Process;
- Reporting arrangements.

2.7.1. Definition of Annual Program Monitoring

Monitoring is the year-on-year process conducted in the periods of the 5-years cyclical accreditation and bi-annual Internal Audit and Assessment of the college or the programs. It is a key mechanism by which the CQPC or PQPC who have the responsibility for the delivery of a program continues the annual check and balance to continuously evaluate and improve the effectiveness of the program in achieving and sustaining its stated aims, and the success of students in attaining the program's learning outcomes. Monitoring, which is based on the use of qualitative and quantitative evidence, is conducted by the CQPC or PQPC responsible for the delivery of the program in partnership with the relevant monitoring committee as established by the College. The outcomes of monitoring as reported in the APR (Annual Program report) are reported to the College Council, Vice Rector for Planning and Development via the Deanship of Quality and Development, and, thereafter, to appropriate management authorities.

2.7.2. Aims of Annual Program Monitoring

As the annual program monitoring does not carry a full-fledged internal audit and assessment that is more stringent and strenuous, but still maintaining the continued improvements on an annual basis, the broad aims of monitoring are to:

- Ensure that the college or program remains current and valid in the light of developing knowledge in the discipline and educational practices, identifies and disseminates good practices;
- Seek the views of students with regard to the quality of the students' experience by identifying issues, shortcomings and problems in the content or delivery of a program and to take timely action to resolve those problems;
- Encourage reflection and evaluation on student performance in individual modules and the program as a whole and seek improvements to the program in the light of that reflection and the extent to which the intended learning outcomes are being attained by the students;
- Ensure that issues raised by visiting examiners are acted upon and draw the attention of the institution to matters beyond the influence of the teaching team and to provide feedback on action taken in response to these matters and contribute to strategic, academic and resource planning;

2.7.3. Responsibilities in monitoring

The Vice Rector for Planning and Development via the Deanship of Quality and Development has overall responsibility for quality and planning management and standards, policies, protocols and processes in King Saud University. The College and Program Quality and Planning Committees namely the CQPC and PQPC have full responsibility for the implementation of the ITQAN 2020: KSU – QMS Annual monitoring procedures based on policies of the University Quality Committee related to those procedures. The CQPC and PQPC are responsible for the local implementation of those procedures in their respective College and programs. As part of this responsibility, the CQPC and PQPC will ensure that programs and modules are monitored effectively by the teams delivering those programs and modules. Thus APM (Annual Program Monitoring):

- is the responsibility of program and module teaching teams (and the staff within those teams) and assumes that key individuals will be appointed to take responsibility for the day-

to-day management of a program and to maintain an ongoing record of monitoring activities and to prepare (or contribute to the preparation of) the College or Program annual report;

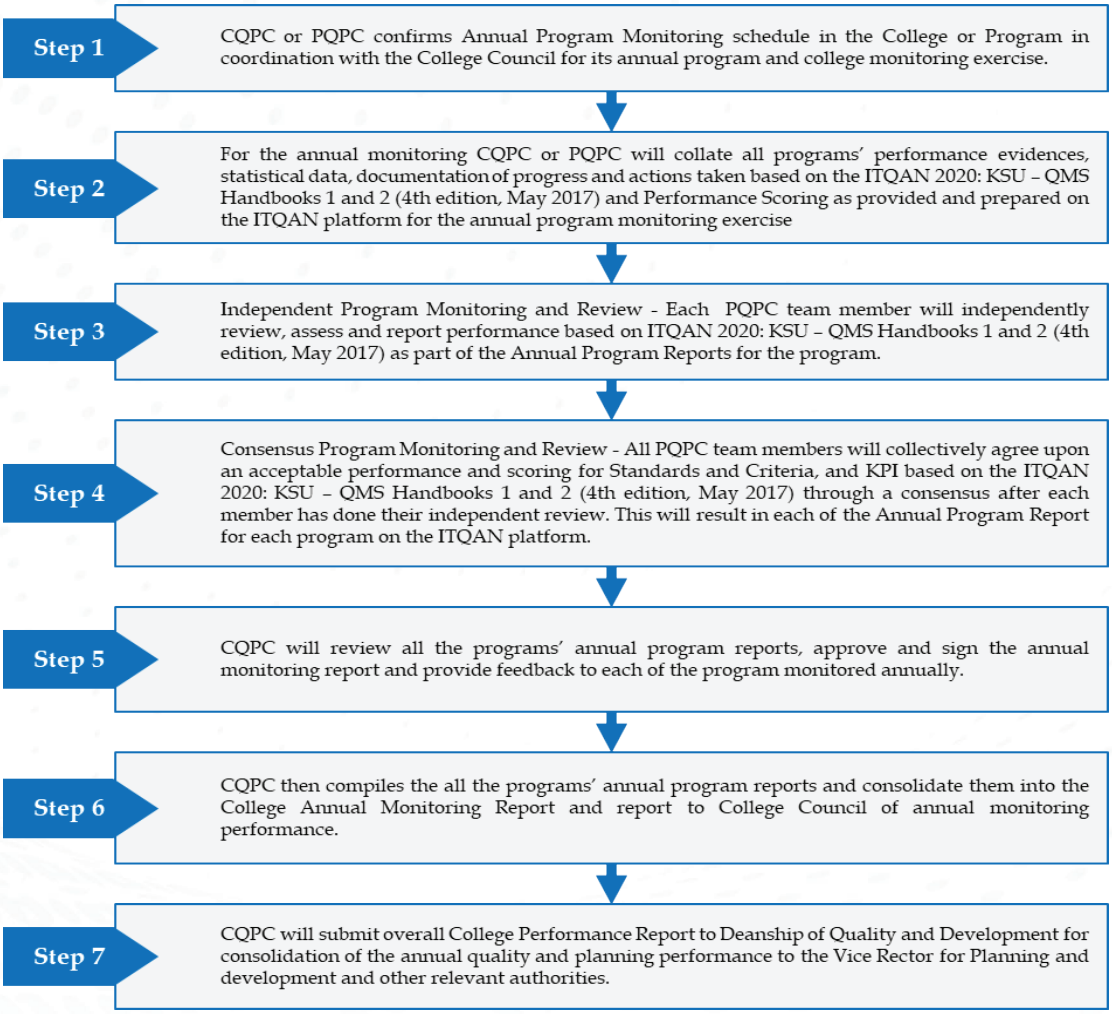
- is for programs to determine how information and evidence about modules is collected and used to support program monitoring within the ITQAN 2020: KSU – QMS requirements;
- within the context of monitoring, the program and module teaching teams are accountable to the relevant monitoring committee through, *inter alia*, the production of an annual performance report;
- by the monitoring committees are expected to produce an annual performance report to Vice Rector for Planning and Development and the Deanship of Quality and Development summarizing the performance outcomes of the committee's monitoring activity for the preceding year;
- the Deanship of Quality and Development prepares an overview report to Vice Rector for Planning and Development summarizing the outcomes of all monitoring activity for the academic year concerned.

2.7.4. Stages in the Annual Program Monitoring Process

Figure 2.12 shows the key process flow in the annual program monitoring of the Program and the following are the key stages in the monitoring process presented chronologically:

- Allocation of responsibilities for college or program annual monitoring by the CQPC or PQPC (*September of academic year*);
- Ongoing collection of evidence, record of issues, and action taken through the use of monitoring portfolio or logs (all year activity by College, Programs and faculty);
- CQPC or PQPC keep monitoring as a work in progress (all year activity) throughout academic year;
- Preparation of annual monitoring report (*August of Academic year at end of academic year*);
- Submission of summary report by the College or Program monitoring committee to Deanship of Quality (*September of new Academic year on completion of previous academic year)*
- Preparation by Deanship of Quality and Development of an overview report to Vice Rector of Planning and Development to include feedback to the CQPC and PQPC (*October of each new academic year*).

Figure 2.12: College and Program Annual Monitoring Process Flow



2.7.4.1. College and Program Annual Monitoring Process Flow (CQPC and PQPC) – Process applicable to College or Program level (Figure 2.12)

Step 1:

- The Chair of the CQPC will initiate the annual monitoring by calling for a meeting of the members of the CQPC and PQPC to inform them of the requirements, processes and procedures of the College or Programs annual program monitoring for the academic year by the CQPC and PQCP.
- The CQPC Chair will confirm the annual program monitoring dates at the Program level with PQPC chairs.

Step 2:

- The CQPC and PQPC will provide the ITQAN 2020: KSU-QMS annual program report template on the ITQAN platform for APR (Annual Program Report) development. (Note that the annual program monitoring at the Program level will culminate in the College level annual monitoring report. As such, the same flow is applicable to both the College level and the Program level).

Step 3 (Independent Monitoring Review):

- When collating the evidences and documentation and statistics and in preparing the independent review for each program monitoring, each of the PQPC members will conduct the annual monitoring independently with minimal consultation with the other team members.

Step 4 (Consensus Monitoring Review):

- Once all the PQPC team members have completed their independent review in Step 3, the PQPC Chair will set up a date for the consensus review and consolidation of the Annual Program Report on the ITQAN platform.
- At the consensus review, all the PQPC team members will collectively discuss and agree upon an acceptable evidenced based performance of the program of all its courses through a consensus. The unanimous consensus is imperative to an impartial and fair indicator for each of the Standard, Criteria, Items and KPI as different members can assign different percentage and score depending on his/her perspectives. This is whereby the Performance Scoring Worksheet will be a critical support to justify a score.
- Once all the PQPC team members have reached a consensus for all the KPIs, the team will prepare Annual Program Report for that program.

Step 6:

- ❑ The CQPC will review and approve the APR by appending their signature to the APR signifying responsibility and accountability in the fair, just and impartial audit and assessment of their college or programs.
- ❑ The signed APR will be submitted to the College Council for review of program progress and performance, whereby the CQPC will use the APRs for consolidation as the College Annual Monitoring Report.

Step 7:

- ❑ The CQPC will submit College Annual Monitoring report to Deanship of Quality and Development of the approved APRs of the College
- ❑ The Deanship of Quality and Development will provide a consolidated institutional report on the overall annual monitoring exercise to the Vice rector for Planning and Development and other relevant authorities.

Note: it should be noted that the annual monitoring exercise follows the main procedural aspects of a full scale Internal Audit and Assessment exercise but on a less stringent requirement in that the annual monitoring emphasis is on ensuring the continuous improvements of each program as reported in the APR as planned annually, whereas the internal audit and assessment is aimed at ensuring that the college or program is more academically ready and provides an external perspective to the programs' accreditation.

2.7.5. Guidance on the annual monitoring report required of the College or programs

The APR (Annual Program Report) and the College Annual Monitoring Report should normally:

- List all the program and module reports of the college considered by the CQPC and PQPC, and any reports not received or found unsatisfactory;
- Summarize the key findings of the reports (for example as they relate to college or curricular issues; teaching and learning; student achievement; resources, facilities and equipment, research. Community services, human resources, governance and administration, etc.);

- Comment on any trends apparent from the statistics on student entry, progression and achievement and key performance indicators for each of the standard;
- Comment on the extent to which action plans from previous year(s) have been met;
- Note any areas of good practice or improvements;
- Note any follow-up planned by the committee in the light of the College or Programs annual reports;
- Make recommendations to CQPC or PQPC, and to higher authorities as necessary about matters that should be followed up at institutional level (e.g. in areas related to academic policy, procedures such as monitoring, regulations, staff development, community services, learning resources, facilities and equipment, financial resources and human resources development).

2.7.6. Procedure to be followed if an Annual Program Report or the College Annual Monitoring Report is not submitted

- The CQPC and the Deanship of Quality and Development are informed by the chair of the PQCP that the Annual Program Report or the College Annual Monitoring Report has not been prepared or submitted.
- The Deanship of Quality and Development will then identify a senior member of Deanship in collaboration with the CQPC and PQPC to carry out a brief preliminary discussion to establish the reasons why the annual monitoring reports were not submitted. The preliminary enquiry would take the form of a discussion with the Deans or Vice Deans, Course Director, the Head of Division and the CQPC or PQPC.
- The team carrying out the preliminary enquiry would be asked to make a recommendation about follow up action to CQPC and the Deanship of Quality and Development. The preliminary report should be received within 10 working days of any request to carry out a preliminary enquiry.

Recommendations by the team might be:

- No action if there is evidence that steps are already in place to ensure future reports are submitted on schedule;
- The development of an action plan with clear timelines that addresses the reasons why the report was not submitted;
- Replacement of the Course Director or the overhaul of the Program Management Committee;
- The program undergoes a periodic review in accordance with university procedures;
- Suspension or closure of the program (as a last resort). If there were other indications, e.g. from student feedback and visiting examiner reports, that quality and standards were not at risk., a program was unlikely to be closed;
- Other actions as appropriate.

Actions at each stage of the procedure should be taken to ensure that issues were resolved quickly. To prevent delays, the CQPC and the Deanship of Quality and Development in collaboration with the Dean of the College will have the authority to take action at any stage. The operation of the annual monitoring process and procedure is the responsibility of CQPC and PQPC in collaboration with the Deanship of Quality and Development. The suspension or closure of a Program requires the Vice Rector of Academic Affairs recommendation for the University Council approval.

2.7.7. Use of evidence to support annual monitoring or preparation of SSRP

The annual program monitoring or the development of the program SSRP depends on the collection of evidence that confirms the effectiveness of a program. Evidence is collected from a variety of sources but may include:

- data on applications and enrolment;

- feedback from students (in staff-student consultation groups, from course or student evaluation via survey instruments of Courses Satisfaction Survey, Program Satisfaction Survey and the Student Experience Survey);
- student performance (in modules, in any one year and throughout a program);
- visiting examiners reports;
- reports from professional bodies;
- feedback from placements and from employers;
- the professional, educational and research activities and performance of staff including staff development that contribute to the development of a program or college;
- infrastructure and facilities;
- student and service support of learning and living environment, counselling and career guidance, and students' rights.

2.7.8. ITQAN 2020: KSU – QMS Checklist of Supporting Evidence

Please refer to ITQAN 2020: KSU – QMS Handbook 2 (4th Edition May 2017) for a full listing of the type of evidence proposed as part of the evidence based approach. The listing provides a set of key evidence in the forms of Statistics, Information and documents that should be provided to meet the minimum requirements of each of the Standards of EEC-NCAAA and ITQAN 2020: KSU – QMS.

2.8. Typical Annual Quality and Planning Management Cycle

Table 2.3: Typical Annual Quality and Planning Management Cycle

Activities	Schedule	Responsible Unit
1. Workshops on ITQAN 2020: KSU – QMS	September – December of academic year	Deanship of Quality and Development
2. College and Administrative Units Strategic Plan development on ITQAN platform	May – June of academic year	Deans of Colleges
3. Approval of College and Administrative Unit Strategic Plan	July - August of academic year	President and Vice-Rector of Planning and Development
4. Development of Annual Operation Plan and Budget of next academic year by all Colleges and Administrative units on ITQAN platform	May – June of academic year	Deans, Program Directors and Administrative Directors
5. Development of SSR (Self – Study Report) OR annual monitoring report for academic year by Colleges and Programs on ITQAN platform	April to June of academic year	CQPC and PQPC of Colleges and Programs
6. Deadline for submission of Annual Operation Plan and Budget of next academic year	30th June of academic year	Deans, Program Directors and Administrative Directors
7. Deadline for submission of SSR (Internal Quality Audit and Assessment Performance Report) OR annual monitoring report for academic year to Deanship of Quality and Development on ITQAN platform	30th June of academic year	Deans, Program Directors and Administrative Directors
8. Review of Annual Operation Plan and Budget of next academic year	1st July – 30th August of academic year	Vice Rector of Planning and Development and Vice Rector

Activities	Schedule	Responsible Unit
9. Approval of Annual Operation Plan and Budget of next academic year	1st August – 30th September of academic year	President or as assigned by the President
10. Implementation of One-Year Plan and Budget of next academic year on ITQAN platform	1st September – 30th June of next academic year	Colleges and Administrative Units
11. Deanship of Quality and Development plan for and get SSR and Performance Scoring and send them to Board of Assessors on ITQAN platform	1st July to 30th December of academic year	Deanship of Quality and Development
12 Internal Audit and Assessment of academic year by Board of Assessors on ITQAN platform	1st January – 31st May of academic year	KSU-BOA
13. Submission of Quality Performance Assessment Report (QPAR) of academic year on ITQAN platform	June of academic year	KSU-BOA

References

- Baldrige Performance Excellence Program: *2015 – 2016 Baldrige Performance Excellence Framework: A Systems Approach to Improving your Organization's Performance*, Gaitherburgs, MD: US Department of Commerce, National Institute of Standards and Technology, http://www.nist.gov/baldrige
- EEC-NCAAA (Education Evaluation Commission - Sector for Academic Accreditation) (2015), *Self-Evaluation Scales for Higher Education Institutions* (October 2015).
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Chapter 3 KSU Quality Standards and Performance Assessment

KSU Quality Standards and Performance Assessment

3.1. KSU Standards, Criteria and Items

As noted in the previous chapters, in the development of the ITQAN 2020: KSU – QMS (KSU Quality Management System), the EEC-NCAAA standards, sub-standards and sub-sub-standards requirements or best practices form the basis of the ITQAN 2020: KSU – QMS standards, criteria and item respectively. The use of CRITERIA and ITEMS in the ITQAN 2020: KSU – QMS denotes the same sub-standards and sub-sub-standards requirements or best practices of EEC-NCAAA respectively, as this is the performance excellence norm of MBNQA. KSU combines the institutional requirements and the program requirements into one standardized set that are applicable at all three levels i.e. the institutional, college and program level. The key rationale is that the same standards and criteria can be cascaded from top to bottom and is comparable across all program areas, and that the overall performance of the institution is based on the holistic accumulation and aggregations of the sum total efforts of all the colleges and programs resulting into the institutional performance. As such, KSU will maintain one singular set of quality standards, criteria and items that are applicable at the institutional, college or program levels. The system has been re-named as upgraded ITQAN 2020: KSU – QMS (King Saud University Quality Management System Handbooks 1 and 2, – 4th Editions, May 2017).

Figure 3.1: Explanation of Standard, Criteria and Item requirements

KSU – QMS Standards, Criteria and Items		Explanations	
○	**Standard 1: Mission and Objectives**	**STANDARD Requirement**	BASIC
1.1	**Appropriateness of the Mission**	**1.1 CRITERIA Requirement**	OVERALL
1.1.1	The mission is consistent with the establishment charter of the institution.(including any objectives or purposes in by-laws, company objectives or comparable documents)	**1.1.1 ITEM details Requirement**	MULTIPLE REQUIREMENTS
1.1.2	The mission statement is appropriate for an institution of its type. (E.g. a small private college, a research university, a girl's college in a regional community, etc.)	**1.1.2 ITEM details Requirement**	
1.1.3	The mission statement is consistent with Islamic beliefs and values.	**1.1.3 ITEM details Requirement**	
1.1.4	The mission is relevant to needs of the community or communities served by the institution	**1.1.4 ITEM details Requirement**	
1.1.5	The mission is consistent with the economic and cultural requirements of the Kingdom of Saudi Arabia.	**1.1.5 ITEM details Requirement**	
1.1.6	The appropriateness of the mission is explained to stakeholders in an accompanying statement commenting on significant aspects of the environment within which it operates. (which may relate to local, national or international issues)	**1.1.6 ITEM details Requirement**	

The sample Standard 1, Criteria 1.1 and Items 1.1.1 to 1.1.6 illustrated above in Figure 3.1 shows the depth levels used in each of the standard with its explanation as discussed below:

- ***Standard*** – This defines one of the key areas in the academic performance audit and assessment. There are 11 key standards (as given by EEC-NCAAA) used to audit and assess the performance and achievements of the institution, college or programs. This represents the **OVERALL STANDARD REQUIREMENT**. In the case of the OVERALL REQUIREMENT, the institution, college or program is only addressing the beginning of some actions that are not systematic, and as such are in the very early stages or beginning of their continuous improvements. Satisfying all the standards alone does not mean that the entire criteria requirements had been met or achieved. Criteria (which forms the Basic requirements of each of the Standard) associated with standards need to be accomplished for overall performance review.

- ***Criteria*** – This defines the sub-components of each of the standard. This means that in evaluating the performance in each standard, there are areas of emphasis within the same standard which has to be accomplished in order to meet standard requirements. This represents the **CRITERIA REQUIREMENT (or the Basic requirements of each of the standard)**. In other words, the achievement of the BASIC requirement is based on fulfilling the criteria requirement partially or at the CRITERIA level only which means that some of the sub-components are beginning to be addressed in a systematic approach or are missing. Satisfying this requirement partially means the improvements of performance at the key process specific to the criteria and contributes to its score in the overall standard.

- ***Items*** – This defines the details or further requirements of each of the criterion detailing the elaborate systematic mechanisms that has been established and implemented or addressed in order to achieve the criterion. This represents the **ITEM REQUIREMENT (or the MULTIPLE requirement of each of the Criteria)**. Fulfilling the MULTIPLE REQUIREMENTS mean that it is addressing each of the best practices in each of the process or Criteria holistically and systematically, covering ALL of them. The full achievement of the performance of the contribution of each ITEM to the criterion that leads to the accomplishments of the entire criteria set.

Based on the Standards and Criteria requirements, the EEC-NCAAA has identified 11 Standards and 58 Criteria requirements (Figure 3.2). The details of the Items requirements of each criterion will be discussed in the chapter 4 on Standards, Criteria and Items Specifications. It should be noted that there are 80 Criteria Requirement in the ITQAN 2020: KSU – QMS structure. This addition of 22 criteria in is due to the fact that there are 11 KPIs (Key Performance Indicators) Criteria set that are established as a generic set applicable to the institution, college and programs, and 11 KPIs (Key Performance Indicators) Criteria sets as established by the college or programs themselves based on the uniqueness of each individual college or program.

3.2. KSU Standards, Criteria and Weights

Since the ITQAN 2020: KSU – QMS Quality Model is adapted from the MBNQA performance excellence model, the judgment of excellence for each standard and criteria has varying degree of relative importance in contribution to overall performance excellence. The performance contribution is reflected in its allocated weights (Figure 3.2). These weights reflect their importance to the contribution of overall performance excellence totaling to an overall score of 1000. The use of the weights as the rationale of relative importance and contribution to performance is based on the overall mission and goals of the organization. Based on the above rationale, the assignment of the weights for each of the standards and criteria for the ITQAN 2020: KSU – QMS (Figure 3.2) is based on the following principles:

- The basic and priority mission of a higher education institution is teaching, learning and research and social services which form the fundamental reasons for the existence of the institution or its mission.

- The KSU strive to be a research university and also laying a stronger foundation in its existing teaching and learning as this is a priority mission of all higher education institutions that contribute to the societal and social development of the nation.

- The student-centered approach whereby the teaching-learning must shift from a teacher-centered to the student-centered to fully develop all the key components of the students based on the NQF (National Qualification Framework) of EEC-NCAAA.

- The service and support infrastructure of the supporting administrative units not attached to the academic units but are of central and critical importance in the successful service support of the academic programs for creation and delivery of education values.

The full set of standards, criteria and its weights allocation are shown in Figure 3.2.

Figure 3.2: KSU – QMS Standards, Criteria and Weights

KSU – QMS Standards and Criteria		Weights (1000 points)	
○	Standards and Criteria	Institution	Program
○	**Standard 1: Mission and Objectives**	**40 points**	**40 points**
1.1	Appropriateness of the Mission	**6**	**6**
1.2	Usefulness of the Mission Statement	**4**	**4**
1.3	Development and Review of the Mission	**4**	**4**
1.4	Use of the Mission Statement	**6**	**6**
1.5	Relationship Between Mission, Goals and Objectives	**10**	**10**
1.6	Key Performance Indicators	**8**	**8**
1.7	Additional KPIs of Colleges	**2**	**2**
○	**Standard 2: Governance and Administration**	**50 points**	**36 points**
2.1	Governing Body	**5**	**NA**
2.2	Leadership	**5**	**5**
2.3	Planning Processes	**5**	**5**
2.4	Relationship Between Sections for Male and Female Students	**4**	**4**
2.5	Integrity	**4**	**4**
2.6	Policies and Regulations	**5**	**5**
2.7	Organizational Climate	**5**	**NA**
2.8	Associated Centers and Controlled Entities	**4**	**NA**
2.9	Key Performance Indicators	**9**	**9**
2.10	Additional KPIs of Colleges	**4**	**4**
○	**Standard 3: Management of Quality Assurance and Improvement**	**75 points**	**75 points**
3.1	Institutional Commitment to Quality Improvement	**7**	**7**
3.2	Scope of Quality Assurance Processes	**7**	**7**
3.3	Administration of Quality Assurance Processes	**18**	**18**
3.4	Use of Indicators and Benchmarks	**6**	**6**
3.5	Independent Verification of Standards	**6**	**6**
3.6	Key Performance Indicators	**27**	**27**
3.7	Additional KPIs of Colleges	**4**	**4**

KSU – QMS Standards and Criteria		Weights (1000 points)	
○	Standards and Criteria	Institution	Program
○	**Standard 4: Learning and Teaching**	**250 points**	**226 points**
4.1	Oversight of Quality of Learning and Teaching	**24**	**NA**
4.2	Student Learning Outcomes	**20**	**20**
4.3	Program Development Processes	**18**	**18**
4.4	Program Evaluation and Review Processes	**24**	**24**
4.5	Student Assessment	**15**	**15**
4.6	Educational Assistance for Students	**18**	**18**
4.7	Quality of Teaching	**24**	**24**
4.8	Support for Improvements in Quality of Teaching	**15**	**15**
4.9	Qualifications and Experience of Teaching Staff	**15**	**15**
4.10	Field Experience Activities	**24**	**24**
4.11	Partnership Arrangements with Other Institutions	**17**	**16**
4.12	Key Performance Indicators	**33**	**33**
4.13	Additional KPIs of Colleges	**4**	**4**
○	**Standard 5: Student Administration and Support Services**	**70 points**	**59 points**
5.1	Student Admissions	**12**	**12**
5.2	Student Records	**8**	**5**
5.3	Student Management	**8**	**8**
5.4	Planning and Evaluation of Student Services	**7**	**NA**
5.5	Medical and Counseling Services	**6**	**7**
5.6	Extra-Curricular Activities for Students	**5**	**NA**
5.7	Key Performance Indicators	**12**	**12**
5.8	Additional KPIs of Colleges	**12**	**12**
○	**Standard 6: Learning Resources**	**56 points**	**56 points**
6.1	Planning and Evaluation	**16**	**16**
6.2	Organization	**8**	**8**
6.3	Support for Users	**7**	**7**
6.4	Resources and Facilities	**9**	**9**
6.5	Key Performance Indicators	**9**	**9**
6.6	Additional KPIs of Colleges	**8**	**8**
○	**Standard 7: Facilities and Equipment**	**58 points**	**52 points**
7.1	Policy and Planning	**6**	**8**
7.2	Quality of and Adequacy of Facilities	**9**	**9**
7.3	Management and Administration	**8**	**88**
7.4	Information Technology	**11**	**11**
7.5	Student Residences	**8**	**NA**
7.6	Key Performance Indicators	**12**	**12**
7.7	Additional KPIs of Colleges	**4**	**4**

KSU – QMS Standards and Criteria		Weights (1000 points)	
○	Standards and Criteria	Institution	Program
○	**Standard 8: Financial Planning and Management**	**38 points**	**36 points**
8.1	Financial Planning and Budgeting	**9**	**11**
8.2	Financial Management	**9**	**9**
8.3	Auditing and Risk Management	**4**	**NA**
8.4	Key Performance Indicators	**12**	**12**
8.5	Additional KPIs of Colleges	**4**	**4**
○	**Standard 9: Faculty and Staff Employment Processes**	**80 points**	**50 points**
9.1	Policy and Administration	**20**	**NA**
9.2	Recruitment	**18**	**18**
9.3	Personal and Career Development	**22**	**22**
9.4	Discipline, Complaints and Dispute Resolution	**10**	**NA**
9.5	Key Performance Indicators	**6**	**6**
9.6	Additional KPIs of Colleges	**4**	**4**
○	**Standard 10: Research**	**200 points**	**140 points**
10.1	Institutional Research Policies	**45**	**NA**
10.2	Faculty and Student Involvement	**40**	**40**
10.3	Commercialization of Research	**15**	**NA**
10.4	Facilities and Equipment	**25**	**25**
10.5	Key Performance Indicators	**45**	**45**
10.6	Additional KPIs of Colleges	**30**	**30**
○	**Standard 11: Institutional Relationships with the Community**	**83 points**	**58 points**
11.1	Institutional Policies on Community Relationships	**12**	**12**
11.2	Interactions With the Community	**24**	**24**
11.3	Institutional Reputation	**24**	**NA**
11.4	Key Performance Indicators	**16**	**16**
11.5	Additional KPIs of Colleges	**7**	**7**
Total of 11 Standards, 58 Process and 22 Results Criteria (INSTITUTION)		**1000 points**	
Total of 11 Standards, 45 Process and 22 Results Criteria (PROGRAM) with 13 NA (Not applicable processes in Program)			**828 points**

Note:

(1) The use of the 1000 points score for the institution and 828 points for programs is for the facilitation in the computation and conversion to the overall weighted average of the degree and level of performance. This is also to accommodate the fact that there are 80 sets of criteria for institution and 67 sets of criteria for programs, of which the use of 100 points as the total score would be less fitting. The use of the 1000 points and 828 points generally follows the MBNQA Performance Excellence Methodology of evaluation of criteria.

(2) The Standards and Criteria as used in the ITQAN 2020: KSU-QMS are based on *EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015, and Standards _Programs, Version 3, Muharram 1437H, October 2015.*

3.3. KSU – QMS Categorization of Standards and Criteria based on EEC-NCAAA

Institutional Context

- Standard 1: Mission and Objectives
- Standard 2: Governance and Administration
- Standard 3: Management of Quality Assurance and Improvement

Quality of Learning and Teaching

- Standard 4: Learning and Teaching

Community Contributions

- Standard 10: Research
- Standard 11: Institutional Relationships with the Community

Support for Student Learning

- Standard 5: Student Administration and Support Services
- Standard 6: Learning Resources

Supporting Infrastructure

- Standard 7: Facilities and Equipment
- Standard 8: Financial Planning and Management
- Standard 9: Faculty and Staff Employment Processes

The EEC-NCAAA has 11 main standards and 58 Sub – Standards categorized under these main Standards. EEC-NCAAA has specified 33 KPIs in the handbooks. The KSU – QMS ensures full compliance with EEC-NCAAA by using the EEC-NCAAA Standards, Sub – Standards and Sub – Sub – standards or best practices as the blueprint in developing the ITQAN 2020: KSU-QMS Standards, Criteria and Items respectively. Figure 3.3 provides the overall structure of the ITQAN 2020: KSU-QMS Standards, Criteria and Key Performance Indicators with the detailed requirements explained in Chapter 4. As noted, the ITQAN 2020: KSU-QMS has 80 Criteria of which 58 PROCESS criteria are fully compliant with EEC-NCAAA (which are the Process – based Criteria) and 11 sets of Institution specified KPIs and 11 sets of College or Program specified KPIs which are the Result – based Criteria. These KPIs are inclusive of the 33 EEC-NCAAA KPIs. The ITQAN 2020: KSU-QMS has got 55 Institution specified KPIs which are shown in Figure. 3.3, as summarized below:

(1) Process Criteria:

- Institution has 58 Process Criteria
- Programs have 45 Process Criteria

(2) Result Criteria

- At Institution level, there is 11 sets of institution specified KPIs of which there are 42 are Quantitative KPIs and 13 Qualitative KPIs. These 11 Institution defined sets of KPIs are the minimum requirements of for quality and accreditation management. The "Additional KPIs of College" are developed and managed by the College or Program themselves but needs to be define collectively in the Performance Metrics that are computed as part of the Results Criteria performance.
- At Programs level, there is 11 sets of institution specified KPIs of which there are 42 are Quantitative KPIs and 13 Qualitative KPIs. The "Additional KPIs of College" are developed and managed by the College or Program themselves but needs to be defined collectively in the Performance Metrics that are computed as part of the Results Criteria performance.

Figure 3.3: Process-based Standards and Criteria and Results-based KPI under ITQAN 2020: KSU – QMS (Institution and Program)

Institutional Context		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
○ ***Standard 1: Mission and Objectives*** 1.1 Appropriateness of the Mission 1.2 Usefulness of the Mission Statement 1.3 Development and Review of the Mission 1.4 Use of the Mission Statement 1.5 Relationship Between Mission, Goals and Objectives 1.6 Key Performance Indicators 1.7 Additional KPI of College	○ ***Standard 1: Mission and Objectives*** 1.1 Appropriateness of the Mission 1.2 Usefulness of the Mission Statement 1.3 Development and Review of the Mission 1.4 Use of the Mission Statement 1.5 Relationship Between Mission, Goals and Objectives 1.6 Key Performance Indicators 1.7 Additional KPI of College	1.6.1 **EEC-NCAAA S1.1** – Stakeholders' awareness ratings of the Mission Statement and Objectives (Average rating on how well the mission is known to teaching staff, and undergraduate and graduate students, respectively, on a five- point scale in an annual survey). 1.6.2 Percentage of objectives accomplished of: (a) The approved Annual Action Plan and budget requisitioned (%) (b) As % accumulation of the unit's 5-Years Strategic Plan performance achievements (%)
Number of Criteria = 5 Process + 2 Result	**Number of Criteria = 5 Process + 2 Result**	**Number of KPI = 2 (1 Quantitative, 1 Qualitative)**
○ ***Standard 2: Governance and Administration*** 2.1 Governing Body 2.2 Leadership 2.3 Planning Processes 2.4 Relationship Between Sections for Male and Female Students 2.5 Integrity 2.6 Policies and Regulations 2.7 Organizational Climate 2.8 Associated Centers and Controlled Entities 2.9 Key Performance Indicators 2.10 Additional KPI of College	○ ***Standard 2: Governance and Administration*** 2.1 Leadership 2.2 Planning Processes 2.3 Relationship Between Sections for Male and Female Students 2.4 Integrity 2.5 Policies and Regulations 2.6 Key Performance Indicators 2.7 Additional KPI of College	2.9.1 **EEC-NCAAA S2.1** – Stakeholder evaluation of the Policy Handbook, including administrative flow chart and job responsibilities (Average rating on the adequacy of the Policy Handbook on a five-point scale in an annual survey of teaching staff and final year students). 2.9.2 Evaluation of Organization Climate (Means average and Level achieved based on survey) 2.9.3 Evaluation of Management and Administration overall performance (Means average and Level achieved based on survey)
Number of Criteria = 8 Process + 2 Result	**Number of Criteria = 5 Process + 2 Result**	**Number of KPI = 3 (3 Qualitative)**

Institutional Context		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
○ ***Standard 3: Management of Quality Assurance and Improvement*** 3.1 Institutional Commitment to Quality Improvement 3.2 Scope of Quality Assurance Processes 3.3 Administration of Quality Assurance Processes 3.4 Use of Indicators and Benchmarks 3.5 Independent Verification of Standards 3.6 Key Performance Indicators 3.7 Additional KPI of College	○ ***Standard 3: Management of Quality Assurance and Improvement*** 3.1 Institutional Commitment to Quality Improvement 3.2 Scope of Quality Assurance Processes 3.3 Administration of Quality Assurance Processes 3.4 Use of Indicators and Benchmarks 3.5 Independent Verification of Standards 3.6 Key Performance Indicators 3.7 Additional KPI of College	3.6.1 Percentage of students graduated in the last 3 years who are recognized in the areas of academics, or profession, or contribution to society at the national or international level (%) 3.6.2 Percentage of the full-time faculty members and teaching staffs obtaining academic or professional awards at the national or international level. (%) 3.6.3 **EEC-NCAAA S3.1** – Students overall evaluation on the quality of their learning experiences at the institution (Average rating of the overall quality of their program on a five point scale in an annual survey of final year students) 3.6.4 **EEC-NCAAA S3.2** – Proportion of courses in which student evaluations were conducted during the year 3.6.5 **EEC-NCAAA S3.3** – Proportion of programs in which there was independent verifications within the institution of standards of student achievement during the year 3.6.6 **EEC-NCAAA S3.4** – Proportion of programs in which there was independent verifications within the institution of standards of student achievement by people external to the institution during the year. 3.6.7 Percentage of academic programs accomplishment in current academic year and accomplishment of internal audit and assessment (IAA) on bi-annual basis of: (a) undergraduate programs attained national accreditation (b) undergraduate programs attained

Institutional Context		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
		international accreditation (c) post graduate programs attained national accreditation (d) post graduate programs attained international accreditation (e) undergraduate programs IAA bi-annually under KSU – QMS (f) post graduate programs IAA bi-annually under KSU – QMS
Number of Criteria = 5 Process + 2 Result	**Number of Criteria = 5 Process + 2 Result**	**Number of KPI = 7 (6 Quantitative, 1 Qualitative)**

Quality of Learning and Teaching		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
○ ***Standard 4 Learning and Teaching*** 4.1 Oversight of Quality of Learning and Teaching 4.2 Student Learning Outcomes 4.3 Program Development Processes 4.4 Program Evaluation and Review Processes 4.5 Student Assessment 4.6 Educational Assistance for Students 4.7 Quality of Teaching 4.8 Support for Improvements in Quality of Teaching 4.9 Qualifications and Experience of Teaching Staff 4.10 Field Experience Activities 4.11 Partnership Arrangements	○ ***Standard 4 Learning and Teaching*** 4.1 Student Learning Outcomes 4.2 Program Development Processes 4.3 Program Evaluation and Review Processes 4.4 Student Assessment 4.5 Educational Assistance for Students 4.6 Quality of Teaching 4.7 Support for Improvements in Quality of Teaching 4.8 Qualifications and Experience of Teaching Staff 4.9 Field Experience Activities 4.10 Partnership Arrangements with Other Institutions 4.11 Key Performance Indicators	4.12.1 Students' competency score index as per NQF (Means average and Level achieved) 4.12.2 Percentage of graduates who work in their major field of study 4.12.3 **EEC-NCAAA S4.5** (Graduation Rate for Undergraduate Students) – Proportion of students entering undergraduate programs who complete those programs in minimum time 4.12.4 **EEC-NCAAA S4.6** (Graduation Rate for Post graduate Students) – Proportion of students entering post graduate programs who complete those programs in specified time 4.12.5 **EEC-NCAAA S4.2** – Students overall rating on the quality of their courses (Average rating of students on a 5 point scale overall evaluation of courses)

Quality of Learning and Teaching		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
with Other Institutions 4.12 Key Performance Indicators 4.13 Additional KPI of College	4.12 Additional KPI of College	4.12.6 **EEC-NCAAA S4.1** – Ratio of students to teaching staff. (Based on full time equivalents) 4.12.7 **EEC-NCAAA S4.3** – Proportion of teaching staff with verified doctoral qualifications 4.12.8 Proportion of the full-time faculty members and teaching staffs holding academic titles of teaching assistant, instructor, Assistant Professor, Associate Professor, and Professor. 4.12.9 **EEC-NCAAA S4.4** – (Retention Rate) Percentage of students entering programs who successfully complete first year 4.12.10 Percentage of courses that are improved based on research and/or evaluation results. (Means average and Level achieved) 4.12.11 **EEC-NCAAA S4.7** – Proportion of graduates from undergraduate programs who within six months of graduation are: (a) employed (b) enrolled in further study (c) not seeking employment or further study
Number of Criteria = 11 Process + 2 Result	**Number of Criteria = 10 Process + 2 Result**	**Number of KPI = 11 (10 Quantitative, 1 Qualitative)**

Community Contributions		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
○ ***Standard 10: Research*** 10.1 Institutional Research Policies 10.2 Faculty and Student Involvement 10.3 Commercialization of Research 10.4 Facilities and Equipment 10.5 Key Performance Indicators 10.6 Additional KPI of College	○ ***Standard 10: Research*** 10.1 Faculty and Student Involvement 10.2 Facilities and Equipment 10.3 Key Performance Indicators 10.4 Additional KPI of College	10.4.1 **EEC-NCAAA S10.1** – Number of refereed publications in the previous year per full time equivalent member of teaching staff. (Publications based on the formula in the Higher Council Bylaw excluding conference presentations) 10.4.2 **EEC-NCAAA S10.2** – Number of citations in refereed journals in the previous year per full time equivalent teaching staff. 10.4.3 **EEC-NCAAA S10.3** – Proportion of full time member of teaching staff with at least on refereed publications during the previous year 10.4.4 Evaluation of facilities and environment supporting research (Means average and Level achieved based on survey) 10.4.5 Ratio of internal research and innovation funds in proportion to the total number of full-time faculty members and teaching staffs 10.4.6 **EEC-NCAAA S10.5** – Research Income from external sources in the past year per full-time equivalent faculty members 10.4.7 **EEC-NCAAA S10.4** – Number of papers or reports presented at academic conferences during the past year per full time equivalent faculty member 10.4.8 Number of research and innovations registered as intellectual property or patented within the past 5 years 10.4.9 **EEC-NCAAA S10.6** – Proportion of total annual operating budgets dedicated to research
Number of Criteria = 4 Process + 2 Result	**Number of Criteria = 2 Process + 2 Result**	**Number of KPI = 9 (8 Quantitative, 1 Qualitative)**

Community Contributions		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
○ ***Standard 11: Institutional Relationships with the Community*** 11.1 Institutional Policies on Community Relationships 11.2 Interactions With the Community 11.3 Institutional Reputation 11.4 Key Performance Indicators 11.5 Additional KPI of College	○ ***Standard 11: Institutional Relationships with the Community*** 11.1 Institutional Policies on Community Relationships 11.2 Interactions With the Community 11.3 Key Performance Indicators 11.4 Additional KPI of College	11.4.1 Evaluation of satisfaction of employers/ business operators/ users of graduates /alumni / graduates on competency of graduates (Means average and Level achieved based on survey) 11.4.2 Evaluation of the systems and mechanisms used in providing academic services to the society according to the goals of the institution, college or program (Means average and Level achieved based on survey) 11.4.3 **EEC-NCAAA S11.1** – Proportion of full time teaching and other staff actively engaged in community service activities 11.4.4 **EEC-NCAAA S11.2** – Number of community education program provided in proportion of the number of departments
Number of Criteria = 3 Process + 2 Result	**Number of Criteria = 2 Process + 2 Result**	**Number of KPI = 4 (2 Quantitative, 2 Qualitative)**

Support for Student Learning		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
○ ***Standard 5: Student Administration and Support Services*** 5.1 Student Admissions 5.2 Student Records 5.3 Student Management 5.4 Planning and Evaluation of Student Services 5.5 Medical and Counseling Services 5.6 Extra-Curricular Activities	○ ***Standard 5: Student Administration and Support Services*** 5.1 Student Admissions 5.2 Student Records 5.3 Student Management 5.4 Medical and Counseling Services 5.5 Key Performance Indicators 5.6 Additional KPI of College	5.7.1 **EEC-NCAAA S5.1** – Ratio of students to administrative staff 5.7.2 **EEC-NCAAA S5.2** – Proportion of total operating funds (other than accommodation and student allowances) allocated to provision of student services 5.7.3 **EEC-NCAAA S5.3** – Student evaluation of academic and career counselling (Average rating on the adequacy of academic and career counselling on a five point scale in

Support for Student Learning		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
for Students 5.7 Key Performance Indicators 5.8 Additional KPI of College		an annual survey of final year students)
Number of Criteria = 6 Process + 2 Result	**Number of Criteria = 4 Process + 2 Result**	**Number of KPI = 3 (2 Quantitative, 1 Qualitative)**
○ ***Standard 6: Learning Resources*** 6.1 Planning and Evaluation 6.2 Organization 6.3 Support for Users 6.4 Resources and Facilities 6.5 Key Performance Indicators 6.6 Additional KPI of College	○ ***Standard 6: Learning Resources*** 6.1 Planning and Evaluation 6.2 Organization 6.3 Support for Users 6.4 Resources and Facilities 6.5 Key Performance Indicators 6.6 Additional KPI of College	6.5.1 **EEC-NCAAA S6.2** – Number of web-site subscriptions and journal as a proportion of the number of programs offered 6.5.2 **EEC-NCAAA S6.1** – Student evaluation of library and media center (Average rating on adequacy of library and media center including Staff assistance; Current and up-to-date; copy & print facilities; functionality of equipment; atmosphere or climate for studying; availability of study sites and any other quality of indicators on a five point scale in an annual survey) 6.5.3 **EEC-NCAAA S6.3** – Student evaluation of digital library (Average rating on adequacy of the digital library including User friendly website; Availability of the digital databases; Accessibility for users; Library skill training and any other quality of indicators on a five point scale in an annual survey)
Number of Criteria = 4 Process + 2 Result	**Number of Criteria = 4 Process + 2 Result**	**Number of KPI = 3 (2 Quantitative, 1 Qualitative)**

Supporting Infrastructure		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
○ ***Standard 7: Facilities and Equipment*** 7.1 Policy and Planning 7.2 Quality of and Adequacy of Facilities 7.3 Management and Administration 7.4 Information Technology 7.5 Student Residences 7.6 Key Performance Indicators 7.7 Additional KPI of College	○ ***Standard 7: Facilities and Equipment*** 7.1 Policy and Planning 7.2 Quality of and Adequacy of Facilities 7.3 Management and Administration 7.4 Information Technology 7.5 Key Performance Indicators 7.6 Additional KPI of College	7.6.1 **EEC-NCAAA S7.1** – Annual expenditure on IT budget, including: a) Percentage of the total Institution, or College, or Program budget allocated for IT; b) Percentage of IT budget allocated per program for institutional or per student for programmatic; c) Percentage of IT budget allocated for software licences; d) Percentage of IT budget allocated for IT security; e) Percentage of IT budge allocated for IT maintenance. 7.6.2 **EEC-NCAAA S7.2** – Stakeholder evaluation of the IT services. (Average overall rating of the adequacy of IT availability; Security; Maintenance; Accessibility; Support systems; Software and up-dates; Age of hardware, and other viable indicators of service on a five- point scale of an annual survey.) 7.6.3 Average overall rating of adequacy of facilities and equipment in a survey of faculty members and teaching staffs. 7.6.4 **EEC-NCAAA S7.3** – Stakeholder evaluation of Websites; e-learning services; Hardware and software; Accessibility; Learning and Teaching; Assessment and service; Web-based electronic data management system or electronic resources (for example: institutional website providing resource sharing, networking & relevant information, including e-learning, interactive learning & teaching between students & faculty on a five- point scale of an annual survey).
Number of Criteria = 5 Process + 2 Result	**Number of Criteria = 4 Process + 2 Result**	**Number of KPI = 4 (3 Quantitative, 1 Qualitative)**

Supporting Infrastructure		
Institution Standards & Criteria	Program Standards & Criteria	Key Performance Indicators
○ ***Standard 8: Financial Planning and Management*** 8.1 Financial Planning and Budgeting 8.2 Financial Management 8.3 Auditing and Risk Management 8.4 Key Performance Indicators 8.5 Additional KPI of College	○ ***Standard 8: Financial Planning and Management*** 8.1 Financial Planning and Budgeting 8.2 Financial Management 8.3 Key Performance Indicators 8.4 Additional KPI of College	8.4.1 **EEC-NCAAA S8.1 –** Total operating expenditure (other than accommodation and student allowances) per student 8.4.2 University revenues generated from providing academic and professional services in the name of the university in proportion to the total number of full-time faculty members 8.4.3 Percentage of University expenses incurred in cash and in kind in the preservation, development and enhancement of identity, art and culture in proportion to the total operation budget 8.4.4 Budget per head for full-time faculty members' development in the country and abroad in proportion to the total number of full-time faculty members (SR per capita) 8.4.5 Operating expenses in the library system, computers and information center in proportion to the total number of full-time students (SR per capita) 8.4.6 Evaluation of risk management practices as implemented (Means average and Level achieved based on survey)
Number of Criteria = 3 Process + 2 Result	**Number of Criteria = 2 Process + 2 Result**	**Number of KPI = 6 (5 Quantitative, 1 Qualitative)**
○ ***Standard 9: Employment Processes*** 9.1 Policy and Administration 9.2 Recruitment 9.3 Personal and Career Development 9.4 Discipline, Complaints and Dispute Resolution 9.5 Key Performance Indicators 9.6 Additional KPI of College	○ ***Standard 9: Employment Processes*** 9.1 Recruitment 9.2 Personal and Career Development 9.3 Key Performance Indicators 9.4 Additional KPI of College	9.5.1 **EEC-NCAAA S9.1 –** Proportion of Faculty Members leaving the institution in the past year for reasons other than age retirement 9.5.2 **EEC-NCAAA S9.2 –** Proportion of teaching staff participating in professional development activities during the past year) 9.5.3 Percentage of full-time supporting staff participating in professional development activities during the past year
Number of Criteria = 4 Process + 2 Result	**Number of Criteria = 2 Process + 2 Result**	**Number of KPI = 3 (3 Quantitative)**

Total Number of Criteria = 58 Process + 22 Result = 80 Process and Result based Criteria	Total Number of Criteria = 45 Process + 22 Result = 67 Process and Result based Criteria	Number of KPI = 55 (42 Quantitative, 13 Qualitative)

Note: Unless otherwise specified or as sourced by the program itself, all the KPIs will be collated and computed at the level of the institution, college and program by the ITQAN 2020: KSU-QMS electronic system. They will be provided to the programs for the SSR development, discussion and analysis of performance and achievements to arrive at a common data set that are used for internal benchmarking purposes for comparative performance across programs and colleges.

3.4. ITQAN 2020: KSU-QMS Performance Assessment System

3.4.1. ITQAN 2020: KSU-QMS Performance Scoring System

As noted earlier in the EEC-NCAAA basic requirements and in determining the performance of the institution, college or program, the EEC-NCAAA uses 2 main set of criteria of:

- ***Relevance*** – This is used to determine the relevance of the standard and substandard (standard and criteria as termed in ITQAN 2020: KSU-QMS) to the college or program, of which majority of them have direct relevancy in terms of its contribution to academic performance and achievement.
- ***Rating*** – The assessment of the performance of the standard and substandard requirement is based on a Star system of which there are 6 levels of Stars as discussed in the EEC-NCAAA system earlier in Chapter 1.

3.4.1.1 ITQAN 2020: KSU- QMS Performance Scoring System

The Performance Scoring approach used in the ITQAN 2020: KSU-QMS leans towards the internationally accepted norms as indicated in the ITQAN 2020: KSU-QMS Performance Excellence Model. In the assessment of performance it must be noted that there are 2 main types of performance based on the "Process" and "Results" components as noted earlier. In the ITQAN 2020: KSU-QMS, the term "performance excellence" is defined by and adapted from NIST (2015), as **"PERFORMANCE EXCELLENCE:** An integrated approach to the institution, college or program performance management that results in (1) delivery of ever-improving value to students and stakeholders, contributing to ongoing institution, college or program success; (2) improvement of your institution, college or program overall effectiveness and capabilities; and (3) learning for the institution, college or program and for people in the workforce".

With the ITQAN 2020: KSU-QMS Performance Excellence framework, the institution, college or program evaluate and improve its performance based on these factors of evaluation of:

(1) **PROCESSES** along four dimensions based on their levels of maturity of performances :

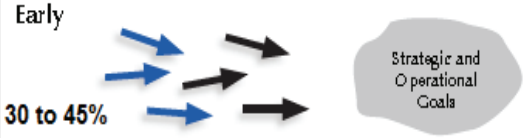
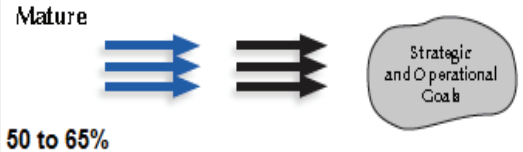
- **Approach:** How do you accomplish the institution, college or program work? How effective are your key approaches?
- **Deployment:** How consistently are your key processes used in relevant parts of the institution, college or program?
- **Learning:** How well have you evaluated and improved your key processes? How well have improvements been shared within the institution, college or program?
- **Integration:** How do your processes align with your current and future institution, college or program needs? How well are processes and operations harmonized across the institution, college or program?

(2) **RESULTS** along four dimensions based on their levels of maturity of performances :

- **Levels:** What is your current performance?
- **Trends:** Are the results improving, staying the same, or getting worse?
- **Comparisons:** How does your performance compare with that of other institution, college or program, or with benchmarks or industry leaders?
- **Integration:** Are you tracking results that are important to the institution, college or program and that consider the expectations and needs of your key stakeholders? Are you using the results in institution, college or program decision making?

Figure 3.4: Philosophy of Assessment of Process and Results Criteria

Assessing Processes and Results Performances based on different levels of MATURITY

DESCRIPTOR	PROCESS	RESULTS
Reactive  0 to 25%	• Operations are characterized by activities rather than by processes, and they are largely responsive to immediate needs or problems. Goals are poorly defined.	• Results that are important to the organization's ongoing success are missing, not used, or randomly reported.
Early  30 to 45%	• The organization is beginning to carry out operations with repeatable processes, evaluation, and improvement, and there is some early coordination among organizational units. Strategy and quantitative goals are being defined.	• Results that are important to the organization's ongoing success are reported, tracked over time, and improving.
Mature  50 to 65%	• Operations are characterized by repeatable processes that are regularly evaluated for improvement. Learnings are shared, and there is coordination among organizational units. Processes address key strategies and goals.	• Results that are important to the organization's ongoing success are trending in the right direction and doing well relative to competitors or other relevant organizations.
Role Model  70 to 100%	• Operations are characterized by repeatable processes that are regularly evaluated for change and improvement in collaboration with other affected units. The organization seeks and achieves efficiencies across units through analysis, innovation, and the sharing of information and knowledge. Processes and measures track progress on key strategic and operational goals.	• The full array of results that are important to the organization's ongoing success are reported and trended over time, indicating top performance relative to other organizations.

Source: Baldrige Performance Excellence Program: *2015 – 2016 Baldrige Performance Excellence Framework: A Systems Approach to Improving your Organization's Performance*, Gaitherburgs, MD: US Department of Commerce, National Institute of Standards and Technology, http://www.nist.gov/baldrige

The performance scoring is based on two dimensions of:

1. "Weight" assigned to each of the overall Standards and its 58 PROCESS Criteria and 22 sets of KPIs RESULTS Criteria which totals to 1000 points for the Institution and 825 points for the Programs.
2. "Performance Sore" of each of the 58 PROCESS Criteria and 22 sets of KPIs RESULTS Criteria based on their levels of maturity (Figure 3.4) which is scored on a 100% range with an incremental of 5% each of , 5%, 10%, 15% and so on.

The performance scores are given based on the levels of maturity of its processes (Figure 3.5) that can range from:

i. Being **reactive to problems** with no systematic approaches which can be give a score of 0 to 5%;
ii. **General improvement orientation (10% to 15%)** whereby the institution, college or programs shows some early signs of improvements that are not systematically established or well evidenced;
iii. The beginning of a **systematic approach for evaluation and improvements (30% to 45%)** whereby there are the beginnings of the PDCA (Plan, Do, Check and Act) Cycle that is more emphasized on the P and D, that do not completely closes the PDCA loop;
iv. When the PDCA loop matures, where there is a more systematic approach that shows repeated or replications in the C and A showing **learning and strategic improvements (50% to 65%)** important to the institution, college or program. There is a systematic approach to check for performance gaps and take remedial actions based on the evaluation of the performance, which is the basis of "organizational" or "individual" learning which is the crux of learning and improving;
v. The organization analysis and innovation (70% to 100%) is whereby the institution, college or program has a systematic approach to organizational analysis, organizational learning that brings about innovations and not only incremental improvements to the whole organizational setting.

While accomplishing a 100% is what the institution, college or program aims for and assumed to be the end-point journey of the improvements and innovation of the institution, college or program, in reality, they do not exist, as there are internal and external factors that are constantly changing that affects the "way we do things here" and "what we believes in and how we live our beliefs" on an ever changing environment.

Figure 3.5: Rule of Thumb guidelines in assigning percentage scoring

From Fighting Fires to Innovation: An Analogy for Learning

Learning is an essential attribute of high-performing organizations. Effective, well-deployed organizational learning can help an organization improve from the early stages of reacting to problems to the highest levels of organization-wide improvement, refinement, and innovation.

1

Reacting to the problem (0–5%)

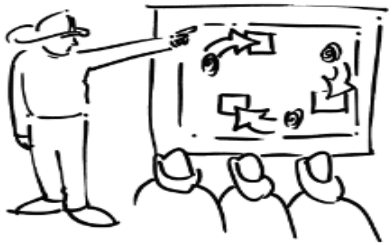
Run with the hose and put out the fire.

2

General improvement orientation (10–25%)

Install more fire hoses to get to the fires quickly and reduce their impact.

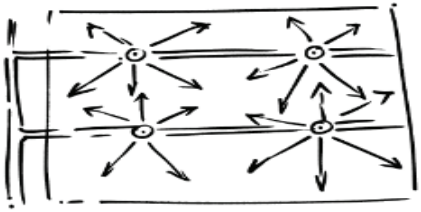
3



Systematic evaluation and improvement (30–45%)

Evaluate which locations are most susceptible to fire. Install heat sensors and sprinklers in those locations.

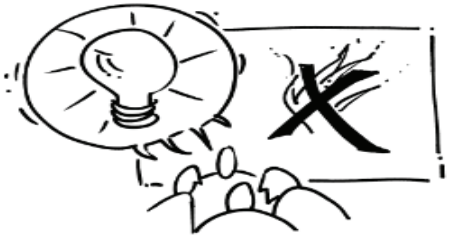
4



Learning and strategic improvement (50–65%)

Install systemwide heat sensors and a sprinkler system that is activated by the heat preceding fires.

5



Organizational analysis and innovation (70–100%)

Use fireproof and fire-retardant materials. Replace combustible liquids with water-based liquids. Prevention is the primary approach for protection, with sensors and sprinklers as the secondary line of protection. This approach has been shared with all facilities and is practiced in all locations.

In the ITQAN 2020: KSU-QMS, for the "Process" components which cover the standards, criteria and items, the following scoring performance is used:

- ***Using Weights and Percentage Scoring System as opposed to the Star System*** – In moving away from the EEC-NCAAA Star assignment system, KSU intends to use an internationally accepted approach to determine a performance scoring system that ascertains degree or level quantifiable performance scoring methodology of using a weighting and rating approach. The weights assigned for each Standard and Criteria are explained previously in Figure 3.2 with a sample scoring of Standard 1 and its Criteria shown in Figure 3.6. The basic rationale is that it might be easier to manipulate and determine quantifiable rather than qualitative elements in a relative way to provide some forms of levels in its evaluation through the weighting (prioritizing or ranking) and rating (scoring or evaluating) systems. The weighted score represents 80% of performance achievement.
- ***Comparative Benchmark*** – In using the weighting and rating approach, KSU aims at a quantifiable set of indicators in performance that can be scored and compared relative to internationally accepted norms or benchmark which are normally quantitative in nature. Normally the qualitative benchmarks are translated into quantifiable methodology using levels or degrees of performance with standardized criteria achievement. This is the threshold of the KSU-QMS Internal benchmarking System (December, 2013) which uses the 828 points as comparative performance across programs and colleges that culminates.

Fig. 3.6: Performance Scoring Sample of a full Standard 1 and its Criteria 1.1 to 1.7

1st Column	2nd Column	3rd Column	4th Column	5th Column	6th Column	7th Column	8th Column	9th Column	10th Column
KSU – QMS Performance Scoring Worksheet	Weights	Score (%)	Weighted Score	Goals Set	Goals Achv.	Develop.	Effective	Previous Perf.	Overall Perf.
Overall Institution / College / Program Score	1000	35%	350.00						316.14
Standard 1 Mission, Goals and Objectives	40	52%	20.8					10.6	16.14
1.1 Appropriateness of the Mission	6	60%	3.6	0.5	0.60	1	1	1.6	3.6
1.2 Usefulness of the Mission Statement	4	60%	2.4	0.6	0.60	1	1	1.8	2.4
1.3 Development and Review of the Mission	4	50%	2	0.5	0.50	1	1	1.6	2.0
1.4 Use Made of the Mission	6	60%	3.6	0.5	0.60	1	1	2.1	3.6
1.5 Relationship Between Mission, Goals and Objectives	10	30%	3	0.5	0.30	0	0	2.5	2.9
1.6 Institution specified Key Performance Indicators	6	30 %	1.8	0.5	0.30	0	0	1.0	1.64
1.7 College or Programs specified KPI	4	0 %	0	0.5	0.00	0	0	0	0

Figure 3.6 shows a worked example of the performance scoring of Standard 1 which has a weight of 40 out of the 1000 points for the 11 Standards. As noted earlier, the weight for each Standard is assigned based on the vision and mission of the institution. Key highlights:

- As shown in the 10th Column, the overall performance for the academic year 2016 for all the Standards is 316.14/1000. This means that the institution has systematic approaches for all of its Standards 1 to 11. This indicates the early stages of a systematic approach and deployment throughout the whole university system and its colleges and programs. It also shows the result performance that do show some reports of KPI performance level and the beginning of some trends performance at the institution level, but not at the college or program levels.
- For Standard 1, the institution performance 16.14 (10th Column) as compared to the previous performance of 10.6 (9th Column). This means that there has been an improvement of 5.54 points from the previous performance.
- The "goals set" (5th Column) which is set at default of 50% at the beginning of the year is used to compare to the "goals achieved" (6th Column) accomplished at the end of the year. Criteria 1.1 to 1.4 shows relatively better performance for all with the exception of Criteria 1.5 and 1.6 and no performance improvements recorded for Criteria 1.7. All these are factored towards performance as shown in (10th Column).

- Overall, it can be said that there are improvements made from 2016 as compared to the previous year performance.
- The next step is to identify the strengths and opportunities for improvements and put them into the next academic year action plans for continuous development and improvements.

- ***Continuous improvements against planned targets*** – The theme of any quality system is that there are continuous improvements. The use of the weighting and rating system as discussed above will show the specific achievement and performance of a specific academic year or a bi-annual performance. But what is important is that there is a continuous improvement over a period of time across a few years which are the TREND of continuous improvement. To better achieve its improvement, targets for each academic year must be identified through its goals or objectives or target specifications. In this context, there are 2 main areas of "development" and "effectiveness" that contributes to the remaining 20% of overall performance in:

  - ✓ **Development** –These development aspects look at the planning at the beginning of the academic year with the specifications of the goals or objectives or targets to be achieved in a specific academic year or over a few academic years in terms of its trend. To ensure there is development, the unit will need to define the **goals set** (5th Column in Figures 3.6 and 3.7.1) – which specify the target to be achieved in an academic year or its bi-annual audit and assessment. At the end of the academic year, the **goals achieved** as shown in the 6th column of Figures 3.6 and 3.7.1 is automatically computed based of the difference between "goal set or target and actual goal achieved". **"Development"** as shown in 7th column of Figures 3.6 and 3.7.1 specifies the variations or deviations from the goals and represents the actual performance. This could be positive (has performance above target) or negative (has performed below target) on comparing the actual performance with the targeted performance. If there is positive development, then it is assigned a "1", if there is a negative development (actual performance is lower than the target or goal), then it is assigned a "0". This is shown in the 7th column of Figures 3.6 and 3.7.1. This contributes 10 % to the overall performance as shown in the 9th column of Figures 3.6 and 3.7.1.

  - ✓ **Effectiveness** – The actual performance is compared against the planned performance in the "goals – 6th and 7th column" and "development – 8th column" which represents the comparison of the target and actual performance. If there is positive development, then there is "effectiveness – 9th column" which is assigned a "1". If there is negative development (indication of performing below the goals or target) there is "no effectiveness" which is assigned a "0" as shown in the 8th Column in Figures 3.6 and 3.7.1. This contributes 10 % to the overall performance as shown in the last (9th) column.

Figure 3.7.1: Standard 1 & items 1.1.1 to 1.1.6 weighted score & overall performance scoring sample

1st Column	2nd Column	3rd Column	4th Column	5th Column	6th Column	7th Column	8th Column	9th Column	10th Column
Institutional, College and Program Context	**Weights**	**Score (%)**	**Weighted Score**	**Goals Set**	**Goals Achieved**	**Develop.**	**Effective**	**Previous Perf.**	**Overall Perf.**
Standard 1 Mission, Goals and Objectives	**40**								
1.1 Appropriateness of the Mission	**6**	60	**3.2**	**70%**	**50%**	**0**	**0**	**2.2**	**3.16**
1.1.1 The mission is consistent with the establishment charter of the institution.(including any objectives or purposes in by-laws, company objectives or comparable documents)									
1.1.2 The mission statement is appropriate for an institution of its type. (E.g. a small private college, a research university, a girl's college in a regional community, etc.)									
1.1.3 The mission statement is consistent with Islamic beliefs and values.									
1.1.4 The mission is relevant to needs of the community or communities served by the institution									
1.1.5 The mission is consistent with the economic and cultural requirements of the Kingdom of Saudi Arabia.									
1.1.6 The appropriateness of the mission is explained to stakeholders in an accompanying statement commenting on significant aspects of the environment within which it operates. (which may relate to local, national or international issues)									
Overall Assessment									**3.16**

Inputs for formulae computation (column 10):

1. Determine the scoring % (based on ADLI) in column 3.
2. Determine the goals set for this criterion in column 5
3. Get the previous year performance and input into column 9

Formulae computation (automatically computed by ITQAN)

1. The weighted score for the overall criterion is based on the review of each item to derive the weighted score which is (SCORE % * WEIGHTS).
2. The weighted score 3.2 in column 4 is based on the performance of all items and contributes by 80% to overall performance.
3. As there is "development" and "effective", 20% is computed, and the final Overall performance is 3.16 {which is 2.2 + (3.2 – 2.2) * [0.8 + 0.1(0 + 0)]}

3.4.1.2 Performance Scoring Assessment of the Process – based Criteria Requirements

Figure 3.7.1 shows a worked out sample standard 1, criteria 1.1 and items 1.1.1 to 1.1.6 of the PROCESS criteria performance scoring and assessment. Steps in the computation of the Overall Performance in 9th Column are as follows:

- **Step 1** – Start by reading the overall Standard requirement. Then identify and understand what the main Criteria requirements of the Standard are. Then go to the Items of each of the Criteria and start reviewing the performance of each item. It should be noted that performance review of all the Items should be made within the Criteria requirements. A Holistic overview of the Standard and Criteria should be maintained as the items should not be assessed as independent of other Items that lead to the overall performance for each criterion and all the criteria in the whole Standard.

- **Step 2** – For each of the items, determine the performance contribution to the overall criterion. The scoring for the whole criterion is based on ALL items and is based on the process as described in Figure 3.7.1. A rule of thumb is to go for the 50% scoring range percentile. Determine whether the SID (Statistics, Information and Documents) which are the evidence are supportive of the determination of a higher or lower range. If the overall evidence points to a lower percentile than the 50%, then go to the lower range percentile and assess whether the scoring criteria in that percentile are met.

- **Step 3** – The Scored Performance Worksheet will automatically compute the Weighted Score in the 4th Column, based on the following formulae of [Weights (2nd Column) * Score (3rd Column)] resulting in the weighted score in 4th Column.

- **Step 4** – At the beginning of the academic year, the institution, college, program or administrative unit has to identify the goal for each CRITERION to be achieved during that academic year. This is the "Goal Set" in the 5th Column. This is normally defined as the overall % achievement that the institution, college, program or administrative unit sets as the target to be achieved during that year.

- **Step 5** – At the end of the year, the "Goals Achieved" is automatically computed as a percentage of the weighted score (4th Column) and weights (2nd Column) to arrive at a percentage score in the 6th Column.

- **Step 6** – The differential between the "Goals Set" and "Goals Achieved" will lead to a positive or negative variance. The score performance worksheet will automatically compute the variance. A

positive variance means that there is "Development" as shown in the 7th Column and will be assigned a numerical "1" which contributes to the 10 %, and if it is positive, there is "Effectiveness" in the 8th Column which will be assigned a numerical 1. If there is no "Development" or "Effectiveness", there will be 2 "0" which means that 20 % does not contribute to the overall score in the 4th column.

- **Step 7** – The 9th column shows the previous year performance. The overall performance for the academic year (10th Column) is based on achieving the "development" and "effectiveness" which constitutes the remaining 20 % of the performance. As such, in this case, based on the formula, the overall performance is ***[Previous Performance + (Weighted Score – Previous Performance) * (0.8 + 0.1 (Development + Effectiveness)]*** and the score is 3.16 {which is 2.2 + (3.2 – 2.2) * [0.8 + 0.1(0 + 0)]} giving an overall performance achievement of 3.16 (11th Column), as 20 % was awarded due to the positive development (1 or 0) and effectiveness (1 or 0). ***(Note that the ALL formulae are automatically computed in the ITQAN System).***

As noted earlier, there are 2 sets of performance criteria as follows:

- ***Process – based Standards, Criteria and Items.*** The performance scoring guidelines is shown as a worked example in Figure 3.6 and 3.7.1 for Criteria 1.1 based on the scoring guideline in Figure 3.8.

- ***Result – based Key Performance Indicators*** of which there are 22 sets, 11 criteria set for each Standard for the generic Institutional Key Performance Indicators or Benchmarks and 11 criteria set for each Standard for the additional College or Program Key Performance Indicators or Benchmarks. The performance scoring guidelines is shown as a worked example in Figure 3.7.2 based on the scoring guideline in Figure 3.9.

Figure 3.8: Scoring Guideline for PROCESS - based Standards and Criteria Requirements

SCORE	PROCESS – based Performance Scoring Guidelines
0% or 5% OR No Star (EEC-NCAAA)	• No SYSTEMATIC APPROACH (methodical, orderly, regular and organize) to Item requirements is evident; information is ANECDOTAL. (A) • Little or no DEPLOYMENT of any SYSTEMATIC APPROACH is evident. (D) • An improvement orientation is not evident; improvement is achieved through reacting to problems. (L) • No Institution, College or Program ALIGNMENT is evident; individual areas or work units operate independently. (I)
10%, 15%, 20% or 25% OR 1 Star (EEC-NCAAA)	• The beginning of a SYSTEMATIC APPROACH to the BASIC REQUIREMENTS of the item is evident. (A) • The APPROACH is in the early stages of DEPLOYMENT in most standards or work units, inhibiting progress in achieving the BASIC REQUIREMENTS of the Item. (D) • Early stages of a transition from reacting to problems to a general improvement orientation are evident. (L) • The APPROACH is ALIGNED with other standards, areas or work units largely through joint problem solving. (I)
30%, 35%, 40% or 45% OR 2 Stars (EEC-NCAAA)	• An EFFECTIVE, SYSTEMATIC APPROACH, responsive to the BASIC REQUIREMENTS of the Item, is evident. (A) • The APPROACH is DEPLOYED, although some areas or work units are in early stages of DEPLOYMENT. (D) • The beginning of a SYSTEMATIC APPROACH to evaluation and improvement of KEY PROCESSES is evident. (L) • The APPROACH is in the early stages of ALIGNMENT with the basic Institution, College or Program needs identified in response to the Institution, College or Program Profile and other Process Standards. (I)
50%, 55%, 60% or 65% OR 3 Stars (EEC-NCAAA)	• An EFFECTIVE, SYSTEMATIC APPROACH, responsive to the OVERALL REQUIREMENTS of the Item is evident. (A) • The APPROACH is well DEPLOYED, although DEPLOYMENT may vary in some Item, areas or work units. (D) • A fact-based, SYSTEMATIC evaluation and improvement PROCESS and some organizational LEARNING, including INNOVATION are in place for improving the efficiency and EFFECTIVENESS of KEY PROCESSES. (L) • The APPROACH is ALIGNED with the Institution, College or Program needs identified in response to the Institution, College or Program Profile and other Process Item. (I)
70%, 75%, 80%, or 85% OR 4 Stars (EEC-NCAAA)	• An EFFECTIVE, SYSTEMATIC APPROACH, responsive to the MULTIPLE REQUIREMENTS of the Item is evident. (A) • The APPROACH is well DEPLOYED, with no significant gaps. (D) • Fact-based, SYSTEMATIC evaluation and improvement and organizational LEARNING including INNOVATION are KEY management tools; there is clear evidence of refinement as a result of organizational-level ANALYSIS and sharing. (L) • The APPROACH is INTEGRATED with the Institution, College or Program needs identified in response to the Institution, College or Program Profile and other Process Item. (I)
90%, 95% or 100% OR 5 Stars (EEC-NCAAA)	• An EFFECTIVE, SYSTEMATIC APPROACH, fully responsive to the MULTIPLE REQUIREMENTS of the Item is evident. (A) • The APPROACH is fully DEPLOYED without significant weaknesses or gaps in any areas or work units. (D) • Fact-based, SYSTEMATIC evaluation and improvement and organizational LEARNING through INNOVATION are KEY organization-wide tools; refinement and INNOVATION, backed by ANALYSIS and sharing, are evident throughout the organization. (L) • The APPROACH is well INTEGRATED with the Institution, College or Program needs identified in response to the Institution, College or Program Profile and other Item. (I)

Source: Adapted from NIST (2015), *Malcolm Baldrige National Quality Award 2015/2016 Item for Performance Excellence. National Institute of Standards and Technology*, US Department of Commerce, Washington, D.C., Available at: www.nist.gov/

Note: Glossary of KEY terms used:

- ***ACTION PLANS:*** Specific actions that your organization takes to reach its short- and longer-term strategic objectives
- ***ALIGNMENT:*** A state of consistency among plans, processes, information, resource decisions, workforce capability and capacity, actions, results, and analyses that support key organization-wide goals
- ***ANECDOTAL:*** In a response to a Criteria item, information that lacks specific methods; measures; deployment mechanisms; and evaluation, improvement, and learning factors.
- ***APPROACH:*** The methods your organization uses to carry out its processes
- ***BASIC REQUIREMENTS:*** The most central concept of a Criteria item, as presented in the item title question.
- ***BENCHMARKS:*** Processes and results that represent the best practices and best performance for similar activities, inside or outside your organization's industry
- ***DEPLOYMENT:*** The extent to which your organization applies an approach in addressing the requirements of a Criteria item
- ***EFFECTIVE:*** How well a process or a measure addresses its intended purpose
- ***GOALS:*** Future conditions or performance levels that your organization intends or desires to attain
- **HIGH PERFORMANCE:** Ever-higher levels of overall organizational and individual performance, including quality, productivity, innovation rate, and cycle time.
- **HOW:** The systems and processes that your organization uses to achieve its mission requirements
- ***INNOVATION:*** Making meaningful change to improve products, processes, or organizational effectiveness and create new value for stakeholders
- ***INTEGRATION:*** The harmonization of plans, processes, information, resource decisions, workforce capability and capacity, actions, results, and analyses to support key organization-wide goals.
- ***LEARNING:*** New knowledge or skills acquired through evaluation, study, experience, and innovation
- ***MISSION:*** Your organization's overall function.
- ***MULTIPLE REQUIREMENTS:*** The details of a Criteria item, as expressed in the individual questions under each lettered area to address.
- ***OVERALL REQUIREMENTS:*** The most important features of a Criteria item.
- ***PERFORMANCE:*** Outputs and their outcomes obtained from processes, products, and customers that permit you to evaluate and compare your organization's results to performance projections, standards, past results, goals, and other organizations' results
- ***PROCESS:*** Linked activities with the purpose of producing a product or service for a customer (user) within or outside your organization.
- ***STAKEHOLDERS:*** All groups that are or might be affected by your organization's actions and success.
- ***SYSTEMATIC:*** Well-ordered, repeatable, and exhibiting the use of data and information so that learning is possible.
- ***WORK PROCESSES:*** The organization's most important internal value-creation processes

3.4.1.3 Performance Scoring Assessment of the Results – based KPI Requirements

In the ITQAN 2020: KSU – QMS Handbook 2 (May, 2017), KSU has identified 2 sets of KPIs as shown in Figure 3.3 and as discussed below:

i. ***KPI*** – This represents a set of 55 generic KPIs that serve as the minimum requirement that all colleges and programs should measure, audit and assess every academic year or on a bi-annual basis prior to internal audit and assessment. All these generic KPI are compliant KPI based on the 11 Standards applicable to all and should be reported as the minimum required set of KPI. These are aggregated and summated into the institutional quality performance and achievement for institutional quality management.

ii. ***Additional KPI of College or Programs*** – In recognizing the uniqueness of each college or programs, they must identify specific KPIs within their jurisdiction that are deemed unique to or specific and that are of prime importance to their own unique performance. This brings to an additional total of 11 sets of KPIs or Benchmarks as each college or program or administrative unit can identify and develop for each of the 11 Standards.

It should be noted that the "Results" or Result – Oriented KPI or Benchmarks can be generally classified into 2 main groups that KSU uses. The 2 groups are as follows:

1. ***Quantitative Indicators – The main denominators of*** these quantitative indicators are normally quantified by (a) percentage in terms of percentage increase or decrease (b) ratio ranges of its ratio change in terms of ratio increase or decrease or (c) numerical numbers ranges of its numeric change in terms of numerical increases or decreases. An example is shown below in Figure 3.7.2.

Figure 3.7.2: Worked Example Performance Assessments of Criteria 1.6, KPIs and KPI Items

Institutional, College and Program Context	Weights	Score (%)	Weighted Score	Goals Set	Goals Achv.	Develop.	Effective	Overall Perf.
Standard 1 Mission, Goals and Objectives	**40**							
1.6 Key Performance Indicators or Benchmarks	**10**		3.2	20%	30%	1	1	**3.2**
1.6.1 **EEC-NCAAA S1.1** – Stakeholders' awareness ratings of the Mission Statement and Objectives (Average rating on how well the mission is known to teaching staff, and undergraduate and graduate students, respectively, on a five-point scale in an annual survey)	3	40	1.2					
1.6.2 Percentage of objectives accomplished of: **(a)** The approved Annual Operation Plan and budget requisitioned (%) **(b)** As % accumulation of the unit's 5-Years Strategic Plan performance achievements (%)	**4**	**50**	**2.0**					

1. The weighted score for each item is derived from SCORE * WEIGHTS.
2. The overall weighted score (3.2) is an averaged summation of each of the weighted score of each item and contributes 80% to overall performance.
3. As there is both "development" and "effectiveness", representing 20% the final Overall performance is 3.2 (which is (0.8 * 3.2 + 0.2 * 3.2)

(a) Sample of a Quantitative Result – based KPI Item 1.6.2

1.6.3 Percentage of objectives accomplished of:
(a) The approved Annual Operation Plan and budget requisitioned (%)

Formulae Computation:

$$\frac{\text{Number or prorated \# of planned actions/projects achieved in Annual Operation Plan and Budget}}{\text{Total \# of planned actions/projects developed in Annual Operation Plan and Budget}} \times 100$$

KPI Criteria (Levels {Le} equivalence based on Means Average of Percentage)

Level 1	✓	0 % < 15 % achievement
Level 2	✓	15 % < 30 % achievement
Level 3	✓	30 % <45 % achievement
Level 4	✓	45 % < 60 % achievement
Level 5	✓	60 % < 80 % achievement
Level 6	✓	80 % - 100 % achievement

Procedural Steps in assessing and scoring a Quantitative KPI Requirement

Step1: Read what is expected of the KPI Requirement

Step 2: Use the necessary data to compute the percentage or ratio or numerical data needed based on the formulae computation

Step 3: Determine the range whereby the computed percentage or ratio or numerical evidence falls within a certain level of scoring criteria requirement.

Step 4: It should be noted that there are low end and high end percentages. If the computed percentage or ratio or numerical evidence substantially falls into a certain range, then assign a percentage score in that scoring criteria range.

Case Study Example: If the institution, college, program or administrative unit has identified 50 sets of targeted goals, and has measured 25 of them with the rest not implemented or measured, the computed range is 50 % which is in level 4 in Figure 3.7.3 and scoring range 4 in Figure 3.9.

2. ***Qualitative Indicators*** – These qualitative indicators are multifarious in nature, and in order to systemize and standardize its approach, the basic approach is to identify the performance levels based on a survey instrument that has been developed based on a set of parameters. A sample of the qualitative indicators used and its criteria of assessment are shown in Figure 3.7.4. These levels of performance are categorized into 6 levels to allow for easy conversion to the Stars System used by the EEC-NCAAA. There are 6 levels used to determine the level of performance of the Result oriented Key performance indicators. Therefore the criteria used for qualitative indicators are divided into six levels as shown below in Fig. 3.7.5.

(b) Sample of a Qualitative Result – based KPI Item 1.6.1

1.6.1 EEC-NCAAA S1.1 – Stakeholders' awareness ratings of the Mission Statement and Objectives (Average rating on how well the mission is known to teaching staff, and undergraduate and graduate students, respectively, on a five- point scale in an annual survey).

The mission of the strategic plan is the main foci of all the institution, college or programs goals, objectives and accomplishment and achievements of their educational offers and value in any higher education institute. As such the degree of awareness of the "institution mission" or the "college/program mission" is important to a set of common understanding and commitment to a unified set of mission that is used to guide the institution, college or program as to "who we are and what we are" and "why we exist" as the mission is the overarching guide to be used for all its actions and activities. This is normally scaled on a 5-point Likert Scale to get the means averages score of the stakeholders' awareness and perception the mission. The aim of this KPI is to ensure that there is an overarching understanding and commitment to the mission as part of the systematic approach Strategic Planning process that is well deployed and that brings about continuous improvements that are implemented, monitored and measured for performance.

KPI Criteria (Levels {Le} equivalence based on Means Average of Survey)

Level 1	✓ Below 2.49
Level 2	✓ 2.5 – 2.99
Level 3	✓ 3.0 – 3.49
Level 4	✓ 3.5 – 3.99
Level 5	✓ 4.0 – 4.49
Level 6	✓ 4.5 – 5.0

Procedural Steps in assessing and scoring a Qualitative KPI Requirement by the assessor in their performance assessment when developing the SSR and QPAR

Case Study Example: In this case, the institution, college or program or administrative unit has identified its mission as part of its strategic plan, but has not implemented them the awareness of its

understanding, commitment and use to guide the educational offers and value creation to the stakeholders. In this case, only means average of 3.77 which defines its performance level that is average. Based on this performance evidence, it merits only a level 4 performance (as per Figure 3.7.4) and a scoring of 40 % (as per Figure 3.9) as there is the beginning of the trend, but lack evidence of comparison or integration. The procedural steps are shown below:

Step1: Read what is expected of the Qualitative KPI Requirement based on the parameters design of the survey instrument and its scoring of the Performance levels

Step 2: Read the SSR (Self – Study Report) prepared by the institution, college or program

Step 3: Determine whether there is statistics, information or data (SID) evidence in LeTCI of the KPI review and assessment to determine the level of performance as shown in Figure 3.7.4.

Step 4: Once the performance level has been determined, determine the scoring of the performance level. Normally each of the level of performance corresponds to each of the scoring range.

Step 5: It might be noted that in each of the range, there is about 3 ranges of percentages. It can be divided into a low end, median end and high end. If evidence substantiate that it can be awarded a high end percentage, read the next categorical range. As a basic requirement for the scoring guidelines, check whether the existing evidence calls for a higher range or a lower range, either a lower or higher percentage scoring range depending on the substantial and concrete evidence rather than verbal or verbose and subjective circumstantial judgment. As a rule of thumb for determining whether it is in the low end, median end or high end percentage, use the LeTCI process criteria – if it only satisfy the (Le), then assign a low end, if it is in between (T) and (C), and evidence do not justify the learning aspect, go for a lower percentage of the median end percentage as shown in Figure 3.9.

Figure 3.9: Scoring Guidelines for RESULTS – based KPI Criteria

SCORE	RESULTS – based Performance Scoring Guidelines
0% or 5%	✓ There are no organizational PERFORMANCE RESULTS or the RESULTS reported are poor. (Le) ✓ TREND data are either not reported or show mainly adverse TRENDS. (T) ✓ Comparative information is not reported. (C). ✓ RESULTS are not reported for any areas of importance to the Institution, College or Program KEY MISSION. (I)
10%, 15%, 20%, or 25%	✓ A few organizational PERFORMANCE RESULTS are reported, responsive to the BASIC requirements of the items and early good PERFORMANCE LEVELS. (Le) ✓ Some TREND data are reported, with some adverse TRENDS evident. (T) ✓ Little or no comparative information is reported. (C). ✓ RESULTS are reported for a few areas of importance to the accomplishment of the Institution, College or Program KEY MISSION. (I)
30%, 35%, 40%, or 45%	✓ Improvements and/or good PERFORMANCE LEVELS are reported in many standards or areas addressed in the Standards requirements. (le) ✓ Early stages of developing TRENDS are evident. (T) ✓ Early stages of obtaining comparative information are evident. (C) ✓ RESULTS are reported for many areas of importance to the Institution, College or Program KEY MISSION. (I)
50%, 55%, 60%, or 65%	✓ Good organizational PERFORMANCE LEVELS are reported, responsive to the OVERALL requirements of the item. (Le) ✓ Beneficial TRENDS are evident in most areas of importance to the accomplishment of the Institution, College or Program MISSION. (T) ✓ Some current PERFORMANCE LEVELS have been evaluated against relevant comparisons and/or BENCHMARK and show areas of good relative PERFORMANCE. (C) ✓ Institution, College or Program PERFORMANCE RESULTS are reported for most KEY student, STAKEHOLDER, and PROCESS requirements. (I)
70%,75%, 80%, or 85%	✓ Good to excellent organizational PERFORMANCE LEVELS are reported, responsive to MULTIPLE REQUIREMENTS of the item. (Le) ✓ Beneficial TRENDS have been sustained overt time in most areas of importance to the accomplishment of the Institution, College or Program MISSION. (T) ✓ Many to most reported TRENDS and current PERFORMANCE LEVELS have been evaluated against relevant comparisons and/or BENCHMARKS and show areas of leadership and very good relative PERFORMANCE. (C) ✓ Institution, College or Program PERFORMANCE RESULTS are reported for most KEY student, STAKEHOLDER, PROCESS, and ACTION PLAN requirements.
90%,95%,or 100%	✓ Excellent organizational PERFORMANCE LEVELS are reported that are fully responsive to the MULTIPLE REQUIREMENTS of the item. (Le) ✓ Beneficial TRENDS have been sustained over time in all areas of importance to the accomplishment of the Institution, College or Program MISSION. (T) ✓ Industry and BENCHMARK leadership is demonstrated in many items. (C) ✓ Institution, College or Program PERFORMANCE RESULTS are reported for most KEY student, STAKEHOLDER, PROCESS, and ACTION PLAN requirements. (I)

Source: Adapted from NIST (2015), *Malcolm Baldrige National Quality Award 2015/2016 Criteria for Performance Excellence. National Institute of Standards and Technology*, US Department of Commerce, Washington, D.C., Available at: www.nist.gov/

3.5. ADDENDUM: Glossary of PDCA, ADLI and LeTCI terminology

This section explains the details of the basic quality terminology used in the performance scoring of both the Process – Based and Result – Based Criteria as used in the earlier sections.

Plan (P)

Definition: Plan refers to the establishing of the objectives and processes necessary to deliver results in accordance with the expected output. It determines what needs to be done, when, how, and by whom. It signifies a set of intended actions, through which one expects to achieve a goal affecting the output which is the focus. By making the expected output as the main focus, it emphasizes on the completeness and accuracy of the specification which is also part of the improvement. In the plan phase, the problem solving team analyzes data to identify possible causes for the problem and then proposes a solution. Plan the process management system by linking the daily work to the institution, college, program or administrative unit strategy and stakeholders' requirements; determine and document the best steps for completing the work, what will be checked, how to check, how often, etc.

Do (D)

Definition: Do refer to implementing the new processes or Do the actions as specified in the plan

Check (C)

Definition: Check refers to the analysis of the results of carrying out the plan and the measuring of the new processes and compares the results against the expected results to ascertain any differences. Check actual performance against the Process Management Plan (PMP) by measuring and reviewing the process outcomes (Y's) and key input and process variables (X's) on a regular, timely basis.

Act (A)

Definition: Act refers to analyzing the differences to determine their cause. Act when there is a gap between the "as-is" of do and the "should-be" of plan and take appropriate steps to close the gap between planned and actual results. This may require normal control activities to identify and fix what went wrong. Each will be part of either one or more of the P-D-C-A steps. Determine where to apply changes that will include improvement. After passing through these four steps does not result in the need to improve, refine the scope to which PDCA is applied until there is a plan that involves improvement.

Explanations of ADLI as used in the Evaluation of the Process – Based Criterion

Approach (A)

Definition: "Approach" refers to the methods used by the institution, college or programs or administrative units to address the Standard and Criteria and Item requirements in all the Standards. Approach includes the appropriateness of the methods to the Criteria and Item requirements.

- Is the approach systematic (i.e., with repeatable steps, inputs, outputs, time frames)?
- Is there evidence that the approach is effective – both qualitative and quantitative?
- Is this approach (or collection of approaches, system or mechanisms) a key organizational process (that provides substantial contribution)? Is the approach important to the institution, college or programs overall performance?

Deployment (D)

Definition: "Deployment" refers to the extent to which an approach is applied in addressing the Standard and Criteria and Item requirements in all the Standards. Deployment is evaluated on the basis of the breadth and depth of the application of the approach to relevant work units throughout the institution, college or programs.

- Is deployment addressed?
- What evidence is presented that the approach is in use in one, some, or all appropriate work units, facilities, locations, shifts, organizational levels, and so forth within the institution, college, programs or administrative units?

Learning (L)

Definition: "Learning," in the context of the evaluation factors, refers to new knowledge or skills acquired through evaluation, study, experience, and innovation.

- Has the approach been evaluated and improved? If it has, was the evaluation and improvement conducted in a fact-based or evidence-based, and in a systematic manner (e.g., was it regular, recurring, data driven, fact driven or evidence driven)?
- Is there evidence of organizational learning (i.e., evidence that the learning from this approach is shared with other organizational units/other work processes through the institution, other colleges or programs or administrative units)?
- Is there evidence of innovation and refinement from organizational analysis and sharing (e.g., evidence that the learning is actually used to drive innovation and refinement of the existing Input, Process, Outputs and Outcomes, or the whole systems in institution, college, programs or administrative units)?

Integration (I)

Definition: As a process evaluation factor, "integration" covers the range from organizational "alignment" of approaches in the lower scoring ranges to "integration" of approaches in the higher ranges.

"Alignment" refers to the consistency of plans, processes, information, resource decisions, actions, results, and analyses to support key organization-wide goals. It requires the use of complementary measures and information for planning, tracking, analysis, and improvement at three levels: the organization level, the key process level, and the work unit level.

"Integration" refers to the harmonization of plans, processes, information, resource decisions, actions, results, and analyses to support key organization-wide goals. Effective integration goes beyond alignment and is achieved when the individual components of a performance management system operate as a fully interconnected unit.

- How well is the approach aligned with the organizational needs the institution, college, programs or administrative units has identified in other Standard and Criteria and Item requirements in all the Standards?
- Does the institution, college or programs indicate complementary measures and information used for planning, tracking, analysis, and improvement on three levels: the organizational level, the key process level, and the department or work-unit level?
- How well is the approach integrated with the institution, college, programs or administrative units' needs?

Explanations of LeTCI as used in the Evaluation of the Results – Based Criterion

Performance Levels (Le)

Definition: "Performance levels" refer to numerical information that places or positions an organization's results and performance on a meaningful measurement scale. Performance levels permit evaluation relative to past performance, projections, goals, and appropriate comparisons.

- What performance levels (with qualitative or quantitative evidence or indicators) are provided?
- Is the measurement scale meaningful?
- Are key results missing?

Trends (T)

Definition: "Trends" refer to numerical information that shows the direction and rate of change for an organization's results. A minimum of three data points generally is needed to begin to ascertain a trend.

- Are trends – (normally at least 3 cycles data is the minimum) provided for few, many, or most Areas addressed in the Standards, Criteria and Item requirements?
- Is the interval between measures or frequencies appropriate?
- Are the trends positive, negative, or flat?

- What is the rate of change (slope of the trend – normally at least 3 cycles data is the minimum)?
- Do the trends demonstrate little, some, or much breadth in the institution, college, programs or administrative units' improvement efforts (i.e., how widely are they deployed and shared)?
- Are significant variations in trends explained in the text of the application?

Comparisons (C)

Definition: "Comparisons" refer to how the institution, college, programs or administrative units' results compare with the results of other organizations. Comparisons can be made to the results of competitors, organizations providing similar products and services, industry averages, or best-in-class organizations. The maturity of the organization should help determine what comparisons are most relevant.

- Are comparisons provided?
- Are the comparisons to key competitors, industry sector averages, or best-in-class institution, college, programs or administrative units?
- How does the applicant compare against these other institution, college, programs or administrative units?

Integration (I)

Definition: "Integration" refers to the extent to which results measures (often through segmentation) address important customer, product and service, market, process, and action-plan performance requirements identified in the Organizational Profile and in Process Items; include valid indicators of future performance; and are harmonized across processes and work units to support organization-wide goals.

- To what extent do results link to key factors and Process Items?
- Are results segmented appropriately (e.g., by key customer, patient, or student segment; employee type; process/education program or service; or geographic location) to help the institution, college, programs or administrative units improve?

Source: Adapted from National Institute of Science and Technology (2015), *MBNQA Education Criteria for Performance Excellence,* Step-by-Step Instructions for INDEPENDENT REVIEW Scorebook Preparation, 2015 and Adapted from NIST (2015), *Malcolm Baldrige National Quality Award 2015/2016 Criteria for Performance Excellence*, National Institute of Standards and Technology, US Department of Commerce, Washington, D.C., Available at: www.nist.gov/ and EEC-NCAAA (National Center for Academic Accreditation and evAluation) (2015), *Self-Evaluation Scales for Higher Education Institutions* (October 2015).

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Chapter 4 ITQAN 2020: KSU – QMS Standards and Key Performance Indicators

ITQAN 2020: KSU – QMS Standards, Criteria and Items and Key Performance Indicators

This chapter will concentrate on the detailed discussion and description the rubrics of the ITQAN 2020: KSU-QMS areas of:

- Self-Study Process and Development if High Impact SSR
- Detailed Explanations of KSU Standards, Criteria and Items and KPI in areas of:
    - Description of the Standard, Criteria and Items
    - Addressing the Standards
    - Addressing the KPIs
    - Statistics, Information and Documents (SID) requirements as evidence-based requirements of the Standards, Criteria and Items
- Descriptive explanations of requirements of Standards and Criteria
- Glossary of Terminologies and Concepts

4.1. Self-Study Process and Development of High Impact SSR

When preparing for the Self-Study, please refer to the following protocols:

(1) **Guide to Self-Study (December 2013) in the ITQAN System** – This guide can provide some constructive and systematic approaches and requirements of the development of a high-impact Self-Study.

(2) **Key EEC-NCAAA Templates used for accreditation and ITQAN 2020: KSU-QMS** – These are the key SSRP and SESR of the Institution or Program and the mandatory EEC-NCAAA and QMS KPIs, all of which are in the ITQAN System. this would mean that the development and submission of all SSRP and SESR with all their supporting evidences and required templates or tables that will be paperless and online

Attachment	Document # and Name	Page #
# 2	D4. EEC-NCAAA Key Performance Indicators	57
# 9	T12. Self-Study Report for Programs (SSRP)	133
# 10	T11. Self-Study Report for Institutions (SSRI)	198
D.2.I	Self-Evaluation Scales for Higher Education Institutions, V3, Muharram 1437H, October 2015.	Document
D.2.P	Self-Evaluation Scales for Higher Education Programs,V3, Muharram 1437H, October 2015	Document

Source: EEC-NCAAA Handbook for Quality Assurance and Accreditation Part 2, Version 3, Muharram 1437H, October 2015.

(3) EEC-NCAAA Eligibility requirements Templates – These are the main checklist as required of EEC-NCAAA as supported with evidences that the institution or program meets all the EEC-NCAAA requirements and is eligible and ready for accreditation or re-accreditation.

Attachment	Document # and Name	Page #
# 1	Eligibility requirements for accreditation of a higher education institution	42
# 2	Eligibility requirements for an application for accreditation of a higher education program	49

Source: EEC-NCAAA Handbook for Quality Assurance and Accreditation Part 3, Version 3, Muharram 1437H, October 2015.

(4) Outcome of Bi-Annual Internal Audit and Assessment – The main outcome of the bi-annual Internal Audit and Assessment (please refer to the KSU Internal Audit and Assessment Standard Operating Protocols, 2013) and as explained in Chapter 2 in details, is the QPAR (Quality Performance Assessment Report) that is used for developmental planning in Stage 3 of the three stage KSU-QMS quality and accreditation management as explained in Chapter 2. Please refer to Internal Audit and Assessment Protocol and development of QPAR (Quality Performance Assessment

Report) produced by the KSU-BOA in the ITQAN System based on the QPAR, the college or program will develop the developmental plan for actions.

4.2. Explanations of KSU Standards, Criteria and Items and KPI

Chapter 3 has explained in details the approach KSU has taken to develop and assess the Standards, Criteria and Items and the KPI and Benchmarks. As noted earlier, the Standards, Criteria and Items represents the Process Criteria requirements and the KPI and Benchmarks represents the Results Criteria requirements.

This Chapter is organized on the basis of the detailed explanations of each of the Process and the Results overall Standard and Criteria level requirement to ensure that the correct interpretation and the collation of data, facts and evidence and performance assessment is based on the understanding and interpretation of that Standard, Criteria and Items detailed requirements.

For each of the Standards, Criteria and Items detailed in Section 4.3 of "Descriptive explanations of requirements of Standards and Criteria", there are 3 sections description the requirements which are used as the basis of description and discussion as follows:

- Description of the Standards, Criteria and Items
- Addressing the Standards, Criteria and Items
- Statistics, Information and Documents (SID) requirements as evidence-based requirements of the Standards, Criteria and Items

4.2.1. Description of the Standard, Criteria and Items

This is detailed in each of the Standard specifically in terms of the overall requirement of the Standard and the detailed requirement of the Criteria in the following sections for each of the individual Standard 1 to 11 (all of which are based on EEC-NCAAA requirements).

4.2.2. Addressing the Standard

As the ITQAN 2020: KSU – QMS defines 2 sets of values of Process-based Performance and Results-based performance, Standards 1 to 11 is a set of Process-based Performance requirements as supported by the Results based outcomes of each standard. The Process-based Criteria will comprehensively cover the Inputs – Process – Outputs which is fundamental to the systemic and systematic approaches in quality and accreditation management as used by KSU. As such, all the Standards which are Process-based should be audited and assessed within the system's definitive Inputs – Processes – Outputs that should be identifiable in all the systems or mechanisms or methodologies used by the institution/college/program or administrative units. Since the KSU approach is systemic and non-prescriptive, the institution/college/program or administrative units, in addressing the Standards, criteria and Items, the following should be used as the basis of the performance audit and assessment:

- Identify and define its **A (APPROACH)** by specifying the systems or mechanisms or methodologies which are developed by the institution/college/program or administrative units and are used to address each of the standard and criteria. As the KSU system is non-prescriptive as to quality techniques or tools any of the systems or mechanisms or methodologies used are accepted as long as the institution/college/program or administrative units can substantiate or justify its use with supporting statistics, information or documents or key performance indicators that are evidence based rather than being speculative or verbose. The bottom line is a systematic approach.

- Identify and define its **D (DEPLOYMENT)** by specifying the systems or mechanisms or methodologies main inputs and key processes or procedures or policies, or people or resources used in its defined system or mechanism approach that are used consistently and comprehensively by all units.

- Identify and define its **L (LEARNING)** by specifying the goals set and achieved and what was learned in terms of continuous improvements or innovations, or any shared learning within and across units in the institution/college/programs that bring about organization or individual learning the closes the PDCA loop.

- Identify and define its **I (INTEGRATION)** within the same standard and criteria set and across the different standards and criteria set or across different work units.

In addressing the ADLI above, read through each of the criteria set and its items within each criteria, and identify how those items within each criteria set has been approached, what resources had been utilized

and determine its performance indicators and did the unit learn from it through the measurement of its performance to bring about improvements and innovations and its integration with other criteria and standards. This applies to the audit and assessment of each of the criteria in the Standard, meaning that the Items requirements will lead to the assessment of the Criteria based on the ADLI requirements addressing and meeting the Items and Criteria. The audit and assessment of each of the items that aggregates towards the Criteria requirement will be aggregated and summated into the overall requirements of the Standard. As such, care must be taken to ensure that the Items are properly addressed and assessed based on the ADLI above.

In evaluation of the Process performance, their performance scoring is addressed from the degree of performance or its level of performance with stepped wise progressive determinants of performance from the:

- **P (PLAN)** of what and how the criteria is addressed through its planning aspects of the system and mechanism or methodology used,
- **D (DO**) of what and how the system or mechanism or methodology is implemented and with what resources,
- **C (CHECK)** in the systems or mechanisms or methodologies used based on a set of targets or measures which are measured to determine its achievement and
- **A (ACT)** of what is done after the planned actions that are implemented and measured in terms of its achievement that brings about future improvement and innovation.

The PDCA is supplemented and complemented by the ADLI metrics to strengthen its performance level determinants:

- In the **A (APPROACH),** together with the P (PLAN), one would need to determine a planned approach in terms of the systems or mechanisms, the tools or techniques used, and what and how resources are auctioned upon.
- In the D (DO) and **D (DEPLOYMENT)** in the configurations and supports of the systems or mechanisms, tools or techniques.
- In the C (CHECK), one would need to define the measures and methodology and identify whether one **L (LEARN)** from it, and
- In the A (ACT) on what is measured and learnt. Learning should lead to continuous improvements and innovations. Lastly, one would need to determine what and how the standards and criteria are aligned or **I (INTEGRATE)** within the same and across different Standards or work units.

It is noted that the more fundamental PDCA covers the lower end of the performance level and the ADLI covers the higher end of the performance level. This is intended to bring a step wise progressive improvements leading to innovation and integration within and across the Standards and all work units.

4.2.3. Addressing the KPI

For the Results-based criteria performance, as noted earlier, there are 2 types of key performance indicators. In assessing the performance of the quantitative or qualitative indicators set, the performance is based on:

- **Le (LEVEL) of performance** as to whether a performance level has been achieved based on the percentage or ratio or numerical scoring range achieved. There are 6 levels of performance to correspond with the Results-based Criteria performance scoring. These are supplemented by the T (Trend), C (Comparison) and I (Integration) of the KPI performance.
- It is then determined in terms of the **T (TREND) of performance**. Normally a minimum 3 years data set of the trend performance is required to identify any progressive improvements in the trend performance.
- **C (COMPARISON) of performance** would mean that the level and trend of performance is compared with historical performance, industry standards or benchmarked with the best in the industry.
- **I (INTEGRATE)** is meant to identify an integrated approach in that the performance levels, trends performance and its benchmarked comparison are integrated with the different indicators within and across the same standard and criteria set going in the same direction as opposed to being contradictory of each other to provide an overall set of performance level of the following:
    - **Qualitative KPI** – In the qualitative indicator set, the qualitative KPI are generic with an emphasis on the systemic aspects and the progressive development of the evaluation of system based on the degree of performance level in meeting the requirement. As such, the audit and assessment is based on the performance achievement at each of the level based on the level requirement of its maturity attained or performance development normally on a means average which specify the performance level.
    - **Quantitative KPI** – In the quantitative indicator set, they are addressed from the percentage or ratio or numerical ranges. Compute the KPI computation based on the Formulae provided using the prescribed data set needed for the computation and determine the range that the outcome result falls into.

Note: In the development of the quantitative key performance indicators, the traditionally and widely accepted KPI were used on the grounds that the issue of the KPI and direct relationships have been challenged and are still widely debated. As noted in all the KPI for the Standards in the later sections, it is noted that quality is an evasive and very subjective factor that has evaded direct measures. As such, the KPI used here are the proxy objective equivalent that had been widely and well-accepted set but that might still raise the issue of a good measure. Pending the derivations of a set of very objective measures, these qualitative and quantitative KPI are found to be the second best approximation set of proxy measures that will serve its purpose in the intermediate stage. These KPI are derived from a wide source of literatures on the KPI measures of education and academic performance. (Teay, 2007; ONESQA, 2006 and CHE, 2007).

4.2.4. Statistics, Information and Documents (SID) requirements as evidence-based requirements of the Standards, Criteria and Items

In the "Management through Measurement" approach for performance measurement and management, it means that better management can be derived from the outcomes performance measurement. This literally means that measurement support management but management precedes measurement as what needs to be measured must be planned and organized. The imperative is that for the performance measurement to be successful there should be a set of corresponding statistics, information or documents that supports the fact that the measurement is evidence-based. The same logic applies to key performance indicators that call for the determination of the levels of performance achievement. The degree or the level is based on the facts, statistics, data or documents to support these KPI.

In essence, evidence should be produced to substantiate the improvements or innovations that had been improved on or innovated upon as compared to the previous year as compared to the industry benchmark. In effect, this also calls for the institution/college/programs to set up a system or mechanism to collate and analyze the statistics and information. This system or mechanism is classified as the Information Management System (IMS) to manage the Statistics, Information or Documents of the institution/college/program or administrative units.

Nature and type of SID can be:

- **Statistics or Statistical reports** reporting on level of performance and trend of the numerical, percentage or ratio movements or changes and benchmarked in comparison with the industry standards and performance.

- **Qualitative reports** based on research or widely accepted academic literature.
- **Documents like the Annual Reports, Strategic Plans, Annual Operating Plans and Action Plans** that defines those goals and objectives that clearly state the targets to be achieved, the measurement of the targets achievement and the deviation from the standard or its variance within a specific time period.

- **Creative works or innovative works** that have been acclaimed through the awards received or recognition that are peer-reviewed at the national or international level.

- **Researches** that had been published in a peer-reviewed journals or proceedings at the national or international level.

- **Any other materials or evidence that is unique to and specific to** the nature or type of actions and activities conducted by the institution/college/program or administrative units.

4.3. Descriptive explanations of requirements of Standard and Criteria

Teaching, Learning and Research and Social Services is said to be the very reason for the existence which is the "life and soul" of the institution, college, programs or administrative units. Therefore, to make this as the key and fundamental mission of all higher education institutes, the key "life support systems" support in terms of infrastructure, service support, learning environmental support resources and facilities support are critical as they form all the sub-systems that creates a conducive and total conducive learning environment for and of the student. All these should be systemic in nature and represents systematic approaches that systematically monitored and managed for performance "Towards Excellence".

As such, all the ITQAN 2020: KSU-QMS standards and criteria based on its Performance Excellence aim uses the above as the main rally theme as the basic mission of KSU with the performance measured and managed within a systematic framework.

Standard 1: Mission, Goals and Objectives

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 1

Teaching, Learning and Research and Social Services can be said to be the very reason for the existence or the "life and soul" of the institution, college or programs. Teaching and Learning is the "life", Learning Resources, Facilities and Equipment are the "life support systems" and Governance is the "life brawn" of the institution, college or programs. As part of key and fundamental mission of all higher education institutes, it must review, revise, recoup, re-plan and rethink leading to its planning strategically and tactically in managing and repositioning its competencies and capabilities and capacity. These are the key mechanisms that bring about these well-planned unconditional and unconventional changes in improvements, in development and in innovations. The Mission, Goals and Objectives of Strategic and Action Planning are the "life brain".

This Standard highlights the importance of planning in the tri-component of the planning – information – quality trilogy that emphasizes the importance of "Management through Measurement". In essence, what needs to be managed needs to be measured through it basic functions of systematic POC[3] (Planning, Organizing, Communicating, Coordinating and Controlling). It is noted that the Control through the measurement aspect of auditing and assessment is based on its targets achievement which is the measurable aspect of the objectives. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Vision** – defines ***"What it wants to be?"*** the position that it aims for in its higher education industry which is the big dreams of the institution, college or programs and administrative units.
- **Mission** – defines the ***"What it can be?"*** which defines the reason for its existence and what it intends to achieve.
- **Goals** – defines the ***"What are the achievements?"*** which defines in more specific terms, the specifics of the mission and that expands in more details of the aims that leads to the overall achievement of the more general mission. This is based on its needed and excelling of the capacity and capability of its human resources, information resources and organization resources within its system and mechanisms deployed that forms the foundation of organizational success.
- **Objectives** – defines the ***"What are the measures of the achievements?"*** which defines the measure of its performance which should be SMART *Specific, Measurable, Achievable, Relevant and Time-bounded" and the target set and the measurement of the targets to determine its performance level and achievement.

It is noted that all these are interrelated as the Vision defines the Mission, the Mission defines the Goals and the Goals define the SMART Objectives. The reverse is also true in that the performance level of the targets achievement which is the objectives that serves as measures of the goals achievement, and the goals achievement as the measure of the mission achievement. This shows the imperative of the relationship or the alignment of the vision, mission, goals and objectives.

The vision, mission, goals and objectives leads to the identification and definition of the strategies (the "What to do" and "How to do") to achieve the vision, mission, goals and objectives. Technically, this leads to the planning part of the planning system of which there are 3 levels:

- **Strategic Plan** – defines the longer term 5 to 10 years of what to do and how to do it to achieve the vision, mission, goals and objectives of the institution, college or programs and administrative units.

- **Annual Operation Plan** – defines the shorter term 1 year plan (which is based on the longer term Strategic Plan) of what to do and how to do it every year to achieve the vision, mission, goals and objectives of the institution, college or programs and administrative units.

- **Action Plan** – defines the details of each project or activity plan of actions to be taken to achieve what to do and how to do the project with its corresponding goal and objectives to be achieved.

Normally, the 3 types of plans are related as the Strategic Plan defines in general terms of the "What to do" and the Annual Operation Plan defines the specifics of "What to do annually, and what are the performance measures to be achieved annually" and the Action Plans define the specifics of the details of each project and actions of which its performance measures. This highlights the imperative that the 3 types of plans are aligned with each other and that all actions and activities in the institution/college/programs or administrative units are systematically planned, managed and measured for performance achievement.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the management of the development, alignment and use made of the systematic planning process of the mission, goals and objectives to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services of the administrative units.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 1.1 to 1.5. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 1.6 and 1.7. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 1

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

1.6 Key Performance Indicators	
1.6.1	**EEC-NCAAA S1.1** – Stakeholders' awareness ratings of the Mission Statement and Objectives (Average rating on how well the mission is known to teaching staff, and undergraduate and graduate students, respectively, on a five-point scale in an annual survey
1.6.2	Percentage of objectives accomplished of: (b) The approved Annual Action Plan and budget requisitioned (c) As % accumulation of the unit's 5-Years Strategic Plan performance achievements (%)
1.7 Additional College KPI	
(describe additional KPI used by college or programs and provide evidence or documentations of KPI achievement)	
1.7.1	(KPI specific to Institution, College or Program)

Part 3 – Overall Assessment of Standard 1

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/program or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Mission Goals and Objectives Summary
1.1 Appropriateness of the Mission
1.2 Usefulness of the Mission Statement
1.3 Development and Review of the Mission
1.4 Use Made of the Mission
1.5 Relationship Between Mission, Goals and Objectives
1.6 Key Performance Indicators
1.7 Additional College KPI

Standard 2: Governance and Administration

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 2

The Strategic and Action Planning are the "life brain" with Governance being the "life brawn" of the institution, college, programs or administrative units. As part of key and fundamental mission of all higher education institutes, it must review, revise, recoup and rethink and repositioning of its good governance, leadership and managing its competencies and capabilities and capacity that is the key mechanism that brings about these unconditional and unconventional changes in improvements, in development and in innovations. This Standard highlights the importance of Governance and Administration that emphasizes the importance of "Management through Measurement". Administration means determining the mechanisms and systems on how to systematically implement what needs to be done, what resources are needed rather than planning for what to do and how to do. As such, the fundamental principle is to look at the overarching management principles that support the PDCA cycle rather than just the ordinary administrative functions. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

For Governance:

- **Governance** – Governance is the overarching supreme authority on the "what the institution, college or programs should be in the eyes of the public as a key player and role model" and determining "the way we do things here – or the values, policies governing the essential core practices and values of the entity".

- **Governing Body** – This represents the highest level of authority within an entity that formulates the key organization policies and the mandates of the organization of what and how to manage the entity.

- **Leadership** – A key component of governance is the leadership mechanism, or the key leader in all levels of the organizational units. Leaders are "transformational" as they are visionary and bring about actions that affect everyone and look at the big picture of the organization in a longer term aspects. They get the work done through the people – they work with the people. Whereas managers are "transactional" concentrating on the more routine or day-to-day functions, managing and administrating the resources at hand to get the work done for its key educational value creation and delivery processes by the people.

- **Integrity** – This deals with the moral aspect of the organization and its people, its adherence to honest practices for the benefits of others. Professional and academic codes of conduct normally define the boundaries or delimitations of "what can be done and what cannot be done". The interpretation and implementation of these codes of conduct is open to discussion, but the basic fundamental is "one should do things that benefits others rather than oneself, and not hurt the wellbeing of others".

- **Policies and Regulations** – Integrity normally is more subjective and is based on the science of "ethics" that goes into the grey areas which neither are nor clearly defined as they are social norms or the unwritten subjective codes. Policies and regulations, on the other hand are the more objective codes that clearly define the boundaries of actions of "what is accepted and can be done". This defines the "what to do and what not to do" that must be objectively stated as the overall set of guidelines and guidance principles to ensure that actions and activities that can be repeated or done frequently follows a coded set of rules and regulations that is applicable to all. These are used as the reference of actions that applies and support the governance and administrative part of leadership and management.

For Administration:

- **The POC^3 of the basic management functions** – This highlights the imperatives of the importance and precedence of "management" and then evaluating and assessing the performance level of the managerial functions through "measurements".

- **The PDCA and ADLI aspects of management functions** – This highlights the imperatives of the quality approach towards the management functions of POC[3]. This entails the P (Plan) of what to D (Do) in terms of the resources and the administration of resources supporting the achievement of the planned actions, and C (Checking) or measurement of the effectiveness and efficiency of the actions and activities to implement the planned actions, and then A (Act) to take corrective or improvement actions of any variances in the output and outcome measured. Used in conjunction with PDCA, A (Approach) represents the planned approach, D (Deployment) or doing it with implementation using the resources acorns al work units, L (Learning) from it through the measurements for continuous improvements or innovation through checking, and I (Integration) for aligning all the actions and activities within the same and across different units.

- **Planning** – This is the first action in any management actions, to plan in the long – term and short – term and ensure that the short – term actions are aligned with longer term strategic direction. This defines the systems or mechanisms, tools or techniques used in the planning activities of the institution, college or programs.

- **Male and Female sections and associated centers** – As required by customary practices in KSA, the female sections are separated but run in parallel in with the male sections. This would mean that all governance and management principles applies equally, to maintain the same standard of quality education with the same or comparable resources to produce the same qualified and competent (fe)male graduates. The same applies to associated centers that must conform to and comply with the same level of performance through a similar set or comparable set of resources.

- **Organization Climate** – In motivating the performance of the people, the institution, college, or programs must emphasize on not only the tangible benefits like salary, wages, promotions, or monetary incentives. Non-tangible benefits like recognition, awards, peer support and environment, work and supportive systems that are categorized under the organization climate are potentially more important for work engagements and interactions. The key question here is whether the "organization climate is conducive and supportive of work requirement". This goes beyond into the domains of the more subjective motivational and psychological aspects of self – achievement and self – actualization. These rise beyond the basic needs into the developmental and achievements oriented ranges which are personal and psychological. A positive organizational climate is normally more supportive of higher quality and more productive work.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the systematic management of the Governance and administrative systems and mechanism to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 2.1 to 2.8. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 2.9 and 2.10. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 2

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

2.9 Key Performance Indicators	
2.9.1	EEC-NCAAA S2.1 – Stakeholder evaluation of the Policy Handbook, including administrative flow chart and job responsibilities (Average rating on the adequacy of the Policy Handbook on a five- point scale in an annual survey of teaching staff and final year students).
2.9.2	Evaluation of Organization Climate (Means average and Level achieved based on survey)
2.9.3	Evaluation of Management and Administration overall performance (Means average and Level achieved based on survey)
2.10 Additional College KPI	
(describe additional KPI used by college or programs and provide evidence or documentations of KPI achievement)	
2.10.1	(KPI specific to Institution, College or Program)
2.10.2	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 2

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/program or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Governance and Administration Summary
2.1 Governing Body
2.2 Leadership
2.3 Planning Process
2.4 Relationship Between Sections for Male and Female Students
2.5 Integrity
2.6 Policies and Regulations
2.7 Organization Climate
2.8 Associated Centers and Entities
2.9 Key Performance Indicators
2.10 Additional College KPI

Standard 3: Management of Quality Assurance and Improvement

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 3

This Standard highlights the importance of the Management of Quality Assurance and Improvement that emphasizes the importance of "Management through Measurement". In essence, what needs to be managed needs to be measured through the systems or mechanisms that are set up by the institution, college, programs or administrative units to manage the quality through measurements of the quality. A widely misled belief is that only using the Accreditation standards is adequate. Accreditation standards define only "meeting the minimum requirements". It must be noted that the accreditation standards of the accreditation agency represent the external component of the "certification of FIT for PURPOSE" based on these standards. This represents the EQA (External Quality Assurance) part of the EQA = IQA equation. The IQA (Internal Quality Assurance) addresses the "what and how" the institution, college, programs or administrative units addresses its own quality based on the EQA accreditation standards.

As such, the fundamental principle is to look at the overarching systematic management principles and practices that support the setup of the systems, the committees, the mechanisms, the processes and procedures and the people and the resources developed and utilized to implement quality. It also looks at how the quality is systematically organized, monitored and managed for performance and utilized for improvements or innovations within the institution, college, programs or administrative units based on the standards, criteria and key performance indicators developed and used as proxy measures of quality, as quality being subjective cannot be measured directly. The ITQAN 2020: KSU – QMS Handbooks (4th Edition, May 2017) represents the minimum IQA standards and criteria in the IQA and the EEC-NCAAA represent the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference when setting up the internal quality assurance. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Commitment to quality** – This looks at the most fundamental of quality achievement as the higher the level of commitment by everyone at all level in the institution, college, programs or administrative units, the faster and better and the degree of quality achievement is. Quality is the role of each and every individual in the institution, college, programs or administrative units. Quality must be communicated, cascaded down to all levels, must be understood by all before commitment can begin. As such, it looks at the mechanisms used to ensure communication, understanding and commitment to quality.
- **Scope of Quality Assurance Processes** – As quality is systemic and systematic, it involves all the members in the institution, college, programs or administrative units system, and what and how it is cascaded to all the sub-systems. This would mean that the systematic IPOO (Input – Process – Output – Outcome) for quality management reigns supreme and must be designed and developed to cover all aspects of the quality system. As it is systematic, the detailed processes, policies, procedures and people must be spelt out and systematically implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. It must comprehensively cover the audit, assessment and assurance of quality comprehensively. Quality Audit deals with ensuring the existence of the processes, procedures, policies, people and resources, with its standards and criteria stated and implemented as a comprehensive system that are well-documented and well-evidenced to form an evidence based mechanism. Quality assessment will use the well-documented and well-evidenced mechanism to support its evaluation and assessment that they conform to and comply with the standards and criteria, and determining the level of the performance through the determination of variations or departure from the standards and criteria, that needs to be addressed and actioned on to bring about continuous improvement and innovations. The assessment that brings about positive development and improvement would mean that the processes in place assure the existence of quality.

- **Administration of Quality Assurance Processes** – This covers the wider scope of the systematic management aspect of the quality assurance in terms of POC[3] (Planning, Organizing, Communicating, Coordinating and Controlling). Administration, a sub-set means to determine how to implement what needs to be done, what resources are needed rather than planning for what to do and how to do. It highlights the systematic PDCA cycle management of its resources pertaining to quality in terms of its organization and implementation of the quality practices through the organization and deployment of its quality implementation.

- **Use of Indicators and Benchmarks** – This call for the identification and deployment of key performance indicators to serve as measurements of the performance. As quality is rather subjective and there is minimal direct ways and means to measure quality, normally proxy measures are used. These proxy measures are the alternative, substitute or near equivalent measures that must be developed and measured to provide a determination of the levels of performance. Normally the level of performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best in the industry or nearest competition.

- **Independent verification of evaluations** – Even though the institution, college, programs or administrative units has conscientiously performed its self-study and assessment, an independent and objective evaluation by a third party perspectives is important. This external and independent verification is normally done by an independent accreditation authority or an external audit and assessment team appointed by the institution or college. The importance of these independent verifications of the assessment is not in looking for faults but for opportunities for improvement from an external lens. It can be said that "one will not see one's weakness or is inclined to ignore it or downplay it". The external verification is construed to assist the assessed to better understand themselves by seeing things and interpreting things from expert opinions and different perspectives.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the management of the quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 3.1 to 3.5. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 3.6 and 3.7. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 3

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

3.6	Key Performance Indicators
3.6.1	Percentage of students graduated in the last 3 years who are recognized in the areas of academics, or profession, or contribution to society at the national or international level (%)
3.6.2	Percentage of the full-time faculty members and teaching staffs obtaining academic or professional awards at the national or international level. (%)
3.6.3	EEC-NCAAA S3.1 – Students overall evaluation on the quality of their learning experiences at the institution (Average rating of the overall quality of their program on a five point scale in an annual survey of final year students)
3.6.4	EEC-NCAAA S3.2 – Proportion of courses in which student evaluations were conducted during the year
3.6.5	EEC-NCAAA S3.3 – Proportion of programs in which there was independent verifications within the institution of standards of student achievement during the year.
3.6.6	EEC-NCAAA S3.4 – Proportion of programs in which there was independent verifications within the institution of standards of student achievement by people external to the institution during the year.
3.6.7	Percentage of academic programs accomplishment in current academic year and accomplishment of internal audit and assessment on bi-annual basis at institutional and collegial levels of: (g) undergraduate programs attained national accreditation (h) undergraduate programs attained international accreditation (i) post graduate programs attained national accreditation (j) post graduate programs attained international accreditation (k) undergraduate programs internally audited and assessed bi-annually under KSU – QMS (l) post graduate programs internally audited and assessed bi-annually under KSU – QMS

3.7 Additional College KPI	
(describe additional KPI used by college or programs and provide evidence or documentations of KPI achievement)	
3.7.1	(KPI specific to Institution, College or Program)
3.7.2	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 3

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Management of Quality and Improvement Summary
3.1 Commitment to Quality Improvement
3.2 Scope of Quality Assurance Processes
3.3 Administration of Quality Assurance Processes
3.4 Use of Indicators and Benchmarks
3.5 Independent Verification of Evaluations
3.6 Key Performance Indicators
3.7 Additional College KPI

Standard 4: Learning and Teaching

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 4

This Standard highlights the importance of the Teaching and Learning and the Management of Quality Assurance that emphasizes the importance of the systems and mechanisms used in systematic management of the teaching and learning process. In essence, what needs to be managed needs to be measured through the systematic teaching and learning systems or mechanisms that is set up by the institution, college, programs or administrative units to manage the quality of its teaching and learning through measurements of the quality. The measurement of the Teaching and Learning systems and mechanisms represents The IQA (Internal Quality Assurance) that systematically addresses the "what and how" the institution, college, programs or administrative units addresses its own teaching and learning quality based on the EQA accreditation standards.

As such, the fundamental principle is to look at the overarching systematic teaching and learning management principles that support the setup of the teaching and learning systems, the committees, the mechanisms, the processes and procedures and the people and the resources developed and utilized to implement quality and educational values. It also looks at how the quality is systematically organized within the institution, college, programs or administrative units, what standards, criteria and key performance indicators are developed and used as proxy measures of Teaching and Learning and, as quality being subjective cannot be measured directly. The ITQAN 2020: KSU – QMS Handbooks (4th Edition, May 2017) represents the minimum Teaching and Learning and criteria in the IQA and the EEC-NCAAA represent the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference when setting up their own internal teaching and learning quality assurance. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Oversight of Quality of Learning and Teaching** – This looks at the most fundamental overall responsibilities and accountabilities of the overall teaching and learning system in the institution, college, programs or administrative units. There should be an alignment of the directions whereby the teaching and learning as practiced and executed at all levels should be cohesive and coherent with a body that has an oversight to ensure this alignment. The systematic processes and procedures should be defined and streamlined to ensure that they go in the same direction and achieve the overall mission and goals of the unit in conformance with the internal and external requirements. The systematic self-evaluations and assessment should be documented and reported to higher authorities to ensure conformance and compliance and used for informed decision making.

- **Student Learning Outcomes** – The very heart and soul of teaching and learning is that the student is competent and qualified. As a total student, this includes not only competencies and capabilities in the IQ (intelligence quotient), but also the EQ (Emotional Quotient), AQ (Adversity Quotient) and MQ (Moral Quotient), as a "total" graduate who is intelligent, physically and mentally fit, spiritually and morally fit. As such, the systematic conduct of teaching and learning should bring about a progressive built-up of these qualities, competencies and capabilities through its learning outcomes domains and process specifcations with relevancy to current and future needs and requirements. Achieving expected student learning outcomes requires setting performance levels, standards or assessment outcomes against which progress is gauged and is used as a guide in decision making in the design and delivery of programs. Preparing for individual differences in students requires understanding those differences and associated strategies to capitalize on strengths and overcome obstacles in styles and rates of learning. Instructional techniques for active learning provide an opportunity for students and student segments to analyze, synthesize and evaluate information as part of the learning process. The basic learning outcomes, its domain, processes and key performance indicators are defined within the EEC-NCAAA National Qualification Framework for each subject and program area, with an overall basic requirement specific to each area of study.

- **Program Development Process** – This deals with the wider scope of the systematic management aspect of the program development in terms of systematic POC[3] (Planning, Organizing, Communicating, Coordinating and Controlling). It means determining the systematic management aspect of what and how to develop and implement the program, what resources are needed rather than just planning for what to teach and how to teach in the program. Education value delivery refers to instructional approaches, i.e., the modes of teaching and organizing activities and experiences so that effective learning takes place for the student-centric value delivered. Coordination of design and delivery processes should involve representatives of all work units and individuals who take part in delivery and whose performance affects overall education outcomes. Education design and delivery calls for information on management and improvement of key learning-centered processes for design and delivery of educational programs. These requirements include the need for agility – speed and flexibility – to adapt to change. The design approaches and education delivery depend on many factors, including the faculty's mission; the market segments; the methods of delivery; and the students' experiences and capabilities. Other factors that might need to be considered in design include capability and variability of faculty and staff, differences among students, long-term student performance, assessment capability, student and stakeholder expectations. This would entail the stakeholders' requirement to be identified and defined to develop the program. As such, it highlights the syetmatic management of the program, program evaluation and assessment and its teaching and learning resources pertaining to a quality program in terms of its program and committee organization and implementation, program context, content and teaching and learning strategies and key performance indicators of the quality practices in the organization and deployment of its program quality implementation.

- **Program Evaluation and Review Processes** – As quality is systemic, it involves all the members in the institution, college, programs or administrative units system, and what and how it is cascaded to all the sub-systems. This would mean that the systematic IPOO (Input – Process – Output – Outcome) for program development, its evaluation and review must be designed to cover all aspects of the quality system. As it is also systematic, the detailed processes, policies, procedures and people must be spelt out and implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. Efficiency and effectiveness factors of the program such as addressing sequences and linkages among courses and program offerings should take into account the various stakeholders in the educational process. Transfer of learning from past design projects, as well as among and across year levels, disciplines, and institutions, can improve the design and delivery process and contribute to reduced cycle time in future efforts. It must comprehensively cover the systematic audit, assessment and assurance of program quality comprehensively. Program quality audit deals with ensuring the existence of the systematic

processes, procedures, policies, people and resources, with its standards and criteria stated and implemented as a comprehensive system that are well-documented and well-evidenced to form an evidence – based mechanism to ensure program quality. Systematic program quality assessment will use the well-documented and well-evidenced mechanism with specific key performance indicators to support its evaluation and assessment to ensure that they conform to and comply with the standards and criteria, and determining the level of the performance through the determination of variations or departure from the standards and criteria, that needs to be addressed and actioned on to bring about continuous improvement of the program after its audit and assessment. The systematic assessment that brings about positive development and improvement and innovations would mean that the processes in place assure the existence of quality in the program.

- **Student Assessment and Use of Program Indicators and Benchmarks** – This call for the identification and deployment of the program key performance indicators to serve as measurements of the program performance. A key indicator is the use of student assessment that should be objective and constructive and can be used as an overall performance determination of the course and course instructor. A measurement plan includes observations and measures or indicators that are used to provide timely information to help students and faculty improve learning. Direct and indirect, formative and summative assessments focused on outcome assessment need to be tailored to the educational offerings and program goals. These might range from purely individualized to group-based assessments. In addition to these assessments, observations, measures, and indicators might include enrollment and participation figures, student evaluations of courses/instructors, success rates, attendance rates, dropout rates, information from student advisors, advanced study rates, complaints, feedback from students and families. Normally the level of program performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best program in the industry or nearest competing program.

- **Education Assistance for Students** – As not all students have the same level of performance, the question of student centricity that focus on the student calls for the understanding of the students' learning potential and environment. Once understood, the types of resources and mechanisms set up to assist and develop the learning potential of the students must be designed, developed and assessed. The instructor here is the mentor, the guide and learning of the student should be facilitated and focused on the student learning and development.

- **Quality of Teaching** – The quality of teaching is normally denominated in terms of the infrastructure used, the environment created to induce teach and learning, the teaching and learning interactions, the teaching and learning experience based on the context, the content and the strategies used to ultimately add value to the students by highly qualified and comptent faculty. This take-home value is the ultimate of the learning experience. If teaching does not add value to the student's competencies and capabilities development, something is taught but nothing is learned as there is no indication of developmental improvements. Textbooks and reference books, course outlines and course reports, teaching strategies, teaching audit and assessment are only part of the total learning environment and value addition that forms the basic requirement in quality of teaching. The verifications of the quality of teaching achievements must be throughly deliberated and assessed for performance.

- **Support for Improvements in Quality of Teaching** – To develop the teaching resources, the main question is the existence of opportunities and actions taken to support the improvement of the quality of teaching. It must not be assumed that all instructors can teach. Teaching is a passion and commitment to excellence. The path, the ways and the means to further strengthen and develop the faculty in their teaching quality should be planned and managed. Mechanisms and systems must be set up to avail an opportunity for the faculty for self development and further development. Ensuring that faculty and staff are properly prepared may require helping them gain subject matter expertise; an understanding of cognitive, socio-emotional, or ethical development; knowledge of teaching strategies; skills in facilitation and learning assessment; an understanding of how to recognize and use learning research theory information; and skill in reporting and analyzing information and data on student progress.

- **Qualifications and Experience of Teaching Staff** – The qualifications of the teaching staff should be in the subject area being taught as a basic and minimum requirement, unless proven wide and industry experience could be equated to the qualifications. A fundamental aspect of the teaching staff is the propensity and ability for more self and further development. A teaching staff cannot stop learning and should be open to the more inter-relationships across discipline. These can be done through the supported self-study, attending conferences and seminars, co-teaching or just learning from others by being open minded. This is a basic requisite as the external environment is dynamic and ever changing. A teaching staff should not lag behind in terms of their own learning to improve on their own teaching. Improving the teaching staff's performance means providing better educational value for the students. A variety of improvement approaches might be used depending on the educational program and many student-specific factors. These approaches include (1) using information from students, families, peers, employers, and governing bodies; (2) benchmarking

practices of other institutions; (3) using assessment results; (4) conducting peer evaluations; (5) using research on learning assessments, and instructional methods; (6) collecting information on the use of new learning technology; and (7) sharing successful strategies across the teaching staff and different colleges and programs.

- **Field Experience Activities** – Theoretic and academic based learning without the practical or pragmatic side of the teaching and learning is adequate but not appropriate for the student to face the real work and world experiences. Theories forms the foundations of knowledge and field experience test the workings of the theories in the real world. As such field experiences, when appropriate and necessary should not only supplement but also complement the teaching and learning in the classroom and systematically assessed for performance.
- **Partnership Arrangement with Other Institutions** – As the world is becoming global, the local institution, college or programs are reaching out to more progressive countries for support in the cooperative or collaborative development or partnership in the educational offerings. This is encouraged but should be within the context of appropriateness to the local needs and requirements and statutory compliance. Both partnering entities should conform and meet the basic requirements in terms of program offerings, development, infrastructure and facilities support, audit and assessment and the systemic quality assurance of the same standards and criteria within the local or national requirements and accepted by the cooperative or collaborative institutions.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within systematic the teaching and learning quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors for the PROCESS Criteria are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 4.1 to 4.11. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 4.12 and 4.13. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 4

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

4.12 Key Performance Indicators	
4.12.1	Students' competency score index as per NQF (Means average and Level achieved)
4.12.2	Percentage of graduates who work in their major field of study
4.12.3	EEC-NCAAA S4.5 (Graduation Rate for Undergraduate Students) – Proportion of students entering undergraduate programs who complete those programs in minimum time
4.12.4	EEC-NCAAA S4.6 (Graduation Rate for Post graduate Students) – Proportion of students entering post graduate programs who complete those programs in specified time
4.12.5	EEC-NCAAA S4.2 – Students overall rating on the quality of their courses (Average rating of students on a 5 point scale overall evaluation of courses)
4.12.6	EEC-NCAAA S4.1 – Ratio of students to teaching staff. (Based on full time equivalents)
4.12.7	EEC-NCAAA S4.3 – Proportion of teaching staff with verified doctoral qualifications
4.12.8	Proportion of the full-time faculty members and teaching staffs holding academic titles of teaching assistant, instructor, Assistant Professor, Associate Professor, and Professor.
4.12.9	EEC-NCAAA S4.4 – (Retention Rate) Percentage of students entering programs who successfully complete first year
4.12.10	Percentage of courses that are improved based on research and/or evaluation results. (Means average and Level achieved)
4.12.11	EEC-NCAAA S4.7 – Proportion of graduates from undergraduate programs who within six months of graduation are: (a) employed (b) enrolled in further study (c) not seeking employment or further study
4.13 **Additional College KPI**	
(describe additional KPI used by college or programs and provide evidence or documentations of KPI achievement)	
4.13.1	(KPI specific to Institution, College or Program)
4.13.2	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 4

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Quality of Learning and Teaching Summary	
4.1	Oversight of Quality of Learning and Teaching
4.2	Student Learning Outcomes
4.3	Program Development Processes
4.4	Program Evaluation and Review Processes
4.5	Student Assessment
4.6	Educational Assistance for Students
4.7	Quality of Teaching
4.8	Support for Improvements in Quality of Teaching
4.9	Qualifications and Experience of Teaching Staff
4.10	Field Experience Activities
4.11	Partnership Arrangements with Other Institutions
4.12	Key Performance Indicators
4.13	Additional College KPI

Standard 5: Support for Student Learning

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 5

This Standard highlights the importance of the systematic student Learning support in Teaching, Learning and Research and Social Services and the Management of Quality Assurance for the Teaching, Learning and Research and Social Services and Improvement. It emphasizes the importance of the systematic support systems and mechanisms used in the Learning support systems support of the management of the teaching and learning process and the measurement of these support in the Teaching, Learning and Research and Social Services achievement. In essence, what needs to be managed needs to be measured to manage the quality of its Teaching, Learning and Research and Social Services through measurements of Learning support of the IQA (Internal Quality Assurance) that addresses the "what and how" the institution, college, programs or administrative units addresses the learning support in teaching and learning quality based on the EQA accreditation standards.

Even though the standards and criteria here emphasizes the importance of the student admissions, student records, student management, planning and evaluation of student services and the medical and student counseling, it should be expanded to be inclusive of a more total approach that affects the service and supports that underlines the successes of student learning outcomes.

The concept of the administrative roles is normally downplayed or assumed to be not part of the academic aspect of quality assurance. The notion of the administrative unit being independent of the academic side is untrue. The academic achievements and success is only as good as the poorest performing administrative units support and services that can totally sabotage and undermine the f the quality educational values offer. It is one and the same total package. The systematic service support units' contribution to education excellence is based on the principles of the quality of its services and support rendered to create a total quality teaching – learning – research and social services environment. As such for the college or programs management of quality assurance, these systematic service and support data and information from the administrative units are critical to the overall provision of quality education. Quality does not delimit the boundary of the academic and the administrative units; it looks holistically to the performance of the whole rather than the aggregation of performance of individual units.

Based on the rationale above, the fundamental principle is to look at the systematic learning support systems and mechanisms that systematically support the teaching and learning systems, the committees, the mechanisms, the processes and procedures and the people and the resources developed and utilized to implement learning support quality. The ITQAN 2020: KSU – QMS Handbooks (4th Edition, May 2017) represents the minimum requirements for the learning support for the students in the IQA. The EEC-NCAAA represents the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference when setting up their own systematic support systems and mechanisms quality assurance. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Student Admissions** – This looks at the most fundamental admissions systems, its criteria used in the admission to select quality students as part of its systemic approach. Its looks at the systems and mechanisms that publicize the admission criteria and requirements ease of access to admission and registration information and requirements regulating admissions to the institution, colleges or programs. These include fees payments or deferred payments, courses offerings, exemption and specific rules and regulations pertaining to the institution as a whole and specific to programs requirements.

- **Student Records** – Students records that contain the personal data and study performance information must be secured through data privacy and security systems that do not allow unauthorized access, modifications and dissemination that can jeopardize the security of the students. Formal policies, procedures and processes pertaining to up datedness of students records, timely and accurate dissemination of information to students, use of the statistical data of students records and performance for the planning and management of the programs performance must be established.

- **Student Management** – This covers the disciplinary and student rights aspects or code of conducts of the students that must be formally formulated and written down and approved by the highest governing body. Formal policies, procedures and processes and systematic approaches and mechanisms to address grievances and appeals, disciplinary measures and actions, channels and committees must be systematically and formally established.

- **Student Learning Outcomes** – The very heart and soul of teaching and learning is that the student is competent and qualified. As a total student, this includes not only competencies and capabilities in the IQ (intelligence quotient), but also the EQ (Emotional Quotient), AQ (Adversity Quotient) and MQ (Moral Quotient), as a "total" graduate who is intelligent, physically and mentally fit, spiritually and morally fit. As such, the conduct of teaching and learning should bring about a systematic and progressive built-up of these qualities, competencies and capabilities. The basic learning outcomes and key performance indicators are defined within the EEC-NCAAA National Qualification Framework for each subject and program area, with an overall basic requirement specific to each area of study.

- **Student Learning Support and Service Process** – This deals with the wider scope of the management aspect of the student learning support and service process in terms of POC^3 (Planning, Organizing, Communicating, Coordinating and Controlling). It means determining the systematic management aspect of what and how to develop and implement the student learning support and service process, what resources are needed rather than just planning for student learning support and service process systematically. This would entail the stakeholders' requirement to be identified and defined to develop the student learning support and service process. It highlights the systematic PDCA cycle management of the student learning support and service process, its evaluation and assessment and resources pertaining to a quality student learning support and service process in terms of its system and mechanisms and committee organization and implementation, student learning support and service context and content and strategies and key performance indicators of the quality practices in the organization and deployment of its student learning support and service process quality implementation.

- **Planning and Evaluation of Student Services** – As quality is systemic, it involves all the members in the institution, college, programs or administrative units system, and what and how it is cascaded to all the sub-systems. This would mean that the systematic IPOO (Input – Process – Output – Outcome) reigns supreme in the development, its evaluation and review of the students learning support systems that must be designed to cover all aspects of the quality system. As it is systematic, the detailed processes, policies, procedures and people must be spelt out and implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. It must comprehensively cover the audit, assessment and assurance of student learning support quality comprehensively. Quality Audit deals with ensuring the existence of the processes, procedures, policies, people and resources, with its standards and criteria stated and implemented as a comprehensive system that are well-documented and well-evidenced to form an evidence – based mechanism to ensure student learning support quality. Quality assessment will use the well-documented and well-evidenced mechanism with specific key performance indicators to support its evaluation and assessment that they conform to and comply with the standards and criteria, and determining the level of the performance through the determination of variations or departure from the standards and criteria, that needs to be addressed and actioned on to bring about continuous improvement of the student learning support systems and mechanisms after its audit and assessment. The assessment that brings about positive development and improvement would mean that the processes in place assure the existence of quality in the program.

- **Student Assessment of the Student learning support systems and Use of student learning support and service process Indicators and Benchmarks** – This calls for the identification and deployment of the key performance indicators to serve as measurements of the student learning support systems and mechanisms performance. A key indicator is the use of student assessment of the service is the "SERVQUAL – Service Quality Index) that should be objective and constructive and can be used as an overall performance determination of the student learning support and services. Normally the level of student learning support and services performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best administrative unit in the industry or nearest competing administrative unit.

- **Medical and Counseling Services** – As not all students have the same level of performance, the question of student centricity that focus on the student calls for the understanding of the students' learning potential and environment through counseling and care for the student welfare. As the aim is to build a total student who are mentally and physically fit, the types of resources and mechanisms

set up to assist and support the learning potential of the students must be systematically designed, developed and assessed. The medical care and counseling together with academic counseling here is the mentor and the guide to support the learning of the student that is facilitated and focused on the student learning and development.

- **Extra-curricular Activities for Students** – As the institution, college or programs aims at building the total student not only in terms of IQ, the EQ, AQ and MQ, these components must be systematically supported through extra-curricular activities at the spiritual and emotional level, the physical level and the moral level in terms of knowledge, skills and competencies that are not fully developed by the academic side. These extra-curricular activities must be developed systematically and formally through additional skills development activities supportive of the total student development.

- **Quality of student learning support and service process support** – The quality of student learning support and service process is normally denominated in terms of the infrastructure used, the environment created to support teach and learning, the teaching and learning interactions, the teaching and learning experience based on the context, the content and the strategies used to support the addition of value to the students. This take-home value is the ultimate of the learning experience. If the student learning support and service process of teaching does not add value to the student's learning experience, the overall teaching and learning is sabotaged. Systematic student learning support and service development process are only part of the total learning environment and value addition that forms the basic requirement in quality of teaching and learning.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the student support for learning quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 5.1 to 5.6. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 5.7 and 5.8. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 5

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

5.7 Key Performance Indicators	
5.7.1	EEC-NCAAA S5.1 – Ratio of students to administrative staff
5.7.2	EEC-NCAAA S5.2 – Proportion of total operating funds (other than accommodation and student allowances) allocated to provision of student services
5.7.3	EEC-NCAAA S5.3 – Student evaluation of academic and career counselling (Average rating on the adequacy of academic and career counselling on a five point scale in an annual survey of final year students)
5.8 Additional College KPI	
(describe additional KPI used by college or programs and provide evidence or documentations of KPI achievement)	
5.8.1	(KPI specific to Institution, College or Program)
5.8.2	(KPI specific to Institution, College or Program)
5.8.3	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 5

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Support for Student Learning Summary
5.1 Student Admissions
5.2 Student Records
5.3 Student Management
5.4 Planning and Evaluation of Student Services
5.5 Medical and Counseling Services
5.6 Extra-Curricular Activities for Students
5.7 Key Performance Indicators
5.8 Additional College KPI

Standard 6: Learning Resources

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 6

This Standard highlights the importance of the Learning resources or "life support systems" of the learning infrastructure, learning service support, learning environmental support resources and learning facilities support are critical used to create a conducive and total learning environment for and of the student. It emphasizes the importance of the mechanisms used in the Learning resources and the measurement of these learning resources in support of Teaching, Learning and Research and Social Services achievements. This represents the IQA (Internal Quality Assurance) and addresses the "what and how" of the systematic learning resources services and support development, organization, implementation and assessment based on the EQA accreditation standards.

Even though the standards and criteria here emphasizes the importance of the library systems as a key resources, it should be expanded to be inclusive of a more total approach that affects the learning resources service and supports that underlines the successes of student learning outcomes. This could include the availability and access to the human, financial, technological and organizational resources that could be aligned to the achievement of the learning resources systems.

The learning resources support and services units' systematic contribution to education excellence is based on the principles of the quality of its services and support rendered to create a total quality teaching – learning – research and social services environment. As such, the systematic provision of the learning resources support and services data and information from the administrative units are critical to the overall provision of quality education.

Based on this rationale, the fundamental principle is to look at the systematic learning resources support systems and mechanisms of the committees, the mechanisms, the processes and procedures and the people and the resources systematically developed and utilized to implement learning resources services and support quality. The ITQAN 2020: KSU – QMS Handbooks (4th Edition, May 2017) represents the minimum requirements for the learning resources services and support for the students and the faculty IQA. The EEC-NCAAA represents the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference when setting up their own learning resources support systems and mechanisms. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Planning and Evaluation of Learning Resources Services and Support** – As quality is systemic and systematic, it involves all the members in the institution, college, programs or administrative units system, and what and how it is cascaded to all the sub-systems. This would mean that the systematic IPOO (Input – Process – Output – Outcome) reigns supreme in the development, its evaluation and review of the learning resources support and service processes that must be designed to cover all aspects of the quality system. As it is systematic, the detailed processes, policies, procedures and people must be spelt out and implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. It must comprehensively cover the systematic audit, assessment and assurance of learning resources support and service processes quality comprehensively. The systematic audit and assessment that brings about positive development and improvement would mean that the learning resources processes in place assure the existence of quality in the system.

- **Organization of the Learning Resources Support and Service Process** – This deals with determining the systematic management aspect of what and how to develop and implement the learning resources support and service processes, what resources are needed rather than just planning for learning resources support and service process. This would entail the stakeholders' requirement to be identified and defined to develop the learning resources support and service processes. As such, the fundamental principle is to look at the overarching management principles that support the PDCA cycle rather than just the ordinary administrative functions. It highlights the management of the learning resources support and service processes, its evaluation and assessment and resources pertaining to a quality learning resources support and service processes in terms of its system and mechanisms and committee, organization and implementation, learning resources support and service processes context and content and strategies and key performance indicators of the quality practices in the organization and deployment of its learning resources support and service processes quality implementation.

- **Support and Assessment of the learning resources support and service processes and users of learning resources support and service process Indicators and Benchmarks** – This calls for the identification and deployment of the key performance indicators to serve as measurements of the systematic learning resources support and service processes, systems and mechanisms performance that supports the stakeholders use of the learning resources. As quality is rather subjective, a key proxy indicator is the use of stakeholders' assessment of the service is the "SERVQUAL – Service Quality Index" that should be objective and constructive and can be used as an overall performance determination of the learning resources support and service process. Normally the level of learning resources support and service processes performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best in the industry or nearest competing administrative unit.

- **Quality of learning resources support and service infrastructure and processes** – The quality of learning resources support and service infrastructure and process is normally denominated in terms of the learning resources infrastructure used, the learning resources and its environment created to support Teaching, Learning and Research. It also looks at learning resources support and service processes experience based on the context, the content and the strategies used to support the addition of value to the students by the learning resources support and service processes. This take-home value is the ultimate of the student learning experience. If the systematic learning resources support and service processes of Teaching, Learning and Research and Social Services does not add value to the student's learning experience, the overall Teaching, Learning and Research and Social Services is sabotaged. Student learning by the learning resources support and service processes are only part of the total learning environment and value addition that forms the basic requirement in the quality of Teaching, Learning and Research and Social Services.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the learning resource quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 6.1 to 6.4. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 6.5 and 6.6. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 6

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

6.5 Key Performance Indicators	
6.5.1	EEC-NCAAA S6.2 – Number of web-site subscriptions and journal as a proportion of the number of programs offered
6.5.2	EEC-NCAAA S6.1 – Student evaluation of library and media center (Average rating on adequacy of library and media center including Staff assistance; Current and up-to-date; copy & print facilities; functionality of equipment; atmosphere or climate for studying; availability of study sites and any other quality of indicators on a five point scale in an annual survey)
6.5.3	EEC-NCAAA S6.3 – Student evaluation of digital library (Average rating on adequacy of the digital library including User friendly website; Availability of the digital databases; Accessibility for users; Library skill training and any other quality of indicators on a five point scale in an annual survey)
6.6 Additional College KPI	
(describe additional KPI used by college or programs and provide evidence or documentations of KPI achievement)	
6.6.1	(KPI specific to Institution, College or Program)
6.6.2	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 6

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Learning Resources Summary
6.1 Planning and Evaluation
6.2 Organization
6.3 Support for Users
6.4 Resources and Facilities
6.5 Key Performance Indicators
6.6 Additional College KPI

Standard 7: Facilities and Equipment

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 7

A key part of the "life support systems" or "tools and paraphernalia and hardware" is the facilities and equipment infrastructure, facilities and equipment service support and facilities and equipment environmental support resources which are critical to the Teaching, Learning, Research and Social Services achievements. They form all the sub-systems that create a conducive and total learning environment for and of the student. This Standard highlights the importance of the facilities and equipment used to systematically service and support Teaching, Learning and Research and Social Services. It emphasizes the importance of the tools and techniques, systems and mechanisms deployed in the systematic utilization of the facilities and equipment and the measurement of the effectiveness and efficiency of facilities and equipment in support of Teaching, Learning and Research and Social Service achievements. In essence, the IQA (Internal Quality Assurance) addresses the "what and how" the institution, college, programs or administrative units addresses the facilities and equipment and the services and support in Teaching, Learning and Research quality based on the EQA accreditation standards.

Even though standards and criteria here emphasizes the importance of the facilities and equipment as a key resources, it should be expanded to be inclusive of a more total approach that affects the facilities and equipment services and supports that underlines the successes of Teaching, Learning and Research and Social Services outcomes. This could include the availability and access to the human, financial, technological and organizational services and supports that are critical to the utilization of facilities and equipment. These could be aligned to the achievement of the facilities and equipment systems.

The facilities and equipment support and services units' contribution to education excellence is based on the principles of the quality of its services and support rendered to create a total quality teaching – learning – research and social services environment. As such, the systematic provision of the facilities and equipment and its support and services data and information from the administrative units are critical to the overall provision of quality education and educational values.

Based on this rationale, the fundamental principle is to look at the facilities and equipment and its support systems and systematic mechanisms of the committees, the systems, the processes and procedures and the people and the resources developed and utilized to implement facilities and equipment and its services and support quality. It also looks at how the quality of the systematic provision of the facilities and equipment and its support and services is organized, what standards, criteria and key performance indicators are

developed and used as performance measures. The ITQAN 2020: KSU – QMS Handbooks (4th Edition, May 2017) represents the minimum requirements for the facilities and equipment and its services and support for the students, stakeholders and the faculty in the IQA. The EEC-NCAAA represent the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference when setting up their own facilities and equipment support systems and mechanisms for supporting Teaching, Learning and Research and Social Services quality assurance. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Policy and Planning and Evaluation of facilities and equipment and its Services and Support –** The planning mechanism deals with the determination of existing and future needs of the facilities and equipment and its support and services needs and priorities that are included in the facilities and equipment and its services and support strategic plan and action plans. This would mean that the systematic IPOO (Input – Process – Output – Outcome) reigns supreme in the planning, development, its evaluation and review of the facilities and equipment and its support and service processes that must be designed to cover all aspects of the quality system. As it is systematic, the detailed processes, policies, procedures and people must be spelt out and implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. It must comprehensively cover the systematic audit, assessment and assurance of facilities and equipment and its support and service processes quality comprehensively. Quality Audit ensures a comprehensive facilities and equipment and its support and service processes system that is well-documented and well-evidenced to form an evidence – based mechanism to ensure quality. Quality assessment determines the level of the performance through the determination of variations or departure from the standards and criteria, that needs to be addressed and actioned on to bring about continuous improvement of the facilities and equipment and its support and service process, systems and mechanisms after its audit and assessment. The systematic assessment that brings about positive development and improvement would mean that the processes in place assure the quality in the systems.

- **Quality and adequacy of facilities and equipment and its support and service infrastructure and processes –** The quality aspect of facilities and equipment in terms of the adequacy, the appropriateness and the stakeholders' needs centricity especially those with specific needs of the facilities and equipment and its support and service infrastructure and processes is critical to the success of education values creation and delivery. This is normally denominated in terms of the nature and type, the volume and its appropriateness or specialty of facilities and equipment infrastructure used, the facilities and equipment and its environment created to support Teaching, Learning and Research. It also looks at the Teaching, Learning and Research interactions supported

by the facilities and equipment and its support and service processes, the Teaching, Learning and Research experience based on the context, the content and the strategies used to support the addition of value to the stakeholders by the facilities and equipment and its support and service processes. This take-home value is the ultimate of the Teaching, Learning and Research experience. If the facilities and equipment and its support and service process of Teaching, Learning and Research does not add value to the stakeholders' experience, the overall Teaching, Learning and Research is sabotaged. Stakeholders' experience and utilization of the facilities and equipment and its support and service process are only part of the total Teaching, Learning and Research environment and value addition that forms the basic requirement in educational success.

- **Management and Administration and Organization of the facilities and equipment and its Support and Service Processes** – This deals with the wider scope of the systematic management aspect of the facilities and equipment and its support and service process in terms of POC[3] (Planning, Organizing, Communicating, Coordinating and Controlling). It means determining the systematic management aspect of what and how to develop and implement the facilities and equipment and its support and service processes, what resources are needed rather than just planning for facilities and equipment and its support and service processes. This would entail the stakeholders' requirement to be identified and defined to develop the facilities and equipment and its support and service processes. As such, it highlights the systematic management of the facilities and equipment and its support and service processes, its evaluation and assessment and facilities and equipment pertaining to a quality facilities and equipment and support and service processes in terms of its system and mechanisms and committee, organization and implementation, facilities and equipment support and service processes context and content and strategies and key performance indicators of the quality practices in the organization and deployment of its facilities and equipment and its support and service processes quality implementation. This would cover all types of security system, waste disposal management, inventories management, space and schedule management and others that deal with the achievements of the facilities and equipment and its support and services management.

- **Support and Assessment of the facilities and equipment and its support and service processes and users of the facilities and equipment and its support and service processes Indicators and Benchmarks** – This calls for the identification and deployment of the key performance indicators to serve as measurements of the facilities and equipment and its support and service processes, systems and mechanisms performance that supports the stakeholders use of the facilities and equipment. A key proxy indicator is the use of stakeholders' assessment of the service is the "SERVQUAL – Service Quality Index" that should be objective and constructive and can be used

as an overall performance determination of the facilities and equipment and its support and service processes. Normally the level of facilities and equipment and its support and service processes performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best in the industry or nearest competing administrative unit.

- **Information Technology** – As ICT (Information Communication Technology) is ubiquitous and is one of the key technology used in Teaching, Learning and Research, the key questions are the policies, processes, procedures and the people of the IT systems set up to support Teaching, Learning and Research. It goes into the domain of the wider scope of the management aspect of the ICT and its support and service process in terms of systematic POC^3 (Planning, Organizing, Communicating, Coordinating and Controlling). It means determining the systematic management aspect of what and how to develop and implement the ICT and its support and service processes, what resources are needed rather than just planning for the ICT and its support and service processes. This would entail the stakeholders' requirement to be identified and defined to develop the appropriate and adequate ICT system and mechanisms and its support and service processes. As such, it highlights the management of the ICT system and its support and service processes, its evaluation and assessment of the ICT system pertaining to a quality ICT and support and service processes in terms of its system and mechanisms and committee, organization and implementation, ICT system and support and service processes context and content and strategies, cyber security and key performance indicators of the quality practices in the organization and deployment of its ICT system and its support and service processes quality implementation. It also goes into the realms of data and information management, its utilization policies, the timeliness, usefulness, accuracy, reliability, conciseness and preciseness of the data and information and their security, all used for planning and decision making by the institution, college or programs. It also aims at the privacy and security of the data and information and ICT systems. It looks at the systematic organization environment and context of the use of the information for analytical purposes underscoring developmental and continuous improvements in the institution, college or programs.

- **Student Residences** – As most student are dependent on the residential facilities of the institution, college or programs, the key issue is the systematic management of the students residences in terms of the planning and management of the residences. It goes not only into the domain of the wider scope of the management aspect of the residence but also the total residential environment and its support and service processes in terms of systematic POC^3 (Planning, Organizing, Communicating, Coordinating and Controlling). It means determining the management aspect of what and how to develop and implement and create a conducive residential environment and its support and service

processes, what resources are needed rather than just planning for the residences and its support and service processes. This would entail the students' needs and requirement to be identified and defined to develop the appropriate and adequate and conducive residential system and with its supplementary and complementary support and service processes. The residential system should enhance and enrich the social, cultural and physical well-being of the students through a safe and secure environment, appropriate and healthy living accommodations and food systems and extra-curricular activities that ultimately affects the learning environment of the students and their total development.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the systematic infrastructure, facilities and equipment management of the quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 7.1 to 7.5. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 7.6 and 7.7. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 7

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

Key Performance Indicators

7.6 Key Performance Indicators	
7.6.1	EEC-NCAAA S7.1 – Annual expenditure on IT budget, including: (a) Percentage of the total Institution, or College, or Program budget allocated for IT; (b) Percentage of IT budget allocated per program for institutional or per student for programmatic; (c) Percentage of IT budget allocated for software licences; (d) Percentage of IT budget allocated for IT security; (e) Percentage of IT budge allocated for IT maintenance.
7.6.2	EEC-NCAAA S7.2 – Stakeholder evaluation of the IT services. (Average overall rating of the adequacy of IT availability; Security; Maintenance; Accessibility; Support systems; Software and up-dates; Age of hardware, and other viable indicators of service on a five- point scale of an annual survey.)
7.6.3	Average overall rating of adequacy of facilities and equipment in a survey of faculty members and teaching staff
7.6.4	EEC-NCAAA S7.3 – Stakeholder evaluation of Websites; e-learning services; Hardware and software; Accessibility; Learning and Teaching; Assessment and service; Web-based electronic data management system or electronic resources (for example: institutional website providing resource sharing, networking & relevant information, including e-learning, interactive learning & teaching between students & faculty on a five- point scale of an annual survey).
7.7 Additional College KPI	
(describe additional KPI or benchmarks used by college or programs and provide evidence or documentations of KPI achievement)	
7.7.1	(KPI specific to Institution, College or Program)
7.7.2	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 7

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Facilities and Equipment Summary
7.1 Policy and Planning
7.2 Quality of and Adequacy of Facilities
7.3 Management and Administration
7.4 Information Technology
7.5 Student Residences
7.6 Key Performance Indicators
7.7 Additional College KPI

Standard 8: Financial Planning and Management

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 8

To accomplish the key and fundamental mission of all higher education institutes, finances and its financial management forms the "life oil that facilitates all the systems to ensure their smoothness in the development and implementation" of the facilities and equipment infrastructure, learning resources, human resources, ICT resources and their services and support systems are critical support systems. It emphasizes the importance of the finances, the risk involved and their systematic management that supports these financial and risk management effectiveness and efficiency achievements. In essence, what needs to be managed need to be measured. The systematic measurement of financial and risk management and its services and support represents the IQA (Internal Quality Assurance) that addresses the "what and how" the financial and risk management based on the EQA accreditation standards are systematically addressed.

Even though standards and criteria here emphasizes the importance of the finance as a key resources, it should be expanded to be inclusive of a more total approach that affects the systems, the mechanisms, the tools and techniques, the services and supports that underlines the successes of Teaching, Learning and Research and Social Services outcomes. This could include the availability and access to the human, technological and organizational services and supports that are critical to the financial and risk management. These could be systematically aligned to the achievement of the financial and risk management systems.

The concept of the administrative roles in the provision of the finances and its support and services is normally downplayed or assumed to be not part of the academic aspect of quality assurance. The notion of the administrative unit in the provision of the finances support and services being independent of the academic side is invalid. The academic achievements and success is only as good as the poorest performing administrative units in the provision of the finances, its timelines and reliability and availability and access, and its support and services that can totally sabotage and undermine quality education. The financial support and services units' contribution to education excellence is based on the principles of the quality of its services and support rendered to create a total quality teaching – learning – research and social services environment. As such, the systematic provision of the finances and its support and services data and information is critical to the overall provision of quality educational values.

Based on this rationale, the fundamental principle is to look at the systematic financial and risk management and its support systems and mechanisms that support the Teaching, Learning and Research and Social Services systems of the committees, the mechanisms, the processes and procedures and the people and

the resources developed and utilized to implement financial and risk management and its services and support quality. It also looks at how the quality of the provision of the financial and risk management, its systematic audit and assessment processes and its support and services to the institution, college, programs or administrative units, what standards, criteria and key performance indicators are developed and used as proxy measures. The ITQAN 2020: KSU-QMS Handbooks 1 and 2 (4th Edition, May 2017) represents the minimum requirements for the financial and risk management, its audit and assessment and its services and support IQA. The EEC-NCAAA represent the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference when setting up their financial and risk management and support systems and mechanisms. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Financial Planning and Budgeting** – The planning and budgeting mechanism deals with the determination of existing and future needs of the financial needs and priorities based on the strategic needs of the institution, college, programs or administrative. These include systematic planning and budgeting for all the resources requisition and disbursement on long-term and short-term basis as defined in its strategic plan and action plans. As quality is systemic, it involves the determination of systematic IPOO (Input – Process – Output – Outcome) resources needed to implement the planned actions and activities, and the evaluation and review of the planning and budgeting efficiency and effectiveness designed to cover all aspects of the quality system. As it is systematic, the detailed resources needed in financial planning and budgeting covering processes, policies, procedures and people must be spelt out and planned, budgeted and implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. It must comprehensively cover the audit, assessment and assurance of the financial and budgeting support and service processes quality comprehensively.

- **Financial Management and Administration and Organization of its Financial Support and Service Processes** – This deals with the wider scope of the systematic management aspect of the financial management and the administration and organization of its financial support and service processes to all the stakeholders in terms of POC^3 (Planning, Organizing, Communicating, Coordinating and Controlling). It means determining the systematic management aspect of what and how to develop and implement the financial management and the administration and organization of its financial support and service processes, what resources are needed rather than just planning for finances and budgeting. This would entail the stakeholders' requirements to be identified and defined to develop the level of the support and service processes needed of financial and budgeting management and the administration and organization of its financial and budgeting support and service processes. As such, the fundamental principle is to look at the systematic PDCA cycle

management of the financial and budgeting management and the administration and organization of its financial and budgeting support and service processes, its evaluation and assessment and facilities and equipment pertaining to a quality facilities and equipment and support and service processes in terms of its system and mechanisms and committee, organization and implementation, financial and budgeting support and service processes context and content and strategies and key performance indicators of the quality practices in the organization and deployment of its financial and budgeting management and its support and service processes quality implementation. This would cover the oversight of the financial and budgeting system and its management, the delegations of fiscal management to line authorities with clear responsibilities and accountabilities defined, audited and assessed, monitoring and accounting system established to audit and assess the financial requisition and disbursement.

- **Auditing and Risk assessment** – This calls for the identification and deployment of the key performance indicators to serve as measurements of the financial and budgeting systems, its support and service processes, systems and mechanisms performance that supports the stakeholders use of the financial and budgeting services. Financial Audit deals with ensuring the use of the budget for the processes, procedures, policies, people and resources, have stated standards and criteria and implemented as a comprehensive system that are well-documented and well-evidenced to form an evidence based mechanism to ensure its effectiveness and efficiency as planned. Risk assessment goes beyond the financial risk that the institution, college, programs or administrative might face. It includes the potential risk from the systemic or systematic risk that could happen to the organization's resources, facilities and equipment, the natural risk due to natural calamities or causes or accidental causes and academic risks. Quality assessment of the auditing and risk management will use the well-documented and well-evidenced mechanism with specific key performance indicators to support its evaluation and assessment of the financial planning and budgeting and risk management that they conform to and comply with the standards and criteria, and determining the level of the performance through the determination of variations or departure from the standards and criteria, that needs to be addressed and actioned on to bring about continuous improvement of the financial and budgeting and risk management, systems and mechanisms after its audit and assessment. The assessment that brings about positive development and improvement would mean that the processes in place assure the existence of quality in the financial and budgeting system. Normally the hard financial metrics can tell the health of the institution, college or programs, the utilization of its financial resources. Another key proxy indicator is the use of stakeholders' assessment of the financial service and support is the "SERVQUAL – Service Quality Index" that should be objective and constructive and can be used as an overall performance determination of the

facilities and equipment and its support and service processes. Normally the level of financial, budgeting and risk management and its support and service processes performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best in the industry or nearest competing administrative unit. The audit here refers to both the internal audit within the institution, college or programs and the external audit conducted by an independent unit normally outside of institution, college or programs.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the systematic financial management quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 8.1 to 8.3. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 8.4 and 8.5. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 8

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

8.4 Key Performance Indicators	
8.4.1	EEC-NCAAA S8.1 – Total operating expenditure (other than accommodation and student allowances) per student
8.4.2	University revenues generated from providing academic and professional services in the name of the university in proportion to the total number of full-time faculty members (Ratio and Level achieved)
8.4.3	Percentage of University expenses incurred in cash and in kind in the preservation, development and enhancement of identity, art and culture in proportion to the total operation budget (% and Level achieved)
8.4.4	Budget per head for full-time faculty members' development in the country and abroad in proportion to the total number of full-time faculty members (SAR per capita and Level achieved)
8.4.5	Operating expenses in the library system, computers and information center in proportion to the total number of full-time equivalent students (SAR per capita and Level achieved)
8.4.6	Evaluation of risk management practices as implemented (Means average and Level achieved based on survey)
8.5 Additional College KPI	
(describe additional KPI used by college or programs and provide evidence or documentations of KPI achievement)	
8.5.1	(KPI specific to Institution, College or Program)
8.5.2	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 8

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Financial Planning and Management Summary
8.1 Financial Planning and Budgeting
8.2 Financial Management
8.3 Auditing and Risk Management
8.4 Key Performance Indicators
8.5 Additional College KPI

Standard 9: Employment Processes

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 9

The employment processes of the Human Resources Management Systems (HRMS) or "life - blood support systems" of the human resources infrastructure, human resources planning, management and service support, human resources development and learning environmental support resources and human resources developmental and learning facilities support are critical to any HEI success. They form all the sub-systems that create a conducive and total human resources development and learning environment for and of the institution, college, programs or administrative units. This Standard highlights the importance of the human resources used to conduct service and support Teaching, Learning and Research and Social Services and the Management of Quality Assurance for the Teaching, Learning and Research and Social Services and Improvement. It emphasizes the importance of the systems and mechanisms used in the HRMS to support the mechanism in the management of the Teaching, Learning and Research and Social Services processes and the measurement of these human resources, its education value support creation and addition in support of Teaching, Learning and Research and Social Services achievements. The measurement of HRMS and its services and support for the stakeholders represents the IQA (Internal Quality Assurance) that addresses the "what and how" the institution, college, programs or administrative units addresses the Human Resources Management Systems (HRMS) and its services and support in Teaching, Learning and Research quality based on the EQA accreditation standards.

Even though standards and criteria here emphasizes the importance of the employment process as a key process, it should be expanded to be inclusive of a more total approach that affects the total HRMS, the management of the human assets, that forms one of the key foundation of the institution, college, programs or administrative unit success. Their service and supports underlines the successes of student learning and stakeholders outcomes. This could include the availability and access to the financial, technological and organizational resources that could be aligned to the achievement of the HRMS. A key question here is what and how to address the human resource engagement and their commitment to their roles, responsibilities and accountabilities. Doing a piece of work without full engagement of the human endeavor will not lead to full commitment that can affect the degree of the quality of the work. A fully engaged person is a committed person.

The HRMS examines the faculty's systems for work and jobs, compensation, faculty and staff performance management, motivation, recognition, communication, and hiring, with the aim of enabling and encouraging all faculty and staff to contribute effectively to the best of their abilities. These systems are

intended to foster student achievement and high performance, to result in individual and organizational learning, and to enable adaptation to change. It also examines the organization's faculty and staff education and training to achieve better knowledge and skill acquisitions. It also examines the organization's work environment, the faculty and staff support organization climate, and how the faculty and staff determines job satisfaction and engagement, with the aim of fostering the well-being, satisfaction, and motivation of all faculty and staff while recognizing their diverse needs.

The concept of the administrative roles in the HRMS and in the provision of the support and services is normally downplayed or assumed to be not part of the academic aspect of quality assurance. The notion of the HRMS as a key administrative unit in the provision of the total teaching – learning – research and social services systems support and services being independent of the academic side are invalid. The academic achievements and success is only as good as the poorest performing administrative units in the provision of the total teaching – learning – research and social services systems support and services that can totally sabotage and undermine the quality of educational values creation and delivery. It is one and the same total package. The HRMS systems support and services units' contribution to education excellence is based on the principles of the quality of its services and support rendered to create a total quality teaching – learning – research and social services environment. As such, for the college or programs management of quality assurance, the provision of the HRMS support and faculty and staff services data and information from the administrative units are critical to the overall provision of quality education. Quality does not delimit the boundary of the academic and the administrative units; it looks holistically to the performance of the whole rather than the aggregation of performance of individual units.

Based on this rationale, the fundamental principle is to look at the HRMS and its support systems and mechanisms that support the Teaching, Learning and Research and Social Services systems, the committees, the mechanisms, the processes and procedures and the people and the resources developed and utilized to implement HRMS services and support quality. It also looks at how the quality of the provision of the HRMS support and services is organized within the institution, college, programs or administrative units, what standards, criteria and key performance indicators are developed and used as proxy measures of HRMS support mechanism and systems quality, as quality being subjective cannot be measured directly. The ITQAN 2020: KSU-QMS Handbooks (4th Edition, May 2017) represents the minimum requirements for the Human Resources Management Systems (HRMS) services and support IQA. The EEC-NCAAA represent the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference when setting up their own HRMS and its services and support systems and mechanisms for supporting Teaching, Learning and Research and Social Services quality assurance. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Planning, Policies, Recruitment and Evaluation of Human Resources Management Systems (HRMS) and its Services and Support** – As quality is systemic, it involves all the members in the institution, college, programs or administrative units system, and what and how it is cascaded to all the sub-systems. This would mean identifying the systematic IPOO (Input – Process – Output – Outcome) from the planning to the recruitment to the development and ultimately in retaining its human resources which are institutional assets, its evaluation and review of the HRMS, its support and service processes that must be designed to cover all aspects of the HRMS quality system. This covers the policies, recruitment and development, appropriateness of workloads, competencies and capabilities definition and description, promotions and career path development, professional and academic codes of conduct specifications. faculty and staff performance management system, including feedback to faculty and staff, supports high performance and focuses on students, stakeholders, and educational services, programs, and offerings. This should include how compensation, recognition, and related practices reinforce these objectives, including the overall objectives for student learning and development. As the HRMS should be systematic, the detailed processes, policies, procedures and people must be spelt out and implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. It must comprehensively cover the audit, assessment and assurance of HRMS and its support and service processes quality comprehensively. Quality Audit of the HRMS deals with ensuring the existence of the processes, procedures, policies, people and resources, with its standards and criteria stated and implemented as a comprehensive system that are well-documented and well-evidenced to form an evidence – based mechanism to ensure HRMS support and service processes quality. Quality assessment of the HRMS will use the well-documented and well-evidenced mechanisms with specific key performance indicators to support its evaluation and assessment that they conform to and comply with the minimum standards and criteria. The determination of the level of the performance is done through the determination of variations or departure from the standards and criteria, that needs to be addressed and actioned on to bring about continuous improvement of the learning resources support and service processes, systems and mechanisms after its audit and assessment. The assessment that brings about positive development and improvement would mean that the processes in place assure the existence of quality in the system.

- **Organization of the Human Resources Management Systems (HRMS), its Recruitment and its Support and Service Process** – This deals with the wider scope of the management aspect of the HRMS and its support and service processes in terms of systematic POC^3 (Planning, Organizing, Communicating, Coordinating and Controlling). It means determining the management aspect of what and how to develop and implement the HRMS and its support and service processes, what

resources are needed rather than just planning for HRMS and its support and service process. The HRMS starts with the planning and staffing. This would entail the stakeholders' needs and requirement, the competencies and capabilities for a specific job description, the type of training and development offered, the demands and the nature of the job and job requirements and special needs specification and job environment needs to be identified and defined to develop the HRMS support and service processes in the planning, staffing, recruiting and developing of the human resources. It highlights the PDCA cycle management of the HRMS support and service processes, its evaluation and assessment and resources pertaining to a quality HRMS support and service processes in terms of its system and mechanisms and committee, organization and implementation, HRMS support and service processes context and content and strategies and key performance indicators of the quality practices in the organization and deployment of its HRMS support and service processes quality implementation.

- **Support in the Development and Personal Care and Assessment of the Human Resources Management Systems (HRMS) and its support and service processes and users of HRMS support and service process Indicators and Benchmarks** – This calls for the identification and deployment of the key performance indicators to serve as measurements of the HRMS and its support and service processes, systems and mechanisms performance that supports the stakeholders. It calls for the description of how employee education and training is tied to its action plans, including how education and training balance short and long term individual and organizational objectives. It is asked how it seeks and uses input on education and training needs and delivery from those most directly benefited – faculty, staff, student, and their supervisor and administrators. It is asked how it incorporates organizational learning and knowledge assets into its education and training. A key HRMS indicator is the use of stakeholders' assessment of the service is the "SERVQUAL – Service Quality Index" and the "Developmental Index – that looks at the progressive competencies, capability and capacity development of the human resources". These indices should be objective and constructive and can be used as an overall performance determination of the HRMS and its support and service process. Normally the level of HRMS support and service processes performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best in the industry or nearest competing administrative unit.

- **Discipline, Complaints and Dispute Resolution Management** – In the development and retaining the human resources, it does not mean that the human resource is totally perfect in their professional and academic bearings and code of conduct, or their overall satisfaction with the system. Appropriate systematic channels, mechanisms and measures must be developed to address the

complaints and code of conduct infringement as to the appropriate ways and means to address the issue within the social norms, statutory laws and regulations governing the manpower management in the Kingdom of Saudi Arabia and the institutional governance, guidelines and regulatory requirements pertaining to manpower and human resource management, disciplinary, complaints and dispute resolutions.

- **Quality of Human Resources Management Systems (HRMS) and its support and service infrastructure and processes** – The quality of HRMS and its support and service infrastructure and process is normally denominated in terms of the HRMS infrastructure used and the human learning resources and its environment created. The key question is how the institution, college, programs or admkinistrative units determines the key factors that affect faculty and staff satisfaction and engagement, taking into account their diverse needs and expectations. The institution, college, programs or administrative units is asked to describe formal and informal assessment methods and measures it uses to determine faculty and staff satisfaction, motivation and engagement. It is also asked to define its performance or outcome indicators to ensure that its faculty and staff management, development and assessment meet the basic requirements and expectations to support or bring about effective and efficient management of the faculty and staff. It also looks at the context, the content and the strategies used to support the addition of value to the students by the faculty and staff support and service processes. This take-home value is the ultimate of the total learning experience. If the HRMS support and service processes do not add value to the total learning experience, the overall Teaching, Learning and Research and Social Services is sabotaged. Total learning of the students and staffs by the HRMS support and service processes are only part of the total learning environment and value addition that forms the basic requirement in the quality of Teaching, Learning and Research and Social Services.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the HRMS quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 9.1 to 9.4. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 9.5 and 9.6. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 9

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

9.5 Key Performance Indicators	
9.5.1	EEC-NCAAA S9.1 – Proportion of Faculty Members leaving the institution in the past year for reasons other than age retirement
9.5.2	EEC-NCAAA S9.2 – Proportion of teaching staff participating in professional development activities during the past year
9.5.3	Percentage of full-time supporting staff who were developed in professional knowledge and skills in the country and abroad (% and Level achieved)
9.6 Additional College KPI	
(describe additional KPI used by college or programs and provide evidence or documentations of KPI achievement)	
9.6.1	(KPI specific to Institution, College or Program)
9.6.2	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 9

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative will need to provide a summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Employment Processes Description	
9.1	Policy and Administration
9.2	Recruitment
9.3	Personal and Career Development
9.4	Discipline, Complaints and Dispute Resolution
9.5	Key Performance Indicators
9.6	Additional College KPI

Standard 10: Research

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 10

A key and fundamental mission of all higher education institutes is research. To excel in research, it must review, revise, recuperate, rejuvenate and reposition its research as the key mechanism that brings about these changes in improvements, development and innovations. This Standard highlights the importance of the Research and the Management of Quality Assurance for the Research and Improvement that emphasizes the importance of the mechanisms used in Research Planning and Management process through the Measurement of the Research achievement. In essence, what needs to be managed needs to be measured through the Research system or mechanism that is set up by the institution, college, programs or administrative units to manage the quality of its research through measurements of the research quality. The measurement of the Research systems and mechanisms represents the IQA (Internal Quality Assurance) that addresses the "what and how" the institution, college, programs or administrative units addresses its own research quality based on the EQA accreditation standards.

A broad and general categorization of research independent of the type and nature of research specific to disciplines can be classified into the following:

- **Institutional Research** – This type of research is done at the institutional, college or programs levels to get a full understanding of their own stakeholders', specifically the students' population, its profiling and characteristics and statistical profiled data to examine the profiles of its inputs, the processes that leads to the creation of the outputs, verifying and determining the cause and effects of distinguishing features of different population profiles based on the demographics, geographic and psychographics of their population. A better understanding of this can lead to the better addressing of the issues pertaining to specific student populations and the finding of better ways and means to address the issues through better planned and systematic approaches in meeting and excelling in the needs.

- **Empirical Research** – This type of research is the most widely practiced by most faculty members to test a specific set of hypothesis through empirical or experimental testing to find some conclusive evidence that brings about the better understanding of the research problem. This type of research is normally based on a real world problem or issue.

- **Academic Research** – This type of research is more advanced in that they lead to the development of a new model or framework that is built on a foundation of strong empirical or experimental test or results, or just based on the vast source of secondary data of the literature review. This new model or framework is later tested through further empirical or experimental research to test the validity and reliability of the robustness of the model or framework.

- **Developmental Research** – This type of research should be one of the most widely practiced self-developmental researches, as a faculty member should never stop learning. This is normally aimed at the improvements of their teaching and learning context and contents in order to avoid the "frying the transparencies" and for the more high-tech "frying the power-points" syndrome without any changes to the teaching and learning contexts and contents even though the subject area has changed due to the dynamic changes.

As such, the research fundamental principle is to look at the overarching teaching and learning management principles that support the setup of the research systems, the committees, the mechanisms, the processes and procedures and the people and the resources developed and utilized to implement research quality. It also looks at how the research quality is organized within the institution, college, programs or administrative units, what plans, policies, people, processes, procedures, standards, criteria and key performance indicators are developed and used as proxy measures of research quality, as quality being subjective cannot be measured directly. The ITQAN 2020: KSU-QMS Handbooks (4th Edition, May 2017) represents the minimum research standards and criteria in the IQA and the EEC-NCAAA represent the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference for research quality assurance. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Oversight of Quality of Research** – This looks at the most fundamental overall responsibilities and accountabilities of the overall research system in the institution, college, programs or administrative units. There should be an alignment of the directions whereby the research as practiced and executed at all levels should be cohesive and coherent with a body that has an oversight to ensure this alignment through the institution research plan, that is cascaded down as college and programs research plans. The processes and procedures should be defined and streamlined to ensure that they go in the same direction and achieve the overall mission and goals of the unit in conformance with the internal and external requirements. The self-evaluations and assessment should be documented and reported to higher authorities to ensure conformance and compliance.

- **Institutional Research Policies, Research Planning and Development Process** – This deals with the wider scope of the management aspect of the Research planning and policies development in terms of systematic research POC[3] (Planning, Organizing, Communicating, Coordinating and Controlling). It means determining the management aspect of what and how to develop and implement the research systems and mechanisms, what resources are needed rather than just planning for what to research and how to research. The fundamental principle is to look at the overarching management principles that support the PDCA cycle rather than just the ordinary administrative functions for research. It highlights the management of the research plan and program, research plan program evaluation and assessment and its research resources pertaining to a quality research plan and program in terms of its research program and research committee organization and implementation, research program context, content and research strategies and key performance indicators of the quality practices in the organization and deployment of its research quality implementation. It looks at the allocation of resources for research in its short- and long-term planning. Granted the limited resources factor there is a need to outline the mechanisms of research funding from government, private, business and industrial sectors. It is asked how to create linkages and connections in order to have partnership with the government and private sectors especially the business-academia linkage.

- **Research Outcomes** – The very heart and soul of teaching and learning is that the research contributes to the development of not only the faculty members but the students, stakeholders and community. As such, the conduct of research should bring about a progressive built-up of the personal developmental qualities, competencies and capabilities and that also contribute to the benefits of others. Impact assessment is considered part of the overall assessment of researches in the area of their influences on policy or operational changes in the government, on the budget allocation in the industrial sectors, work units, important change in culture and social welfare, and on the percentage of revenue derived from researches. The outcome to be assessed is the success rate, as well as the time spent on researches which reflects the results of research training and research infrastructure deployment and to assess the faculty's researches which are well known and accepted by the government and private sectors.

- **Research Evaluation and Review Processes** – As quality is systemic, it involves all the members in the institution, college, programs or administrative units system, and what and how it is cascaded to all the sub-systems. This would mean that the systematic IPOO (Input – Process – Output – Outcome) of the research plan and program development, the research plan, program, processes, procedures and people evaluation and review must be designed to cover all aspects of the research quality system. As a research system should be systematic, the detailed processes, policies,

procedures and people must be spelt out and implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. It must comprehensively cover the audit, assessment and assurance of research quality comprehensively. Quality Audit of research deals with ensuring the existence of the processes, procedures, policies, people and resources, with its standards and criteria stated and implemented as a comprehensive system that are well-documented and well-evidenced to form an evidence – based mechanism to ensure research quality. Quality assessment of the research system will use the well-documented and well-evidenced mechanism with specific key performance indicators to support its evaluation and assessment that they conform to and comply with the research standards and criteria, and determining the level of the research performance through the determination of variations or departure from the standards and criteria, that needs to be addressed and actioned on to bring about continuous improvement of the research system after its audit and assessment. The assessment that brings about positive development and improvement would mean that the processes in place assure the existence of quality in the research systems.

- **Research Assessment and Use of Program Indicators and Benchmarks** – This calls for the identification and deployment of the research key performance indicators to serve as measurements of the research performance. It needs to determine the percentage and the expected number of researches in each year; the rising trend, useful findings, quality research and innovative works that could be published to create variety in the knowledge body; that researches are up-to-date, and could be used for the development of the society and of the country. Its performance or outcome indicators needs to be defined to ensure that the research conducted and published meets the basic requirements and expectations required of a well established faculty. Research indicators should be objective and constructive and can be used as an overall performance determination of the research conducted by the faculty members. Normally the level of research performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best research outputs and outcomes in the industry or nearest competing program.
- **Quality of Research** – The quality of research is normally denominated in terms of the infrastructure used, the environment created to induce research, the research interactions, the research experience based on the context, the content and the strategies used to ultimately create research value to the faculty member, its stakeholders, students and community. This take-home value is the ultimate of the research experience. If research does not add value to the researcher's competencies and capabilities development, something is researched into but nothing is learned as there is no indication of developmental improvements. It should preferably contribute to societal development. A total research environment and research value addition forms the basic requirement in the quality of research.

- **Research Facilities and Equipment and Support for Improvements in Quality of Research –** To develop the research resources, the main question is the existence of opportunities and actions taken to support the improvement of the quality research. There are 2 sides of the research coin, the "hardware" and the "software". The "hardware" of research covers the availability and accessibility to research facilities and equipment for experimental research and research resources in terms of appropriate and adequate funding internally or externally, or support from the community. It must not be assumed that all faculty members can research. Research is a passion and commitment to excellence. The path, the ways and the means and the research environments to further strengthen and develop the faculty in their research quality should be systematically planned and managed. Systematic research mechanisms and systems must be set up to avail an opportunity for the faculty for self-development and further development in the research programs and infrastructure. This represents the "software" of research.

- **Research Development of the Teaching Staff and Student Involvement in Research –**A fundamental aspect of the teaching staff is the propensity and ability for more self and further development. A teaching staff cannot stop learning and should be open to more inter-relationships studies across discipline. These can be done through the supported self-study, attending conferences and seminars, co-researching or just learning from others by being open minded. This is a basic requisite as the external environment is dynamic and ever changing. A teaching staff should not lag behind in terms of their own learning to improve on their own teaching and their own self-developmental research in their teaching and learning pedagogy, teaching context and context of their subject area. This should be expanded to incorporate the level of the students' involvement and capabilities in the research for students' research development.

- **Interdisciplinary studies and collaborations with other units and Institutions and Commercialization of Research –** As the world is becoming global, the local institution, college or programs are reaching out to more progressive interdisciplinary or collaborative research with their global partners. This is encouraged but should be within the context of appropriateness to the local needs and requirements and statutory compliance. Both research partnering entities should conform and meet the basic requirements in terms of research needs, research development, research audit and assessment and the systemic research quality assurance of the same standards and criteria. A unit or center should be set up to develop these interdisciplinary research or collaborative research, and if possible to commercialize the research outcomes.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the research management quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 10.1 to 10.4. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 10.5 and 10.6. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 10

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

10.5 Key Performance Indicators	
10.5.1	EEC-NCAAA S10.1 – Number of refereed publications in the previous year per full time equivalent member of teaching staff. (Publications based on the formula in the Higher Council Bylaw excluding conference presentations)
10.5.2	EEC-NCAAA S10.2 – Number of citations in refereed journals in the previous year per full time equivalent teaching staff.
10.5.3	EEC-NCAAA S10.3 – Proportion of full time member of teaching staff with at least on refereed publications during the previous year
10.5.4	Evaluation of facilities and environment supporting research (Means average and Level achieved based on survey)
10.5.5	Ratio of internal research and innovation funds in proportion to the total number of full-time faculty members
10.5.6	EEC-NCAAA S10.5 – Research Income from external sources in the past year per full-time equivalent faculty members
10.5.7	EEC-NCAAA S10.4 – Number of papers or reports presented at academic conferences during the past year per full time equivalent faculty member
10.5.8	Number of research and innovations registered as intellectual property or patented within the past 5 years
10.5.9	EEC-NCAAA S10.6 – Proportion of total annual operating budgets dedicated to research

10.6	**Additional College KPI**
(describe additional KPI or benchmarks used by college or programs and provide evidence or documentations of KPI achievement)	
10.6.1	(KPI specific to Institution, College or Program)
10.6.2	(KPI specific to Institution, College or Program)
10.6.3	(KPI specific to Institution, College or Program)
10.6.4	(KPI specific to Institution, College or Program)

Overall Assessment of Standard 10

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Research Summary
10.1 Institutional Research Policies
10.2 Faculty and Student Involvement
10.3 Commercialization of Research
10.4 Facilities and Equipment
10.5 Key Performance Indicators
10.6 Additional College KPI

Standard 11: Institutional Relationships with the Community

Part 1 – Process-based Performance Criterion

(a) Description of the Standard 11

A key question of any HEI (Higher Education Institution) is "Who benefits from what we do?" A HEI is very different from an ordinary business for profit or non-profit operation. The outputs and outcomes of the teaching, learning, research and social services affect the communities and stakeholders directly or indirectly as they develop and built the future citizens and leaders of tomorrow. The burden falls heavily and squarely on the shoulders of the academics and the institution, college, programs or administrative units. As part of the key and fundamental mission of all higher education institutes, it must review, revise, recuperate, rejuvenate and reposition the understanding of the stakeholders' needs and requirements to ensure that these changes in improvements, development and innovations meets the needs and requirements of the stakeholders. As such, the relationships with the **Stakeholders and Communities' Relationships (SCR)**

represent the "life – lens that should not be myopic but have a long-term sighting of the ever dynamic changes to needs and requirements the stakeholders and communities".

This Standard highlights the importance of the SCR Management of Quality Assurance that emphasizes the importance of the systems and mechanisms, planning and management process through the Measurement of the SCR achievement. In essence, what needs to be managed need to be measured of the quality of its SCR. This represents The IQA (Internal Quality Assurance) that addresses the "what and how" the institution, college, programs or administrative units addresses its own SCR quality based on the EQA accreditation standards.

A broad and general categorization of the key stakeholders and communities can be classified into the following:

- ***Students*** – This is the key stakeholder group that purchase and consume the educational products and services directly and attain educational values leading to a competent and qualified "total" graduate in terms of competence as defined in the EEC-NCAAA Qualification Framework.
- ***Graduates*** – This stakeholder group represents the "total" graduates who are intellectually, physically, emotionally, spiritually and morally competent to contribute to the development of the society and communities. This group normally forms the core "alumni" grouping who plays an important and form a very vocal group based on the outcomes of the educational offerings and values attained.
- ***Parents*** – This stakeholder group represents the parental guidance of the students and graduates who can normally influence the choice or specifications of the outputs and outcome specifications of their care.
- ***Employment Market*** – This stakeholder group utilizes the outputs of the institution and evaluates the outcomes of the graduates' performance in terms of meeting the minimum specifications of knowledge, skills, behavior and values conformity and compliance.
- ***Interest Group*** – This stakeholder group indirectly influence the outputs and outcomes of the graduates from the civic and societal values and social norms to be responsible contributors to societal and social development.
- ***Communities*** – This stakeholder group are within the contiguous loci where the institution, college or program is located, as one of the main roles of a higher education institute is to ensure that the communities are involved and the actions of the institution contribute to the well-being and development of the communities.

As such, the SCR fundamental principle is to look at the overarching management principles that support the setup of the SCR systems, the committees, the mechanisms, the processes and procedures and the people and the resources developed and utilized to implement SCR quality. It also looks at how the SCR quality is organized within the institution, college, programs or administrative units, what plans, policies, people, processes, procedures, standards, criteria and key performance indicators are developed and used as proxy measures of Stakeholders' and Communities Relationships' quality. The ITQAN 2020: KSU-QMS Handbooks (4th Edition, May 2017) represents the minimum SCR standards and criteria in the IQA and the EEC-NCAAA represent the minimum standards and criteria in the EQA quality equation that should be used as the minimum point of reference when setting up their own SCR quality assurance. Basically, the key is that the following are identified and defined for the institution/college/program or administrative units:

- **Oversight of Quality of Stakeholders' and Communities' Relationships** – This looks at the most fundamental overall responsibilities and accountabilities of the overall SCR system in the institution, college, programs or administrative units. There should be an alignment of the directions whereby the SCR as practiced and executed at all levels should be cohesive and coherent with a body that has an oversight to ensure this alignment through the institution SCR plan, that is cascaded down as college and programs and administrative unit SCR plans. The processes and procedures should be defined and streamlined to ensure that they go in the same direction and achieve the overall mission and goals of the unit in conformance with the internal and external requirements. The self-evaluations and assessment should be documented and reported to higher authorities to ensure conformance and compliance.
- **Stakeholders' and Communities Relationships' Policies, Planning and Development Process** – This deals with the wider scope of the management aspect of the SCR planning and policies development in terms of systematic POC[3] (Planning, Organizing, Communicating, Coordinating and Controlling). Building student and SCR might include the development of partnerships or alliances (e.g., with businesses, the communities or other colleges). It means determining the systematic management aspect of what and how to develop and implement the SCR systems and mechanisms, what resources are needed rather than just planning for who to relate to, what to relate to and how to relate to. The fundamental principle is to look at the overarching management principles that support the PDCA cycle rather than just the ordinary SCR administrative functions. It highlights the management of the SCR plan and program, SCR program evaluation and assessment and its SCR resources pertaining to a quality SCR plan and program in terms of its SCR program and SCR organization and implementation, SCR program context, content and SCR strategies and key performance indicators of the quality practices in the organization and

deployment of its SCR quality implementation. It means determining the key requirements of the students, stakeholders, and market, and how it builds and keeps effective relationships with them, and the mechanism used to collect information and complaints. The key question is how the institution, college, programs or administrative units builds relationships that should go beyond the "engagement" with the students, stakeholders and market to increase learning and foster continuing interactions and positive referrals.

- **Stakeholders' and Communities Relationships' Interactions Outcomes** – The very heart and soul of teaching and learning is that the SCR contributes to the development of not only the faculty members but the students, stakeholders and community. As such, the conduct of SCR should bring about a progressive built-up of the SCR that benefits others. Student and stakeholder satisfaction and dissatisfaction measurements might include both a numerical rating scale and descriptors for each unit in the scale. Actionable student and stakeholder and communities satisfaction measurements provide useful information about specific educational program and service features, delivery, interactions, and transactions that affect student, stakeholders and communities development and learning and students' and stakeholders' and communities' future actions (e.g., transfers or positive referrals). The key question is how are these relationsips bulit that leads to the interactions that should be bi-directional, contructive and developmental.

- **Stakeholders' and Communities Relationships' Evaluation and Review Processes** – As quality is systemic, it means determining student and stakeholder and communities satisfaction and dissatisfaction and potentially engagement, including how it captures actionable information that reflects students' and stakeholders' and communities' future interactions and potential for positive engagements. One should ask how one follows up on its interactions with students and stakeholders and communities to receive prompt and actionable feedback. The key question is how it obtains and uses information on student and stakeholder and communities satisfaction relative to satisfaction with other HEIs, competitors and education community benchmarks so it can gauge its performance. This would mean that the systematic IPOO (Input – Process – Output – Outcome) of the SCR plan and program development, the SCR plan, program, processes, procedures and people evaluation and review must be designed to cover all aspects of the SCR quality system. As the SCR system should be systematic, the detailed processes, policies, procedures and people must be spelt out and implemented cohesively and consistently and across board throughout the whole institution, college, programs or administrative units. It must comprehensively cover the audit, assessment and assurance of SCR quality comprehensively. Quality Audit of SCR deals with ensuring the existence of the processes, procedures, policies, people and resources, with its standards and criteria stated and implemented as a comprehensive system that are well-documented and well-evidenced to form an

evidence – based mechanism to ensure SCR quality. Quality assessment of the SCR system will use the well-documented and well-evidenced mechanism with specific key performance indicators to support its evaluation and assessment that they conform to and comply with the SCR standards and criteria, and determining the level of the SCR performance through the determination of variations or departure from the standards and criteria, that needs to be addressed and actioned on to bring about continuous improvement of the SCR plan, program and systems after its audit and assessment. The assessment that brings about positive development and improvement would mean that the processes in place assure the existence of quality in the SCR plan, program and systems.

- **Stakeholders' and Communities Relationships' Assessment and Use of Stakeholders' and Communities Relationships' Indicators and Benchmarks** – This call for the identification and deployment of the SCR key performance indicators to serve as measurements of the SCR performance. Determining students', stakeholders' and communities' satisfaction and dissatisfaction and / or engagement might include the use of any or all of the following: surveys, formal and informal feedback, engagement conflict data and complaints. Information might be gathered on the Web, through personal contact or a third party, or by mail. A key proxy SCR indicator should be objective and constructive and can be used as an overall performance determination of the SCR conducted by the institution, college, programs or administrative units. Normally the level of SCR performance, its trends and comparison must be determined and benchmarked with its historical data and performance, or the best SCR outputs and outcomes in the industry or nearest competing institution, college, programs or administrative units.

- **Quality of Stakeholders' and Communities Relationships and Institutional Reputation** – The quality of SCR is normally denominated in terms of the infrastructure used, the environment created to induce SCR interactions and experience based on the context, the content and the strategies used to ultimately create SCR value to the institution, colleges, programs or administrative units, its stakeholders, students and community. This take-home value is the ultimate of the SCR experience. If SCR does not add value to the SCR development, something is related to but nothing is developed and learned as there is no indication of developmental improvements. A total SCR environment and SCR value addition forms the basic requirement in the quality of SCR. The higher the value of the relationship, the higher the reputational aspects of the institution, college or programs in the eyes of the stakeholders and communities.

(b) Criteria Requirements

For ALL criteria and items, it is important that they meet the minimum requirements as defined and are audited and assessed for performance within the societal responsibilities and communities service management quality assurance system to accomplish and achieve the overarching missions of Teaching, Learning and Research and Social Services of the institution, college or programs and its supporting infrastructures, facilities and supporting services.

Basically, in each of the Criterion, the evaluation factors are the ADLI (Approach, Deployment, Learning and Integration) for its Criterion 11.1 to 11.3. The performance scoring of 0% to 100% is based on the ADLI performance or degree of maturity in the ITEMS contributing to each Criterion. The overall performance is determined by the weighted average of "% SCORE * Weight" based on ADLI.

For the RESULTS Criteria, the evaluation factors are the LeTCI (Level, Trend, Comparatives and Integration) of its Criterion 11.4 and 11.5. The Le % performance scorings is based on the Levels of performance indicated in ITQAN 2020: KSU-QMS Handbook 2 (4th Edition, May 2017) of the quantitative or qualitative KPI. They are then scored on T, C and I arriving at the overall performance that is determined by the weighted average of "% SCORE * Weight" based on LeTCI.

(c) Requirements of Standard, Criteria and Items of Standard 11

For details of Standards, Criteria and Items please use the following to meet the requirements:

- **INSTITUION:** EEC-NCAAA Standards _Institutional. Version 3, Muharram 1437H, October 2015
- **PROGRAM:** EEC-NCAAA Standards _Programs, Version 3, Muharram 1437H, October 2015.

Part 2 – Results-based Performance Criterion

11.4 Key Performance Indicators	
11.4.1	Evaluation of satisfaction of employers/business operators/ users of graduates/alumni / graduates on competency of graduates (Means average and Level achieved based on survey)
11.4.2	Evaluation of the systems and mechanisms used in providing academic services to the society according to the goals of the institution, college or program (Means average and Level achieved based on survey)
11.4.3	EEC-NCAAA S11.1 – Proportion of full time teaching and other staff actively engaged in community service activities
11.4.4	EEC-NCAAA S11.2 – Number of community education program provided in proportion of the number of departments
11.5 Additional College KPI	
(describe additional KPI or benchmarks used by college or programs and provide evidence or documentations of KPI achievement)	
11.5.1	KPI specific to Institution, College or Program)
11.5.2 (KPI specific to Institution, College or Program)	

Overall Assessment of Standard 11

Once the above Process-based and the Results-based criteria as discussed above have been audited and assessed, the institution/college/programs or administrative units will need to provide a summarized summative and aggregated overall performance of this Standard in the SSR.

Overall Assessment of Governance and Administration Summary
• 11.1 Institutional Policies on Community Relationships
11.2 Interactions With the Community
11.3 Institutional Reputation
11.4 Key Performance Indicators
11.4 Additional College KPI

4.4. Glossary of Terminologies and Concepts

Concepts and Terminology for Use in Accreditation and Quality Assurance in Saudi Arabia by EEC-NCAAA and in the ITQAN 2002: KSU – QMS

Source: EEC-NCAAA (2015), *Handbook for Quality Assurance and Accreditation in Saudi Arabia, Part 1 – The System for Quality Assurance and Accreditation*, EEC-NCAAA, October 2015 and National Institute of Science and Technology (2015), *MBNQA Education Criteria for Performance Excellence*, Step-by-Step Instructions for INDEPENDENT REVIEW Scorebook Preparation, 2015 and NIST (2015), *Malcolm Baldrige National Quality Award 2015/2016 Education Criteria for Performance Excellence*, National Institute of Standards and Technology, US Department of Commerce, Washington, DC. Available at: www.nist.gov/

To assist in achieving common understanding of important concepts and terms used in the system of accreditation and quality assurance, the EEC-NCAAA has determined that for its purposes the terms identified below will have the meanings described. The definitions are shown in italics, followed by explanatory notes. The ITQAN 2020: KSU-QMS Handbooks (4th Edition, May 2017) has adopted these definitions and terminology without any changes as they form the fundamentals of the supervising EEC-NCAAA that prevails. Some of those that are not unique to EEC-NCAAA but are from other sources are referenced as such.

Accountability

The responsibility of an individual, an institution or an organization to another authority for his or her, or its activities.

In post-secondary education an institution is usually "accountable" and must provide reports to a government or government agency that provides it with funds or approves its establishment. Within an institution faculty and staff are "accountable" to senior management and senior management in turn is responsible to a Board or Council.

In systems of accreditation and quality assurance there is usually a separation of the organizations responsible for institutional accountability and those responsible for independent quality assessment.

Accreditation

Formal certification by a recognized authority that a program or an institution meets required standards.

To be accredited, institutions or programs must comply with generally expected standards of good practice. The Commission has defined the standards it will apply in two documents, *Standards for Quality Assurance and Accreditation in Higher Education Institutions* and *Standards for Quality Assurance and Accreditation in Higher Education Programs.* Reference is also made to several other documents including a *National Qualifications* Framework that describes expected general standards of learning outcomes in four domains of learning and a statement showing the application of these standards to distance education programs. Standards for technical training are in preparation. These statements are expressed in general terms applicable to all fields of study. It is also necessary for programs to meet requirements for professional practice in many professional fields. Details of these requirements are not yet available from the Commission. Until they are available institutions are expected to give consideration to the requirements of specialized international accreditations in the field of study concerned. Accreditation may be given initially on a provisional basis, and this will normally be done when plans for a new program or institution are considered. After a program has been in operation for sufficient time for the first group of students to complete their program a review will be conducted, the provisional designation may be removed and the program given full accreditation. Accreditation will normally be valid for a period of five years after which programs will need to be reviewed for reaccreditation on a five yearly basis.

In the quality assurance systems of different countries there are several different forms of accreditation See descriptions of institutional accreditation, program accreditation, professional accreditation, provisional accreditation, and international accreditation.

Alignment

Alignment refers to the consistency of plans, processes, information, resource decisions, actions, results, and analyses to support key organization-wide goals. It requires the use of complementary measures and information for planning, tracking, analysis, and improvement at three levels: the organization level, the key process level, and the work unit level.

Approach

Approach refers to the methods used by the institution, college or programs or administrative units to address the Standard and Criteria and Item requirements in all the Standards. Approach includes the appropriateness of the methods to the Criteria and Item requirements.

Assessment

A process of measuring performance in relation to established standards or criteria

Assessment is commonly applied in two different contexts: the assessment of students' performance on tests or examinations or other assigned tasks in order to measure their achievement of intended learning outcomes; and the process of measuring the quality of performance of elements within an educational institution.

In the second of these senses the term is used for assessment of quality of teaching, the effectiveness of a program or a course in achieving its objectives, or the effectiveness of many other elements of an institution's operations. Standards of performance for the purposes of these assessments can be derived from different sources, but from the perspective of the Commission in carrying out its accreditation and approval responsibilities the standards are defined in the documents it has approved for these purposes, particularly the *National Qualifications Framework* and the *Standards for Quality Assurance and Accreditation of Higher Education Institutions.*

Audit

An independent review to verify that reports represent a true and correct record of activity, and that recognized standards have been met.

The term "audit" is widely used for financial audits conducted by an independent authority to certify the accuracy of financial reports and compliance with accounting standards.

In post-secondary quality systems the term is used for external independent reviews of an institution's quality and the processes of quality assurance it has established. These reviews are principally based on reports of self-studies carried out by an institution, and, like financial audits, verify the conclusions of those self-studies. Although standards of good practice are considered in this process, in a quality audit it

is customary to give particular attention to the objectives established by an institution and to report on whether the processes used in an institution are effective in achieving those objectives.

Benchmarks

Points of comparison or levels of performance used for establishing objectives and evaluating performance.

Benchmarks may be current levels of performance at an institution (for example, the current completion rate for students in business studies), standards established by an external agency, or standards of performance at another institution or group of institutions selected for comparison. (For example, the number of research publications per full time academic staff member at the University of xxxxx). An institution may select another institution similar to itself as a benchmark against which it can compare the quality of its work, or particular parts of an institution against which equivalent groups within their own institution can be compared. It is usually considered desirable in making these comparisons to use indicators (such as those noted above) that can be stated in specific terms.

Blended Learning

A program in which students are taught through a combination of regular on campus instruction and distance education or packaged materials.

Arrangements can be made for blended modes of instruction in a variety of ways including a regular on campus course in which sections of the course are taught using packaged self-contained materials, or a program in which some courses are taught using distance education methodology and some through on campus lectures, tutorials of other face to face methodology. In situations where blended approaches are used appropriate forms of student assistance and support must be provided to support students learning in both forms of instruction.

Comparisons (C)

Comparisons refer to how the institution, college, programs or administrative units' results compare with the results of other organizations. Comparisons can be made to the results of competitors, organizations providing similar products and services, industry averages, or best-in-class organizations. The maturity of the organization should help determine what comparisons are most relevant.

Credits

Points or hours allocated by an institution to specify the work requirements, or the volume or amount of learning expected for a unit, subject or program of study.

It is common practice to assign a number of credits to units or courses within a program and to specify a number of credits for a total program. Credits may be associated with program inputs such as hours of instruction, laboratory work, or expectations for time spent in self-directed study. The term "credit hours" is used in these systems based on formulae that give differing levels of recognition for formal instruction, laboratory or tutorial participation, and practical work. In some other systems the term "credit points" is used for the notional amount of learning achieved by an average learner over a period of time. The number of credits allocated for a particular amount of work or learning varies between countries. For example some countries use the American based Carnegie credit hour system which allocates 30 credit hours for the amount of academic work normally expected in a full time academic year of study at undergraduate level. Some other countries use 120 points for an equivalent volume of learning. Common practice in the Kingdom of Saudi Arabia is to use 30 credit hours (or slightly more depending on the number of contact hours and mode of instruction) for the work expected in an academic year.

Deployment

Deployment refers to the extent to which an approach is applied in addressing the Standard and Criteria and Item requirements in all the Standards. Deployment is evaluated on the basis of the breadth and depth of the application of the approach to relevant work units throughout the institution, college or programs.

Distance Education

A mode of teaching and learning in which students undertake a major proportion of their studies on an individual basis at a location or locations away from a campus of an institution.

Student learning may be supported by print or electronic materials, and a variety of mechanisms are sometimes used for interaction between students, through the internet, video or radio linkages, or periodic study group activities in appropriate locations. Similarly interaction with faculty may take a variety of forms.

A distance education institution is one offers that offers all its programs by distance education (whether through print-based materials or through electronic learning or a combination of both) to students who do not attend classes on camp us, but instead study in their own locations, often at a time of their own choosing. Where combinations of distance education processes or packaged self-contained materials are used within courses, or for different courses within a program, the terms blended learning or dual mode instruction are frequently used to describe what is done. Dual mode institutions are ones that offer a combination of distance education and campus based programs.

Domains of Learning

Broad categories of types of learning expected in a program of study.

Descriptions of the knowledge and skill students are expected to gain in a program are grouped into broad categories called domains. Although the number and titles for these groupings vary, domains commonly include five to seven broad categories that involve different types of learning and strategies for teaching and assessment of learning in those categories. The domains used in the higher education component of the *National Qualifications Framework* for Saudi Arabia are Knowledge, (the ability to recall and present information), Cognitive Skills (the ability to apply concepts and principles in thinking and problem solving), Interpersonal Skills and Responsibility, (the ability to work effectively in groups, exercise leadership, and take responsibility for their own independent learning, and the ethical and moral development that is associated with these abilities), and Communication, Information Technology and Numerical Skills (including basic mathematical and communication skills and ability to use communications technology). Psychomotor skills are very important in some fields of study and are considered as an additional domain where relevant to the program concerned.

Dual Mode Institution

Dual mode institutions are institutions that offer some programs to students through distance education and some through traditional campus based instruction.

It is increasingly common for institutions to use electronic materials and learning packages as supplements to the methods of instruction in campus based studies and these may take a variety of forms. Where this is done the approach may have many similarities to distance education methodology. However the terms "dual mode" is normally used for institutions that offer both off campus distance education programs and campus based instruction.

Evaluation

The process of assessing and assigning value to a facility or activity.

The term evaluation is sometimes used interchangeably with assessment but it has a slightly different meaning associated with judgments about the quality or value of the matter being considered. The "valuing" component of consideration may be more open ended and interpretive than an assessment which in normally associated with measurement of performance in relation to fixed and predetermined standards.

External Quality Assurance

Processes of review and evaluation of institutions and their programs and activities by an independent external agency.

External quality assurance normally involves periodic, independent peer reviews based on reports of internal self-studies and designed for the dual purposes of assessing quality and validating the conclusions of internal studies.

External quality assessments are usually more selective than internal reviews, and may pay particular attention to student learning outcomes and other matters identified as policy priorities by the institution, or by the government or government to which the institution is responsible. External quality assurance may involve consideration of selected key performance indicators to be used in reviews on a national basis.

Goals or Aims

General statements of desired developments, which apply a mission to broad areas of activity and provide a guide for establishing objectives and detailed planning.

Goals or aims fall between mission, which defines a broad overall purpose, and specific objectives established as targets for achievement and which usually describe specific measurable outcomes by a specified time. They may relate to any aspect of an institution's activities.

Inputs

The resources available to and used by an institution to provide its programs.

Inputs include financial resources, facilities and equipment, faculty, and students. Indicators of quality of faculty as an input could include the number of faculty and their levels of qualifications and staff/student ratios. Indicators of equipment as an input could include such things as the ratio of computer terminals to students, or proportions of down time due to equipment malfunction.

Until recently quality assurance systems have relied heavily on input indicators as measures of quality, using things such as financial resources, qualifications of faculty, extent of library collections and availability of computer equipment. However although these are still important as enabling provisions, emphasis has shifted towards outcome measures relating to the quality of research and student learning outcomes.

Institutional Approval

The approval of an institution based on recognition that its resources, processes and learning outcomes meet required standards for an institution of its type and the level of its programs.

Approval of an institution will normally specify the fields of study the institution is able to offer and the levels at which that can be done. The final license issued to permit the institution to operate will specify the levels and range of programs it is permitted to offer. For example a college may be accredited to offer programs in business studies and engineering up to the level of bachelor, and in applied science up to the level of diploma. A university focusing on those particular fields may be approved to offer programs up to doctoral level in science, engineering and business and up to master's level in social sciences.

Institutional approval indicates that an institution is considered to have the capacity to offer programs in designated fields of study up to the level specified. The final license will formally specify what it is authorized to do. Each program offered within those limits must be accredited, to ensure that the program meets required standards.

Integration (I)

"Integration" refers to the harmonization of plans, processes, information, resource decisions, actions, results, and analyses to support key organization-wide goals. Effective integration goes beyond alignment and is achieved when the individual components of a performance management system operate as a fully interconnected unit.

As a process evaluation factor, "integration" covers the range from organizational "alignment" of approaches in the lower scoring ranges to "integration" of approaches in the higher ranges

Alignment refers to the consistency of plans, processes, information, resource decisions, actions, results, and analyses to support key organization-wide goals. It requires the use of complementary measures and information for planning, tracking, analysis, and improvement at three levels: the organization level, the key process level, and the work unit level.

Internal Quality Assurance

Processes of quality assurance carried out within and by or for a higher education institution.

Internal quality assurance includes not only the processes of monitoring and review that an institution manages itself, but also its use on its own initiative of outside people from other institutions, from industry or the professions, or from other accreditation or quality assurance agencies to review and provide advice on its programs and activities. Internal quality assurance is normally comprehensive, dealing with inputs, processes and outcomes, with all areas of an institution's activities, and with faculty, staff and students in all parts of the institution.

International Accreditation

Accreditation of an institution or of its programs by an accreditation agency established in another country.

A number of institutions have arranged for evaluation and accreditation of their colleges or programs by international accrediting agencies as part of their quality assurance arrangements. This has proved valuable in stimulating rigorous internal reviews and enhancing quality, and in establishing their reputation. These activities are not required as part of the accreditation and quality assurance system in Saudi Arabia, but when they are carried out they are considered part of the institution's internal quality assurance and review processes, and the work done and conclusions reached will be considered and taken into account during the reviews conducted by the Commission.

Key Performance Indicators (KPIs)

Selected performance indicators regarded as particularly important for the purpose of assessing performance.

An institution may identify a short list of KPIs that it regards as particularly important in assessing performance, and require evidence on those KPIs from a number of sections of the institution in addition to any others that different groups may choose for their own purposes. Similarly, a national quality agency such as the Commission may identify a small list of KPIs reflecting national issues or policy objectives for use by all institutions.

Learning

Learning in the context of the evaluation factors, refers to new knowledge or skills acquired through evaluation, study, experience, and innovation.

Learning Outcomes

The learning that results from participation in a course or program.

The term learning outcomes is commonly used to refer to the learning that results from a course or program undertaken by students. Learning outcomes are the result of the teaching process. Reference is often made to ***Intended Learning Outcomes*** to mean the learning objectives a course or program is designed to develop.

The EEC-NCAAA has identified broad categories or types of learning outcomes in five groups or domains, knowledge, cognitive skills, interpersonal skills and responsibility, communication, IT and numerical skills, and psychomotor skills, and has described in general terms the level of knowledge and skill expected for different qualifications. There are differences in how these learning outcomes are developed by students and an important aspect of program and course planning is to plan for teaching processes and forms of assessment that will be appropriate for these different types of intended learning outcomes

Level

The intellectual standard and complexity of learning expected as students' progress through a program of study.

The degree of difficulty or complexity of learning increases as students advance through a program and these increases are defined by descriptions of the learning outcomes that are expected. Levels may be defined for years of study—first year, second year, third year, and so on, or for academic awards such as a diploma, bachelor, master, and doctor.

License

Formal approval, normally by a government or a government agency, to operate or carry out certain activities.

A license may be given to an institution, formally authorizing it to commence operation and offer programs in fields and at levels specified in the license. If the license is revoked the institution must cease to operate. A different type of license may also be given to individuals permitting them to engage in certain activities. A license may be granted to individuals who have completed professional programs and who wish to practice in that profession.

Licensing and accreditation are closely linked. The granting of a license for an institution to operate normally follows or is conditional on assessment of its quality through an approval and accreditation process. The granting of a license for a person to practice in a profession normally follows accreditation of the program that such a person has completed.

Major Change in a Program

A major change in a program is one that affects the basis for its accreditation.

It is expected that adjustments will be required in programs and courses from time to time in response to changing circumstances and results of course and program evaluations. Such changes are highly desirable to ensure that programs are to be kept up to date. However if there is a major change to an accredited program it could affect the program's accreditation status and any such change should be approved by an institutions senior academic committee and notified to the Commission at least one full semester before it is introduced. The Commission can then assess the impact of the change on accreditation. Examples of major changes would be the addition or deletion of a major track within a program, (e.g. accounting or international finance majors within a commerce or business degree), the addition or deletion of a core course (e.g. mathematics in an engineering degree), a change in title that implied a new or different field of study or qualification in a different profession, re-orientation or development of a program to prepare students for a different occupation or profession, a change in the length of a program, or a new exit point within a longer program (e.g. the granting of a diploma within a bachelor's degree program) The Commission should also be notified if a succession of minor programs has a cumulative effect that is equivalent to a major change as described above.

Mission

A brief general statement setting out the principal policy objectives for development of an institution.

While stated in general terms a mission statement should be sufficiently precise to serve as a guide to planning and decision making at all levels of the organization, and should actually be used as a basis for decision making. (*For example, "To develop an international reputation for the quality of applied research and technology transfer, and for the creativity and entrepreneurial skill of graduates.")*

Mode of Instruction

The form of instruction such as lecture, tutorial, laboratory, individual assignment etc.

Organization for instruction is normally based on planned modes of instruction with credit hour allocations based on the amount of contact time in each of these modes. Examples are lectures, tutorials, or laboratories. The term should not be confused with teaching strategies which are the techniques used by an instructor operating within one or more of those modes to present information, develop problem solving skills or habits of responsibility. Different strategies can be incorporated into various modes of instruction as part of educational planning to develop desired learning outcomes.

Objectives

Specific statements that apply the mission and goals to particular areas of activity and indicate intended results.

Desirably objectives should be stated in specific measurable terms setting out intended levels of performance that are to be achieved within stated time periods. Objectives may relate to intended learning outcomes and may be referred to as learning, course or program objectives. Objectives may also be set for program or institutional developments not necessarily related to learning outcomes. Objectives may be expressed as specific performance levels on indicators. *(For example, "That by 2008, 80% of final year undergraduate students will have achieved a score of at least xxxx on xxxx (English language test).)* Objectives may be criterion referenced (based on defined levels of performance) or norm referenced (based on comparisons of performance with other groups or institutions).

Outcomes

The results of teaching, learning and research processes of an institution.

This term is usually used for qualitative descriptions of what is produced by an institution or in a program as a result of its processes. For example, reference to student learning outcomes normally means the quality of their learning and what they are able to do as a result of completing the programs in which they were enrolled. Similarly research outcomes usually relate to the quality and impact of research rather than simply a count of numbers of publications or research projects completed

Outputs

The products of an institutions activities, normally expressed in quantitative terms.

Outputs usually refer to quantitative measures of what is produced by an institution, such as the number of graduates or the number of faculty research publications.

Partner Institution

An institution with which a higher education institution has established a formal, contractual relationship for provision of services.

The exact nature of partnership arrangements can vary. In some cases a partnership may simply involve provision of a number of support services to a local institution. In others arrangements are made for the academic awards of the partner institution to be granted for studies undertaken in a local institution under supervision. However regardless of whether the awards are granted by a local institution or by an overseas provider, the requirements for operating an institution or teaching a program in Saudi Arabia must be fully met.

Peer Review

Evaluation and report on a program, institution or part of an institution by expert evaluators from similar institutions or professions who are specialists in the field concerned or with the organization and management of higher education institutions.

An important element in this concept is that the evaluators are peers, with experience with similar programs or institutions, who understand the nature, purposes and challenges faced by an institution. It is important that their understanding is recognized by the institution under review. It is also essential that those involved be completely independent of the institution being reviewed so there is no real or perceived conflict of interest, carefully trained for their task and committed to assisting in improvement. They should sensitive to the mission and objectives of the institution and programs involved and familiar with international standards for the type of program or institution under review.

Performance Indicators

Specific (and normally pre-selected) forms of evidence used by an institution or other agency to provide evidence about quality of performance.

Performance indicators should be as specific and as directly related as possible to the aims and objectives to which they relate. However direct measures of some of the most important objectives such as quality of students' learning are sometimes difficult to find. Consequently indirect evidence such as student evaluations of programs, employment outcomes, and employer surveys must sometimes be used. Since indirect indicators can be subject to other influences it is usual to use several different but related indicators for important objectives, and to interpret these using some independent system to verify the interpretations. The term triangulation is sometimes used where several indicators are used to provide evidence about an objective from different points of view. For example evidence about quality of faculty could be obtained from several indicators such as levels of qualifications, research output, and student ratings of teaching effectiveness.

Performance levels (Le)

Performance levels refer to numerical information that places or positions an organization's results and performance on a meaningful measurement scale. Performance levels permit evaluation relative to past performance, projections, goals, and appropriate comparisons.

Processes

The administrative arrangements, policies, and organizational procedures carried out by an institution in planning, reviewing and delivering its programs.

Processes are what are done in an institution to use the inputs available to it to produce its outputs and outcomes. The term includes teaching processes, assessment procedures, and processes for managing research and community activities as well as a wide range of other activities that have direct or indirect impact on educational programs.

Professional Accreditation

The accreditation of a program to prepare students for a profession, certifying that it develops the knowledge and skills needed to practice in the profession concerned at the standard of proficiency required.

Professional accreditation is designed to ensure that in addition to meeting general academic standards, programs develop the specific knowledge and skill to practice the profession concerned in the community. In most countries this applies in professional fields such as medicine and other health-related fields, engineering, accounting, psychology, law and many others. In some countries this form of specialized professional accreditation may be given by professional associations recognized by the government for this purpose, or by government agencies.

This form of accreditation differs from academic accreditation, which certifies that a program meets academic standards and conforms to requirements of a qualifications framework. In practice, both academic and professional accreditations are normally required for professional fields although the two may be combined in a single accreditation process.

Program

A coherent program of study followed by students in an academic field or leading to a professional qualification, the successful completion of which qualifies them for an academic award.

A program is regarded as an integrated package of courses and activities leading to a qualification, but the distinction between what is regarded as a single program or a cluster of related programs is difficult to define and may be best explained through examples.

A bachelor's degree program to prepare a student as a civil engineer would be regarded as a different program from one to prepare a mechanical engineer, even though there may be some courses that are common to both. Similarly, if a student had completed the bachelor's degree program and wished to take a post graduate program leading to a master's degree or a doctorate in the same general field that would be

regarded as a separate program. The test in these examples relates to there being a qualification that is regarded as being complete in itself, and in the case of a professional program, qualifying the person who has taken the program for professional practice in the field. The distinction does not necessarily relate to organization of an institution or college into departments. In the particular example given it is likely that a civil engineering department would offer both the undergraduate and the postgraduate programs. It would also be possible if an institution wished to organize itself in that way for a single department to offer programs in both civil and mechanical engineering.

The title of an academic award is not necessarily a useful guide to what should be regarded as a program. For example general titles such as Bachelor of Arts, or Business, or Science, could include many different programs. In an Arts degree there could be programs in history and or social sciences, in psychology, in social work, or many others. A Business degree could include separate programs for accountants, for economists, or for management and administration, and these would be different programs leading to quite different occupational skills.

While the programs that have been used in these examples should be regarded as separate entities, and should be accredited as such, groups of related programs can be considered together in the accreditation process provided it is possible for external review panels to include the necessary expertise.

Program Accreditation.

Accreditation of a program of study certifying that it meets standards required for the delivery of a program in that field at the level concerned.

Accreditation of a programs involves a judgment that the quality and standards are appropriate for the award to which it leads. The assessment of standards takes into account both the nature of teaching and learning in different fields of study, and the level, complexity, and quantity of learning required for the award. The general standards of learning outcomes for programs that lead to awards such as bachelor, master or doctor are defined in the *National Qualifications Framework* and must be met in all programs leading to these awards, regardless of the type of institution offering the program. In addition to meeting the requirements of the Framework a program must meet the standards set out in "Standards for Quality Assurance and Accreditation of Higher Education Programs", and in a professional program must provide the particular knowledge and skill required for practice in the field concerned.

Provisional Accreditation

Accreditation granted on a provisional or temporary basis for a new institution or program after assessment of plans for development.

For a new institution or program provisional accreditation may be given on the basis of detailed plans. This allows the institution to start operating, or to teach the program, with reasonable confidence that if the plans are implemented as proposed accreditation is likely to be granted. This process means that students can rely on the quality of the institution and of the provisionally accredited program when it is first introduced. The actions of the institution during this preliminary stage are monitored and reports on progress must be provided. Full accreditation must be applied for when the first group of students have completed their programs. If the plans are not implemented at an acceptable level of quality within the time specified the provisional accreditation will lapse and the license to operate or offer the program will be revoked.

Qualifications Framework

A document setting out the nature, amount, and levels or standards of learning required for academic or technical awards.

Qualifications frameworks specify increasing levels of mastery of knowledge and skill that are required for academic, vocational or technical awards.

Learning expectations are described in broad areas or domains, such as knowledge and the ability to recall information, cognitive skills such as the mastery of concepts, principles and theories and ability to apply them in problem solving and critical thinking, skills in communication and information technology, capacity for self-directed learning, and ability to work effectively and constructively in group situations. Qualifications frameworks may also incorporate student attributes relating to values and cultural awareness that reflect national culture and educational policy.

In many cases the broadly defined frameworks are associated with more detailed specification of the particular knowledge and skill required for specific professional fields or disciplines of knowledge. These may be used as basic reference points for programs leading to professional accreditation and for the registration or licensing of graduates to practice in professional fields such as medicine, engineering, accounting, law, or education.

Quality

The value, worth, or standard of an institution or program in relation to generally accepted standards for an institution or program of its type.

Assessments of quality are generally based on performance in relation to accepted standards of good practice, but also "fitness for purpose" which recognizes that there are differing requirements for different types of institution or program, and important differences in mission that is relevant to consideration of an institutions quality. Consideration is also given to "fitness of purpose" to take account of the appropriateness of the mission of an institution for the environment within which it operates.

The term "quality" is a relative one comparable to "value", "worth" or "standard" in other contexts. To be of use in planning and evaluation in post-secondary education the term should be related to some defined characteristics, and to some levels or benchmarks of performance.

When used as a general term without specification of any particular characteristics of the system (*for example as in "the quality of higher education" or "the quality of an institution")* it will be taken to refer to a range of elements including but not limited to the level of student achievement, the ability and qualifications of faculty, the standard of facilities and equipment, the effectiveness of teaching, planning and administrative processes, and the relevance of programs. In the system of quality assurance and accreditation in Saudi Arabia reference in assessing quality should be made to the standards identified by the EEC-NCAAA in eleven areas of activity.

In any specific situation some aspects of performance may be of relatively high quality and others of relatively low quality and the balance may depend on the mission and priorities of an institution. Consequently an overall assessment must take account of value judgments' about the selection and relative importance of characteristics for consideration, and understanding of what should be regarded as good practice in relation to each of them.

"Quality" is sometimes defined by quality agencies as meaning the single dimension of "fitness for purpose", an approach that gives particular prominence to the importance of diversity between institutions in mission and objectives. Under this definition the standard of performance is meant to be subsumed within the concept of fitness for the purposes (or mission and objectives) defined by institutions. This definition is sometimes criticized by others who believe it gives inadequate consideration to standards of performance.

Because of potential confusion arising from differing interpretations and a need for clear guidance for institutions about criteria for evaluations of quality, most quality agencies make specific reference to "general criteria of good practice" in defining criteria for evaluation, and provide guidelines or reference documents that spell out matters for consideration and descriptions of what is regarded as good practice.

Quality Assurance

Processes of assessment, evaluation and follow-up relating to quality of performance, which serve two distinct purposes:

(a) To ensure that desired levels of quality are maintained and improved; and
(b) To assure stakeholders that quality is being maintained at levels comparable to good practice in highly regarded institutions elsewhere in the world.

Stakeholders in this context include students, the government and the wider community, including parents, professional associations and industry.

Quality assurance normally involves both internal and external processes. Mechanisms for quality assurance are expected within each institution on a continuing basis as part of normal program provision and usually involve some external input. However the public credibility of claims of quality requires periodic external validation by an independent authority and the independent external advice is also an important element in strategies for improvement.

Quality Improvement

Changes in inputs, processes and outcomes that improve the quality of performance, usually across the whole range of an institution's activities. The term may be used to describe the strategies used by an institution or other organization to bring about these changes and verify their results.

While principal responsibility for quality improvement necessarily rests with an institution delivering programs, actions taken by an outside authority through support services, incentives, or regulations may assist in a number of ways, and may also be described as quality improvement strategies. The term "quality enhancement" used in some quality assurance systems is considered to have the same meaning as "quality Improvement".

Responsible Ministry

The Ministry responsible for the establishment, regulation, or supervision of a higher education institution.

A number of different Ministries have responsibility for postsecondary institutions in their field of activity, and have established regulations for their activities. They may provide funding support, assist with quality improvement, and normally have systems for accountability including annual reporting arrangements. In its assessments of quality for purposes of accreditation and quality assurance, the Commission considers both the activities of the institutions and the results of their interactions with the responsible Ministry with which they are involved.

Results

Result refers to the extent to which results measures (often through segmentation) address important customer, product and service, market, process, and action-plan performance requirements identified in the Organizational Profile and in Process Items; include valid indicators of future performance; and are harmonized across processes and work units to support organization-wide goals.

Substantial Equivalence

A judgment that a unit, subject or other component of a program is equal in quality and equivalent in scope to one offered elsewhere.

This concept is particularly important when consideration is being given to allocation of credit for studies done at another institution, either within the country or elsewhere. The details of what is taught and the approach taken in teaching should vary according to the needs and background of different groups of students and the environment in which they live. Adaptations to meet these needs should not become a barrier to recognition for credit provided essential skills and understandings are developed and standards maintained.

Student Attributes

Special characteristics of students developed as a result of the particular policies and teaching strategies of an institution.

The development of particular student attributes is often an important part of the mission of an institution. For example an institution may adopt procedures to ensure students are particularly self-reliant, more creative and entrepreneurial, or more effective than would normally be the case in group situations. The term is normally reserved for attitudes, skills, and habits of behavior or personality characteristics that are exhibited in students' behavior in outside situations rather than for purely academic learning outcomes which may refer to abilities rather than actual behavior.

Teaching Strategies

The strategies used by an instructor to develop student learning.

Teaching strategies are the specific techniques used to develop student learning in various domains to develop student learning. Strategies may include, for example, question sequences to develop or apply concepts to new situations, value clarification, use of advance organizers to assist with memorization and recall of information, case studies, and group problem solving tasks, simulations, role playing and so on. The

term should not be confused with "modes of instruction", a term used to describe the form of organization for teaching or the delivery of training, such as lecture, tutorial, or laboratory.

Trends (T)

Trends refer to numerical information that shows the direction and rate of change for an organization's results. A minimum of three data points generally is needed to begin to ascertain a trend.

Value-Adding

The process of adding value (normally applied to the value of students' knowledge and skill) as a result of the teaching and learning activities of an institution or program.

The general level of knowledge and skill of students entering programs can vary widely between institutions. Consequently the concept of "value-adding" is important in considering the contribution an institution makes to students' learning. While an important concept in considering the quality of an institution's activities, it is difficult to apply objectively since documenting the extent of "value-added" depends on accurate measures of incoming knowledge and skill and valid attribution of causes of growth.

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Chapter 5 ITQAN 2020: KSU Performance Management System

ITQAN 2020: KSU Performance Management System

5.1. Performance Measurement and Management

Brown (2004) noted that HEIs should address their long-term strategic management development to enhance the strategic capability and organizational performance rather than its short-term and job-oriented focus (Cannon, 1994; Constable and McCormick, 1987). This was supported by Newkirk-Moore and Bracker's (1998) study that organizational performance is correlated to its strategic management development that must be congruent to the strategic needs and objectives (Temporal. 1990; Bolt, 1993; Burach *et al.*, 1997) rather than being based on a fragmented collection of individuals and small scale systems (Tovey, 1991; Mason, 1993). This brought about a proliferation of a variety of performance measurement frameworks (Keegan, *et al.*, 1989; Lynch and Cross, 1991; Fitzgerald *et al.*, 1991; Kaplan and Norton, 1993, 1994, 1996, 2001 and 2004; Neely *et al.*, 2002a). All these ultimately lead to organization performance excellence that includes the HEI as an organization of which there are two main international performance excellence models of the MBNQA (Malcolm Baldrige National Quality Award) and the EFQM (European Forum for Quality Management) with the various hybrid national quality awards which drive the organizational performance excellence worldwide.

Harrington (2005), stated that the 2000s era are focused on knowledge and adaptability through organizational excellence through its 5 pillars: process management, project management, change management, knowledge management and resource management that supports Waal's (2007) themes of high performance organizations as: achieving sustainable growth, ability to adapt to changes, long-term orientation, integrated management processes, focuses on core capabilities, and workforce development. Most HEIs had ignored this but is fast closing the gaps in the 21st century as they cannot afford to be left behind in this highly competitive and commercialized education industry. This is the basis of today's so-called accreditation to meet minimum educational quality; strive for quality management towards education excellence, with all these roads and quality and excellence journeys leading to being ranked as in a "consumer standard".

Marr and Schiuma, (2003) noted that there is a lack of a cohesive set of knowledge in performance management that presently is drawn from diverse management literature covering strategic management, operation management, organizational behavior, human resources, information management and accounting controls that contributes to this field (Neely, 2002; Marr and Schiuma, 2003; Franco-Santos and Bourne, 2005). Franco-Santos *et al.,* (2007) identified two key characteristics of a business performance management system as: "performance measures" and "supporting infrastructure" and 3 key processes of: "information provision", "measure design and selection" and "data capture". Performance measurement must revolutionize to performance management as measurement defines what had happened and not why or how it happened and performance management provides opportunities to refine or improve on the "what, why and how" mechanisms as it is a means to an end, namely, performance management. Bernardin *et al.,* (1998) viewed performance management in an organization as a "total system of gathering information, providing specific feedbacks to individuals or workgroups, and applying such information for the improvement of organizational effectiveness" that includes "organizational structure, culture, systems and processes and its ability to effect these changes based on performance measures" (Procurement Executives' Association, 1999). While business enterprises have moved towards these, the HEIs teaching and preaching such have sorely ignored nor practiced the same in their own institutions.

Kennerly and Neely (2002) identified 4 key factors affecting the evolutions of performance management systems as: *process* (integration of measurement with strategy development, business process review, proactive reviews, inclusion of internal and external stakeholders, inconsistent approach, insufficient time, lack of time, lack of integration); *people* – which is capability, competence (Sveiby, 1997) and capacity of dedicated resources, appropriate skills and management; *systems* which is the IT systems, IT development capabilities, integration of operations and IT budget, inappropriate "off the shelf system", knowledge management (Sveiby, 1997) and inflexible legacy system; and *culture* which includes communication, integrity, championship, common understanding, alignment of measures and rewards, management commitment and inertia, individual inertia and resistance, alignment of actions and measures. This was supported by Oakland's (1999) factors of top-management support, clear communication of strategic objectives, and inclusion of stakeholders and identifications of key drivers of performance.

5.2. Performance Management in HEI

A HEI, like any other organization has specific processes that support the achievement of its teaching-learning-research missions and contribution to academic and societal development of the community and stakeholders at large. These 3 key processes (Ashworth, 1999; Childe *et al.*, 1994; CIM-OSA Committee, 1989) are: the operational processes (that create, produce and deliver on educational value), the support processes (that support the operational processes and provides added value to the basic educational value (Garvin, 1998; Porter, 1980), and the management processes (encompassing the goal setting, controlling and organizational behavior processes). Verweire and Van den Berghe, (2003) argued that all these processes in the integrated performance management needs both strategic and maturity alignment with appropriate managerial and operational processes for performance measurement and management.

This underlies the imperatives that quality in the HEI must move from a monitoring stance to that of management focused on strategy (Cullen, *et al.*, 2003) that supports management through measurement (Bourne, *et al.*, 2005) which highlighted that the internal context factors that are interactive in nature are much more complex than the existing simplistic physical and formal systems affecting performance. The performance model of Martz (2001) for a university setting had the principles: to define performance expectations, create attainable but challenging goals, furnish clear measurements, encourage involvement and provide process clarity and feedback.

Education management had traditionally been viewed through the myopic lens of education fundamentals as opposed to the management fundamentals used in any profit or non-profit organization that led to "strategic management or basic management of the organization" as alienated or opposed to the conservative views of education. In this 21st century, the status quo conservative education fundamentals must be viewed through the strategic management lens to bring out the best of both principles – a marriage of education fundamentals and sound management principles. As a start, education quality is an unquestionable imperative, when supported with clear evidence or an evidence-based performance management system that are used as the planning parameters. It can be argued that the strategic triangularization of the quality-information-planning domains as expounded here, could lead to better education performance through the creation and delivery of educational value meeting the needs of the stakeholders and society, the HEI basic accountability of its stated mission through a well-planned and managed systematic approach towards education management.

While education excellence is an aim, this must be translated into functional and operational systems and mechanism that drive performance excellence in education as enshrined in the education criteria of MBNQA (NIST, 2015). The education excellence is led and driven by the strategic directions of leadership with a customer focus supported with integrated works systems for operations by its workforce, all of which is underscored by its measurement, analysis and knowledge management accomplishing and achieving key results in all these areas.

The rationale of the ITQAN 2020: KSU Performance Management System supports Andersen *et al.*'s (2006) holistic approach of harnessing the various tools and concepts into an overall framework where their inter-linkages are understood when responding to the internal and external challenges. While most of the framework looks at the macro or big picture, Rouse and Putterill (2003) proposed a macro-micro linkage of the: 1) interface between organization and stakeholders, 2) capacity and capability of resources, 3) planning-evaluation and resource-achievement, and 4) the basic core elements of input-activities-output. It must be noted that this approach of moving from the big picture at the organizational level to the operational level is the key determinant of success that supports Franco-Santos *et al.*, (2007), Bernardin *et al.*, (1998), Kennerly and Neely (2002), Harrington (2005), Newkirk-Moore and Bracker (1998), Temporal, (1990), Bolt, (1993), Burach *et al.*, (1997), Tovey, (1991) and Mason, (1993) views that were not clearly nor specifically addressed.

5.3. KSU-IR (Institutional Research) Framework

Institutional research is research conducted within an institution of higher education to provide information which supports institutional planning, policy formation and decision making. Although the activity of institutional research is commonly associated with the individual campus, it also is carried out within higher education systems to serve the governance responsibilities which reside there. This forms the basis of performance management in a HEI as discussed above. It is important to note that the quality-information-planning trio is the basis of operational aspects of the IR framework that links quality management, accreditation management and planning management via the information management of the data analytics.

Institutional research can be distinguished from research on postsecondary education which has as its purpose the advancement of knowledge about and practice in postsecondary education generally. The subject of institutional research is the individual college, university, or system. While institutional research can involve data and analyses which contribute to wider knowledge about how colleges and individuals function, this type of result generally is not sought for its own sake. Activities of institutional research are frequently undertaken in association with specific planning, policy, or decision situations.

Institutional research designed to answer such questions is a form of applied research. Information to answer specific questions can cover:

- How many sections of a specific course or whether specific programs should be offered?
- Is attrition a problem at our institution, in any specific college or program?
- Are our faculty salaries or tuition rate (if applicable) competitive with those paid by peer institutions or levied on peer programs intakes?
- Are the outcomes of our degree programs what the stated purposes of the programs suggest they should be in terms of defined, expected learning outcomes and in comparison with peers?

The assembling of the quantitative and qualitative information for use in periodic or ad hoc reviews of programs or organizational units illustrates the form of institutional research having characteristics of evaluation. Information on cost and productivity underlies judgments about efficiency. Information on other characteristics of programs and units and on outcomes leads to judgments about effectiveness or quality. Information on program purposes, on programs offered by other institutions, on the labor market and on potential demand produce judgments about the need for academic programs. Judgments of these types lead to decisions about program initiation, continuation, and improvement.

In 2016, Jason R. Lewis and Leah Ewing Ross of AIR proposed "*A Holistic Approach to IR*" that explores a variety of key concepts in a series of five core lessons:

- What it Means to be an IR Professional
- Transforming Data into Information for Decision Support
- Data Management and Governance
- Applied Research Design
- Data-Informed Decision Cultures

Key contributions of Institutional Research to Planning, Decision Making, and Policy Formulation where institutional research:

- Can aid in determining how the institution's several publics perceive its missions and goals and in specifying new or altered missions, goals and objectives by:
    - Assisting in relating performance to goals by assessing institutional outcomes and accomplishments, can point to areas in which performance does not appear to meet expectations and can suggest strategies for improvement.
    - Facilitating institutional self-study and accreditation processes and can contribute evidence that the college or university is accountable for its use of resources and performance.

- Can contribute to program planning and development by means of market research and needs assessment by:
    - Supporting intensive reviews of programs or departments by providing relevant factual evidence and by summarizing qualitative information.
    - Illuminating reviews and revisions of curricula by producing information on students' course-selection behaviour.
    - Providing information relevant to questions about the grade-giving behaviour of faculty and the grade-earning behaviour of students; such questions may arise from concerns about standards or about equity with students.
- Can study the culture of the college or university, investigating the extent to which various values and norms are present among the faculty, students and administrators and the extent to which the culture is shared or in conflict. Information from such investigations can inform the direction of planning or policy and can provide an understanding of potential obstacles to moving in new directions
- Underlie the improvement of instruction through:
    - Procedures and specific instruments used in the evaluation of instruction, such as student rating-of-instruction forms, are selected or developed by means of research.
    - Evaluation of instructional methods and media that is a process designed to lead to improvement and is guided by evidence from research.
- Can assist in identifying inefficiencies in instructional activities and in the allocation of resources with:
    - Data on class sizes, teaching loads and student-credit-hour productivity
    - Data on the incidence of small classes and on the frequency of offering of individual courses are made available to academic administrators.
- Can provide enrolment projections and providing analyses of enrolment trends and relationships which guide enrolment policy and suggest assumptions and strategies for enrolment planning through:
    - Data describing the student body can be related to enrolment goals.
    - Data on retention and attrition can reveal problems.
    - Institutional research on causes of attrition and on strategies for increasing retention can contribute to maximizing society's investment in education.
- Can support efforts to provide education to special types of students by assessing their preferences, predispositions and academic behaviour like:
    - In what regards do part-time students, minority-group students, women students, highly talented students, handicapped students, older students and others differ from

the traditional student in ways which have implications for the achievement of the educational goals of such students and of the college or university?
    - Students' program, course and scheduling behaviour can be summarized, and attempts to achieve student and institutional goals can be evaluated.
- Can assist with initiatives intended to foster access to the educational opportunities offered by the college or university by:
    - Contributing to attempts to ensure that the applicant's choice of the institution is an informed one.
    - Assisting in developing the consumer information which should be available to prospective students.
    - Determining financial affairs of students and used as consumer information as well as referents for the determination of financial aid programs and policies.
    - Determining effectiveness of the program of financial aid in achieving the goals set for this program that can be evaluated with the evaluation leading to improved use of financial aid resources
- Can be applied in the evaluation and improvement of such programs as academic advising, counselling, career planning, placement, intercollegiate athletics, health services and housing.
- Can contribute to the institution's development program through:
    - Assisting in organizing information about the institution used in proposals for external funding of specific projects;
    - Assisting in building case statements for fund-raising campaigns; and
    - Contributing to designing information-based strategies for seeking donations from foundations, corporations, and individuals.

Note: The above are direct excerpts from Saupe, J. L., (2009) "*The Functions of Institutional Research*", 2nd Edition, Association for Institutional Research, Florida State University, USA.

The bottom line is that institutional research alone cannot lead to sound plans, appropriate policies, or correct decisions for the college or university. The wisdom, integrity, and courage possessed by those who share the responsibilities of governance are the principal determinants of the soundness of plans, the appropriateness of policies, and the correctness of decisions. Institutional research can, however, provide data and information which contribute to and, in some instances, are essential for maintaining the quality of governance expected of an institution whose existence is based upon principles of rationality, wisdom and truth.

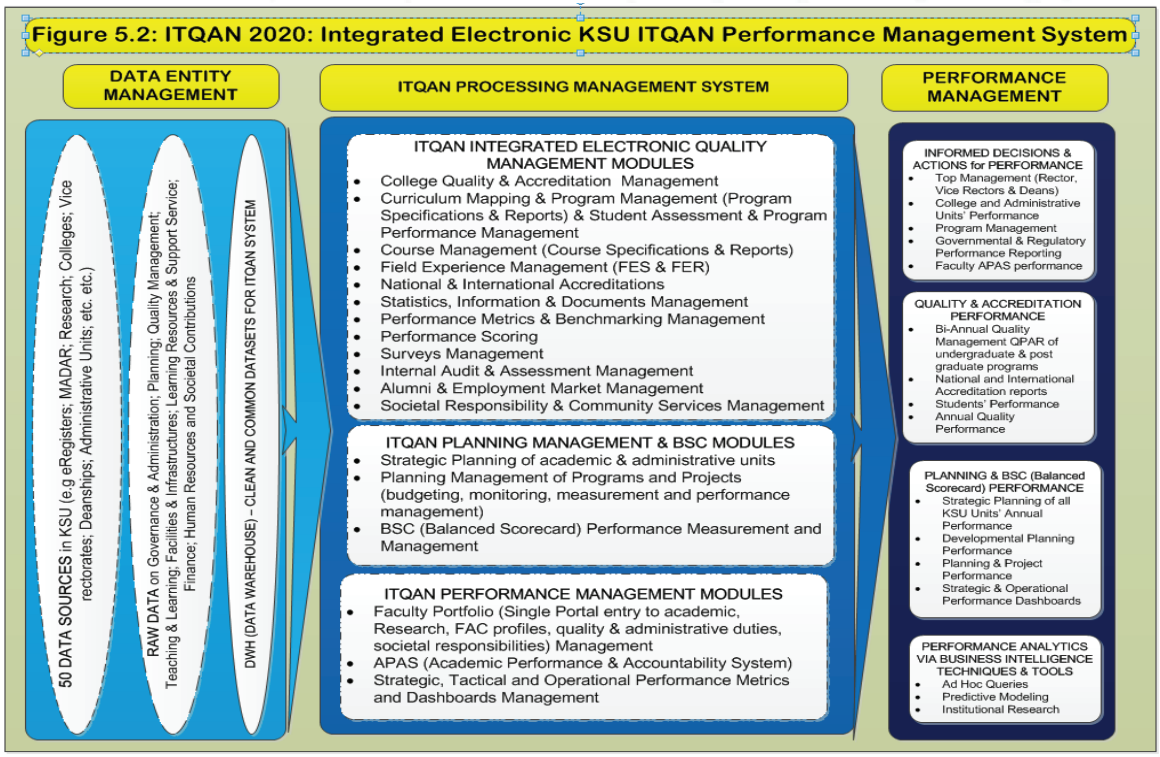
Basically, the ITQAN 2020: KSU Performance Management System is based on the KSU IR (Intuitional Research) Framework based on (1) the constituents of IR as discussed above, and (2) the duties and functions of IR in the KSU-IR (Figure 5.1). The KSU-IR framework is based on the latest AIR (Association for Institutional research) of the USA research that identified 5 main areas of duties and responsibilities of: (1) identify information needs; (2) collect, analyze, interpreted and report data and information; (3) plan and evaluate; (4) serve as stewards of data and information and (5) educate information producers, users and consumers.

Figure 5.1: KSU-IR (Institutional Research) Framework

Duties	Responsibilities
1. Identify information needs	• the iterative process of identifying relevant stakeholders and their decision support needs • assisting stakeholders in developing and refining research questions
2. Collect, analyze, interpret, and report data and information	• provide data, information, and analysis for decision support • process of collecting and reporting required and requested data • incorporates applied research methods to analyze data to provide information for decision making, including appropriate interpretation of analysis results
3. Plan and evaluate	• Planning may include operational, budgetary, and strategic planning • include program review, particularly for accreditation purposes • Formative and summative evaluation processes conducted at an institution use IR data and analysis for planning and decision making purposes
4. Serve as stewards of data and information	• institutional research's role in ensuring an institution-wide data strategy (privacy and security and ethical issues) • data quality assurance activities • ensuring data are appropriately accessible and usable to those who need them to make decisions
5. Educate information producers, users, and consumers	• training and coaching related to the use of data, analysis, and information to inform decision making • ensuring the ability to collect, access, analyze, and interpret information independently and in collaboration with other stakeholders • Scholarship to inform and improve data, information, and analysis for decision support

Source: Adapted from AIR (Association for Institutional Research) 2017, *Development of Duties and the Duties & Functions of Institutional Research*, FL, U.S.A, https://www.airweb.org/

5.4. Integrated electronic ITQAN 2020: KSU Performance Management System



While the KSU-IR is the conceptual institutional research framework of KSU, this needs to be operationalized and developed into an integrated and electronic framework that accomplish and achieve the key roles and functional areas of responsibilities in order to accomplish and achieve the fundamental mission of IR. The KSU-IR, as such, is used the basis of the electronic version of the ITQAN 2020: KSU Performance Management System (Figure 5.2) is based on the Strategic Performance Management System of Teay (2009) of the conceptual KSU-IR as discussed here for managing its institutional research strive and the performance management of KSU at the institutional, collegial and programmatic levels.

Basically, the ITQAN 2020: KSU Performance Management System has 3 main components as follows:

(1) **Data Entity Management** – The main purpose of this entity is to provide a clean and correct common set of data in the DWH (Data warehouse) to be used for the quality & accreditation management and planning management. These data are sourced, cleaned and validated as a clean and correct common data set for processing in the ITQAN processing management system.

(2) In itself, the **ITQAN Processing Management System** represents the key processing mechanisms of the common datasets inputs from the data entity management. This basically covers the main computerization and computations of all data, statistics used for quality and accreditation management. The key flow of the processing of all the KSU-QMS and EEC-NCAAA templates and tables for Course management, Program management, self-study and accreditation management, SID management, performance metrics & surveys, internal audit and assessment & performance scoring, and alumni and employment market and societal responsibility and community services management are discussed in details in Figures 5.3 & 5.4. The components of the ITQAN processing management is comprised of the following:
   - 12 modules of the ***ITQAN integrated electronic Quality Management*** modules which basically is the ITQAN 2020: electronic KSU-QMS, the main processing proponent for quality and accreditation management;
   - 3 modules of the ITQAN Planning Management & BSC (Balanced Scorecard) Module; and
   - 3 modules of the ITQAN Performance Management Module

(3) The last **Performance Management Component** represents the main utilization of the data analytics and information for:
   - ***Informed decisions and actions for performance management*** by all levels of institutional, collegial and programmatic and individual users of data, statistics and information for their decision making, with the aim of objectivity as opposed to subjective and heuristic behavioural judgemental decisions.
   - ***Quality and accreditation management*** that increases the level of productive efficiencies and effectiveness thus minimizing quality fatigue in the manual based approach, and zeroed in on evidenced based performance management.
   - ***Planning & BSC management*** that brings about better implementation of the strategic plans, action plans and developmental plans based on the recommendations of internal audit & assessment and accreditations. It highlights the imperative that the planning is linked to the quality and accreditation management as part of the quality-information-planning trio.
   - Lastly, the ***Performance Analytics and business intelligence tools*** can support in-depth data analysis, modelling and projects which form the core of institutional research.

5.5. KSU ITQAN 2020: electronic KSU-QMS (Quality Management System)

Source: Teay, S., (2017), An Integrated Electronic IQA System For HEI, *Encyclopedia of Information Science and Technology*, Fourth Edition (10 Volumes), Ed. Mehdi Khosrow-Pour, Information Resources Management Association, IGI Global Publishing, USA

A key issue with the manual system requirement of EEC-NCAAA was the multitudes of templates and forms submission of CS & CR (Course Specifications and Course Reports to be prepared for each section / course / semester which means that a faculty member teaching 6 courses will need to prepare 12 sets of documents which leads to documentation fatigue. Annually, the Program Quality Committee needs to prepare the annual PS & PR (Program Specifications and Program Report), leading to the Self-Study Report and Performance Scoring Report once every two years for their bi-annual internal audit and assessment. This excludes the 7 satisfaction surveys of which the Course Satisfaction Survey needs to be done of each section / course / semester, with the Program Satisfaction and Student Experience conducted annually for graduating students. The remaining faculty / staff / employment market and alumni satisfaction surveys must also be conducted annually at the program level. This has potentially led to a quality phobia syndrome due to the volumes and deluges of paper works leading to quality paralysis at all programs levels in not only KSU but KSA.

During the period of 2013 to 2015, Standard Operating Procedures (SOP) was defined for the 3 stage QMS quality and accreditation management as discussed previously in Chapter 2. These culminated in the development of the electronic versions and electronic modules for the 3 stage integrated electronic KSU Quality Management System (Figure 5.3).

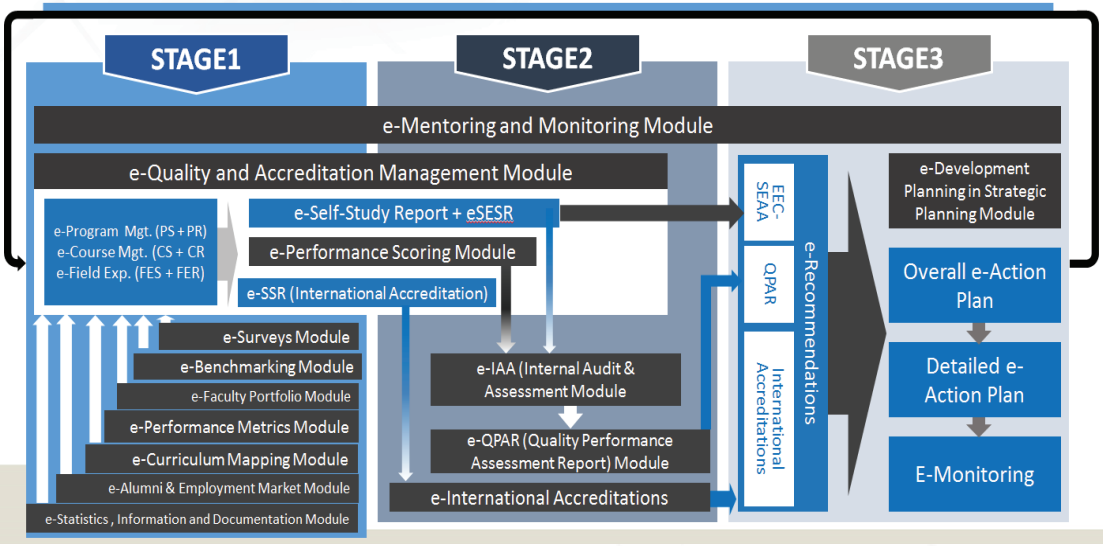
In Stage 1 eSelf-Study, this represents the overarching documents required for the quality and accreditation management, which is a key part that all faculty detests and think of it as equating quality to just documents. The electonic part of the e-Course Specifications (CS) & e-Course Reports (CR) and e-Field Expereinece Specifications (FES) & e-Field Expereinece Report (FER) is done on a semester basis and these culimnate in the annual e-Program Report (PR) based on the e-Program Specification (PS) reported on an annual basis. These use the e-Curriculum mapping as the main linkages across the electronic CS/CR-FES/FER-SSRP/SESR, which defined the learnig outovmes and studens assessments for the courses and programs. All these are used as key evidences in the development of the evidenced based e-Self-Study Report (SSR) and eSelf Evaluatuion Study Report (SESR) of the program before they seek accreditation or get ready for the bi-annual internal audit & assessment. These are supported by the surveys module of the 7 mandated e-Surveys and e-alumni & employment market data bases and e-performance metrics.

In Stage 2 Internal Audit and Assessment (IAA), the electronic KSU – QMS provides for both the fundamentals of an IQA and requisite external review through the IAA processes which is assessed by an independent internal institution appointed KSU-Board of Assessors. These bi-annual monitoring cycles and Internal Audit and Assessments resulting in the QPAR (Quality Performance Assessment Reports) are conducted before the College or programs go for their 5 years mandatory EEC-NCAAA accreditation or re-accreditation or international accreditation as explained in Chapter 2. The main monitoring normally takes place at the core of the educational processes which is represented by the colleges and the programs and their programs offerings. It does not necessitate a full internal audit and assessment as requirement in preparation of the cyclical accreditation 5 years period. But it does need to ensure that the periods in between the accreditation cycle still sustain the continuous improvements that culminate in the 2nd or 3rd or 4th Internal Audit and Assessment Cycle.

In Stage 3 Developmental Planning, it is essential that the institution is able to understand and synthesizes all the programs' offerings to ensure and assure that they achieve the institution's vision and mission and that of the college. In the "Management through Measurement" approach, it means that better management can be derived from the outcomes performance measurement, which literally means that measurement support management but management precedes measurement as what needs to be measured must be planned and organized. The aim is to ensure continuous improvements and evidence substantiating these improvements meeting the vision, mission and goals as committed to the stakeholders and as planned in the strategic plan of the college or programs. From the recommendations of the accreditation and IAA exercises, the action plans and projects planned for addressing these recommendations is the key link to the strategic plans as these will address all the QMS and accreditation criteria which are in line with or contribute to the overall strategic plan accomplishment. This will avoid redundant planning and inconsistencies or incoherence across the quality-planning duo. As such, the bi-annual monitoring process of the developmental planning is aimed at capturing the quality feedback loop on an annual basis to ensure that the quality drive is maintained and sustained through continuous improvements from one accreditation cycle or IAA cycle to another.

All these 3 stages are supported by the **SID (Statistics, Information and Documents) system component.** The imperative is that for the performance measurement to be successful there should be a set of corresponding statistics, information or documents that supports the fact that the measurement is evidence-based. The same logic applies to all key performance indicators that call for the determination of the levels of performance achievement. The degree or the level is based on the facts, statistics, data or documents to support these KPIs. The multitudes of statistics, information and documents used for evidencing quality & accreditation and planning management are centered in these central data marts at institutional, collegial pragmatic and individual levels for a systematic evidenced based quality & accreditation and planning performance management.

Figure 5.3: Electronic QMS MODULES OF THE 3 STAGES OF KSU - QMS



The ITQAN 2020: e-Performance Management System (Figure 5.2) is evolved from the integration of the quality & accreditation and planning management system linking and supporting the quality-information-planning dimensions that underscore the electronic ITQAN 2020: KSU electronic QMS (Quality Management System) (Figure 5.3) that are composed of the following modules:

- **e-Surveys Module** – These are the minimum KSU mandated 7 surveys of e-Course Satisfaction /e- Student Experience / e-Program Satisfaction / e-Faculty & e-Staff Satisfaction / e-Alumni & e-Employment Market Satisfaction conducted on a semester and annual basis in the determination of stakeholders' satisfaction, which are key data inputs to the performance metrics module.
- **e-Performance Metrics Module** – This module takes care of all computation, aggregation and compilations of all the 17 Strategic KPIs and 56 QMS KPIs inclusive of the 33 EEC-NCAAA KPIs and the additional 23 QMS KPIs in ITQAN 2020: KSU-QMS Handbook 2 measuring planning and quality performance and benchmarked in the **e-benchmarking module** where internal & external benchmarks (Internal Benchmarking SOP) are compared.

- **e-QMS &e-Accreditation Module** – The core of the e-QMS for quality management is based on the multifarious forms and templates of EEC-NCAAA requirements in the Accreditation Management System (AMS) of EEC-NCAAA. In addition, this is supported by e-Curriculum Mapping Module where the Student Learning Outcomes, the teaching methodologies and e-students' assessment are mapped according to Program Objectives and Courses & Program Learning Outcomes within the CLO/PLO Matrix. These include the key modules used by all the colleges, programs and faculty members to manage their e-CS & e-CR, e-PS & e-PR. e-FES & e-FER and e-SSR & e-SESR which can be monitored for performance in the key dashboard aggregated from the course levels to program levels to college levels up to the institution level.
- **e-KSU-BOA Module** – The bi-annual IAA of the undergraduate and post graduate programs by the KSU-BOA once every 2 and half years for each program requires substantial time and efforts of performance analysis, identifying strengths and areas for improvements, site visits issues based on the hefty evidence all of which result in the e-QPAR (electronic Quality Performance Assessment Report) of the programs audited and assessed. The computerization of these will help lighten the loads of the BOA and the programs in the bi-annual IAA exercise. The KSU-BOA are university appointed and certified assessors trained by an international expert in performance excellence, where they are entrusted with the IAA of programs under a certain set of Internal Audit & Assessment SOP (Standard Operating Procedures) and Toolkit in a 45 hours in class and 30 hours of external individual work assignments as specified in the KSU Board of Assessor SOP Handbook; KSU Board of Assessor Toolkit Set 1; KSU Board of Assessor Toolkit Set 2 and KSU Board of Assessor Training Program).
- **e-Performance Scoring Module** – The performance of the programs is based on the Performance scoring system in this module which is then integrated into the QPAR. The performance is based on the MBNQA
- **e-Faculty Portfolio Module** – To avoid duplications of data entry to 4 different systems of research, faculty portfolio and evaluation, promotion and FAC web page, all the common data pertaining to the faculty work, responsibilities and performance are entered through a singular portal in this module. These are then channelled to each of the 4 systems for their specific usage, and this will cut down to the same data entry and requirement of 4 different systems. This will result in the future APAS (Academic Performance Accountability System).
- **e-Student Portfolio Module** – In this module the outcomes of the student assessment and performance are integrated into this module for documentation of Student Performances & Profiles and customizing of the individual student's needs and requirements. The aim is for the student to integrate their study, social and extra curricula and personal requirements to better

customize their formative and summative social, academic and personal workspace and work life.

- **e-Statistics, Information and Documents Modules** – This is the main Data marts for data, information statistics, documents of the ITQAN application of the different modules described above, all which are part of the KSU-DWH (Data warehouse) where there is various data sourcing staged in a main directory of the DWH and data marts for key applications utilization.
- **e-Developmental Planning** – This consists of two sub-modules of:
    - ***e-Planning Module*** where the strategic plan of the university's vision, mission, goals, objectives are defined and cascaded to the colleges' & administrative units' vision, mission, goals, objectives for alignment of which the program objectives and action planning are all linked through the 4 perspectives of the Balanced Scorecard of the KSU's 9 objectives. This will result in action plans and projects linked to the quality action plans and objectives if they subscribe to the same goals and objectives.
    - ***E-Monitoring and Mentoring Module*** where KSU assigns mentors to the colleges to support them in the planning and quality management, while at the same time monitoring the progress of the planning and quality action plans. All these can be monitored and measured for accomplishment and achievements in an integrated electronic mode.

Figure 5.4:ITQAN 2020: King Saud University E-QMS (Quality Management System) IPOO Mapping

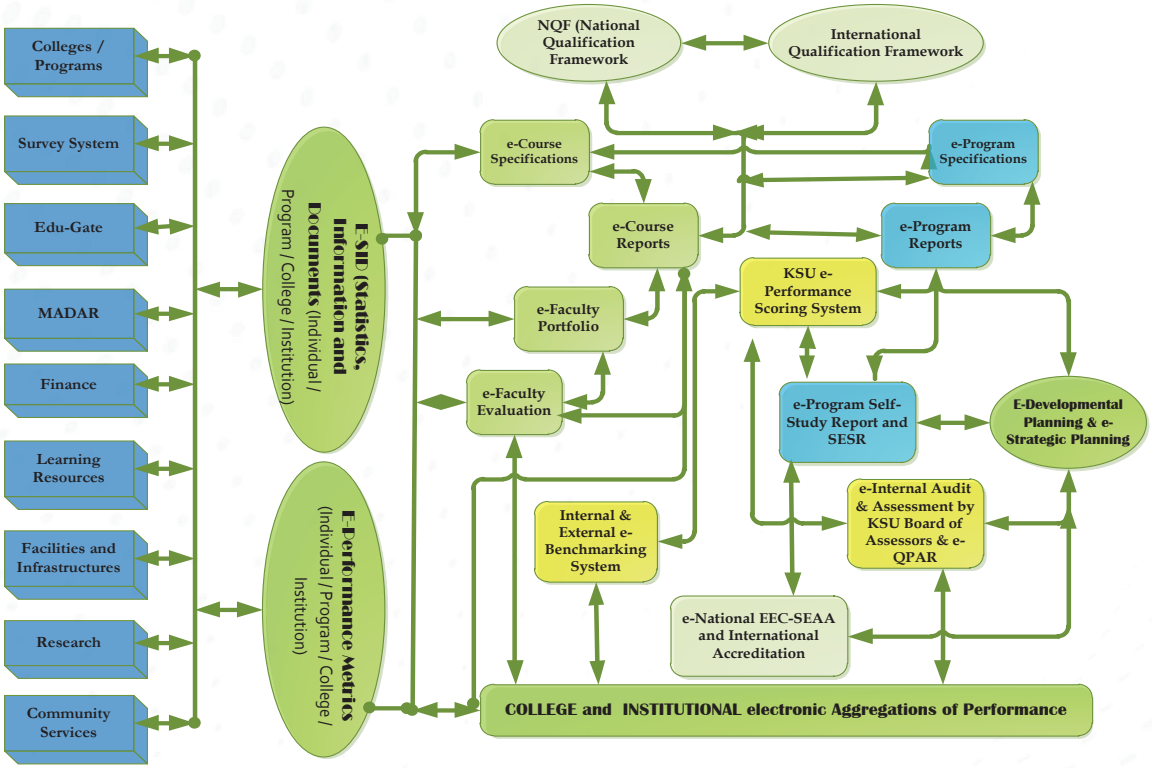


Figure 5.4 shows the conceptualized and configured integration of IPOO (Inputs, Processing, and Outputs & Outcomes) sub-systems components working in tandem and holistically of the ITQAN 2020: KSU-QMS. These intervening and interwoven parts shows key data sources **INPUTS** from Colleges & Programs, & KSU mandated surveys, e-Register, MADAR-HR, finance, learning resources, facilities & infrastructure, research and community services into the SID (Statistics, Information & Documentation) data marts and the DWH (Data warehouse) and the performance metrics. All these are used by the faculty **PROCESSING** components to create their e-CS & e-CR and e-FES & e-FER, by program chairs to create their e-PS & e-PR, and by program quality committee to develop their e-SSRP & e-SESR and e-Internal & External Benchmarking. All these feed into the national EEC-NCAAA and other international accreditation and the bi-annual e-IAA (Internal Audit & Assessment) components. These will culminate

in the recommendations of KSU Board of Assessors and their e-QPAR (Quality Performance Assessment Report) to the **OUTPUTS** accreditation recommendations and reports. These recommendations and reports form the basis of inputs to the developmental planning component to link up with the strategic plan through the action plans and projects. This inherently represents the crucial C (Check) & A (Act) of the PDCA Cycle to close the PDCA loop. These leads to consistent and coherent planning based on quality management inputs via its integrated data marts in the DWH, electronic information networks and highways culminating in the **OUTCOMES** of informed decision making efficiencies and effectiveness.

5.6. Samples of key modules screenshots of ITQAN 2020 application

Basically, the dashboard is one of the most improtant feature in the ITQAN system used for the monitoring of performance that can be drilled down from the highest levels of insititution management to the program levels. Since the core of the ITQAN is the quality and planning management supported by the information management, there are 3 main sets of dashboards of 1) QMS-Accreditation ; 2) Performance Metrics and 3) Developmental Planning & BSC (Balanced Scorecard). The dashboard (Figure 11.1) shows the key category of the university / colleges / programs of their degree of accomplishment in %, of the key areas of accreditation mangement / program management / course management of the selected college / program (Fig 11.2) up to the level of all the courses in the program (Figure 11.3). This allows the central IQA or key manageemnt in the college / program or central insitution management unit to have oversight and overview of the performance of all the colleges up to the levels of the individual courses accomplishement of the key Course Specifications (CS) & Course Reports (CR); Field Experience Specifications (FES) & Field Experience Report (FER) and the Program Specifications & Program Report; and ultimately the progress of the accreditation of its (Self-Study Report (SSR) and Self Evaluation Scale Report (SESR).

In the next two pages, the main Key dashboards upon gouing into the ITQAN 2020: KSU Performance Management System at www.itqan.ksu.edu.sa, with the main dashboard for KSU-QMS shown are:

- Figure 5.5: Landing pages of www.itqan.ksu.edu.sa
- Figure 5.6: Dashboards of QMS-Accreditation for overall Insitution and Colleges
- Figure 5.7: Dashboard QMS-Accreditation for selected college drill-down to program
- Figure 5.8: Dashboard QMS-Accreditation for details of a program

Other dashboards of key componets are also displayed and explained in the following pages.

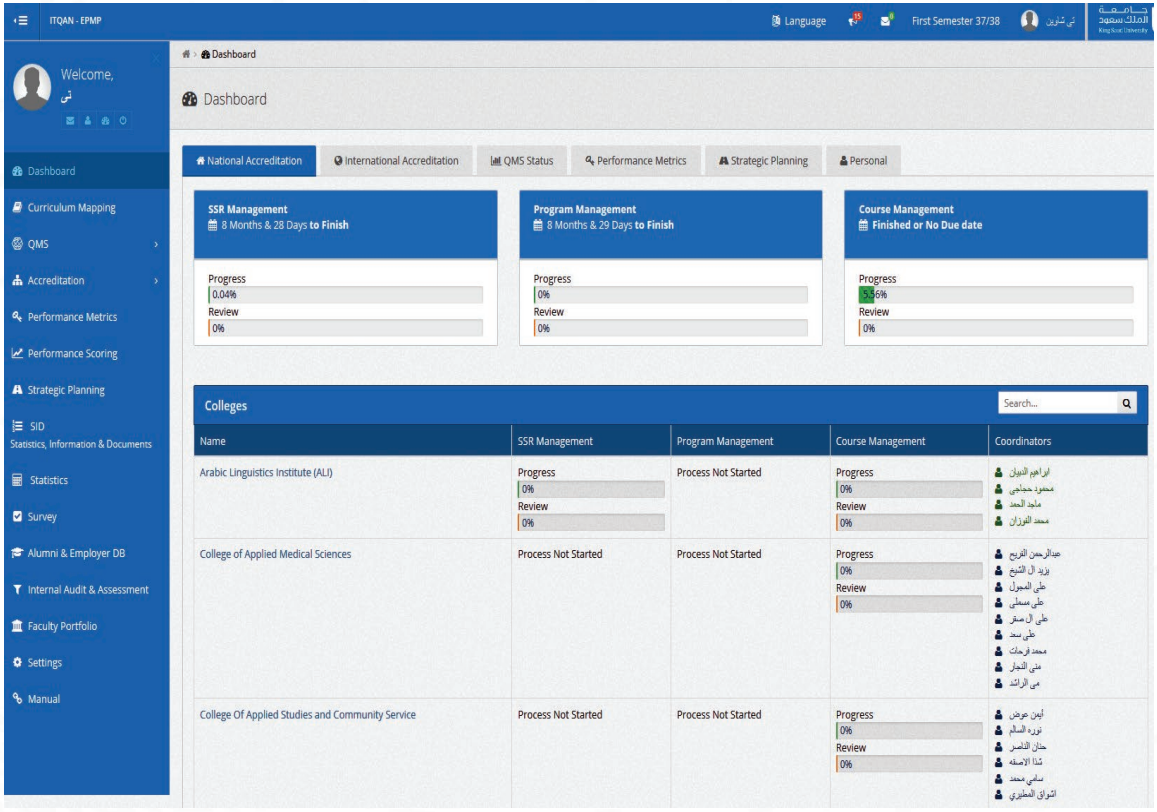
5.6.1. Landing pages

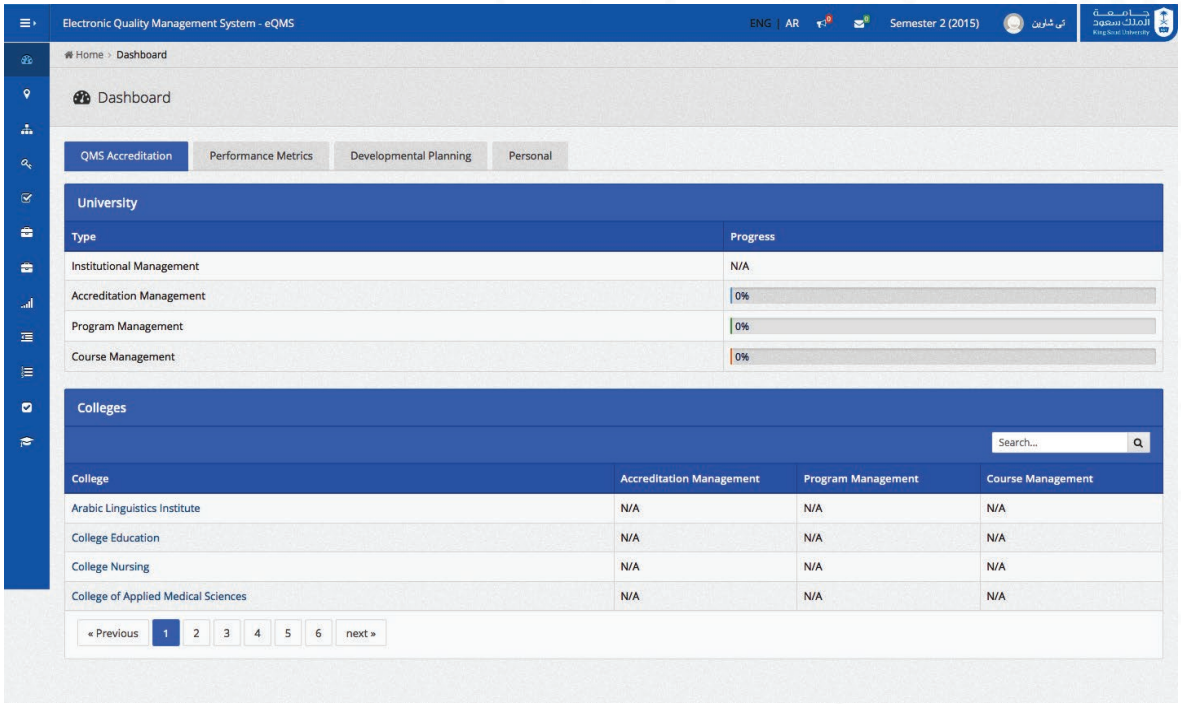
Figure 5.5: Context of Landing pages of www.itqan.ksu.edu.sa


جامعة الملك سعود
King Saud University
إتقان
ITQAN
ELECTORNIC PERFORMANCE MANAGEMENT PLATFORM
King Saud University © 2016 ITQAN
Eng
عربي
About ITQAN
Electronic Performance Management System
KSU Performance Dashboards
ITQAN e-Forms

5.6.2. Context and Content of Screenshots of QMS – Accreditation with drill downs

Figure 5.6: Dashboards of QMS-Accreditation for overall Institution and Colleges




Electronic Quality Management System - eQMS
ENG | AR
Semester 2 (2015)
Home › Dashboard
Dashboard
QMS Accreditation
Performance Metrics
Developmental Planning
Personal
University
Type
Progress
Institutional Management
N/A
Accreditation Management
0%
Program Management
0%
Course Management
0%
Colleges
Search...
College
Accreditation Management
Program Management
Course Management
Arabic Linguistics Institute
N/A
N/A
N/A
College Education
N/A
N/A
N/A
College Nursing
N/A
N/A
N/A
College of Applied Medical Sciences
N/A
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« Previous
1
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3
4
5
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next »

Figure 5.7: Dashboard QMS-Accreditation for selected college drill-down to program

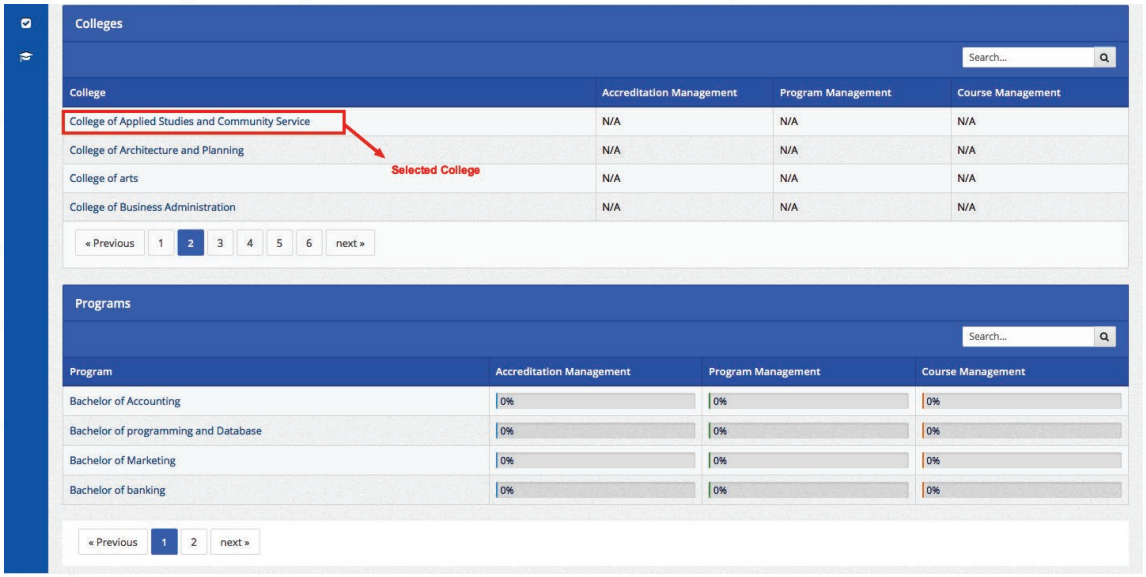
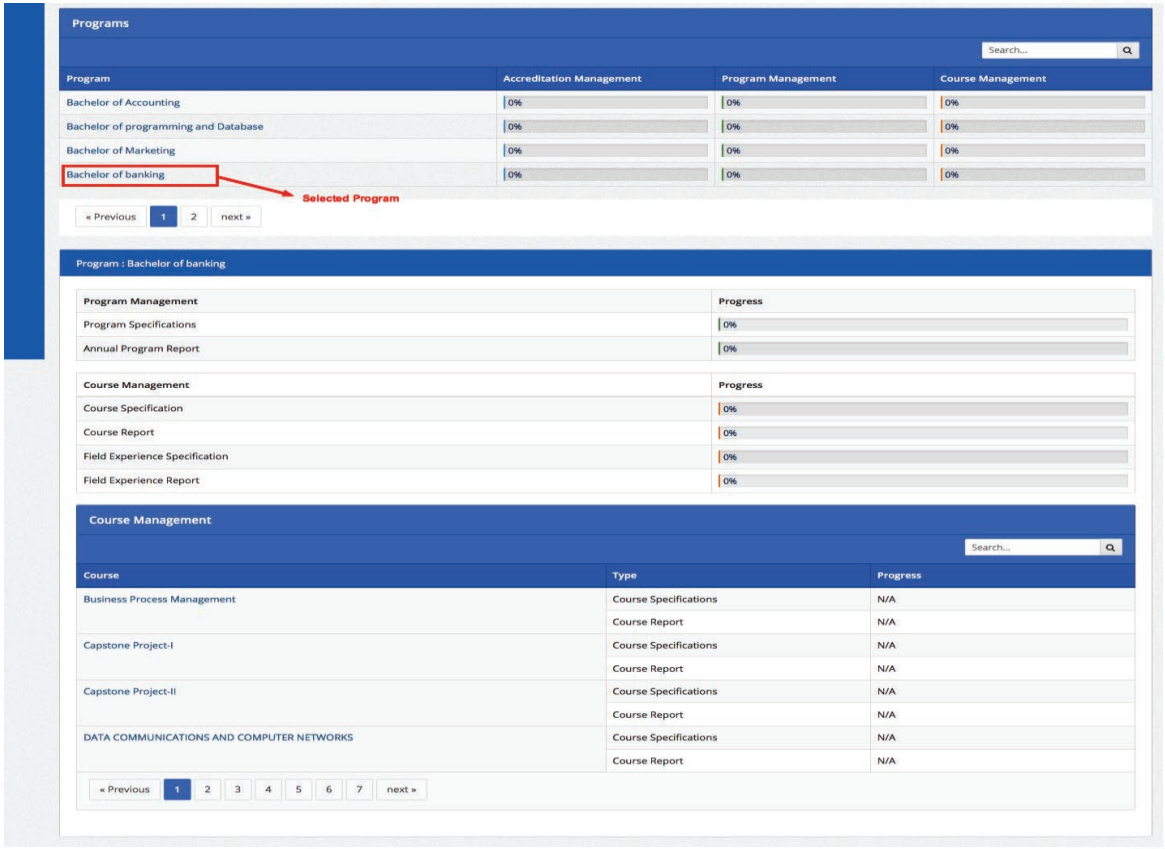


Figure 5.8: Dashboard QMS-Accreditation for details of a program



5.6.3. Strategic Planning Module

The following set of Dashboards is the Performance Planning where the strategic part of the vision, mission, goals, objectives, action plans and projects in the strategic plan. These are monitored for performance through the lead and lag indicators (Figure 5.9) are defined for the planning system of KSU, and for all levels of its colleges (Figure 5.10) and programs and administrative support units which can be drilled down to the programs (Figure 5.11). The key link of the quality and the planning is through the action plans and their appending projects from the recommendations of the internal quality management system and the external accreditations in the forms of recommendations which needs action plans and project (Figure 5.12). It should be noted that these action plans and projects can subscribe to the accomplishment of the defined mission, goals, and objectives from the strategic plan. This forms the key linkage across the quality-planning dimensions through the monitoring of the performance of accomplishment and achievements based on the lead indicators from the program-college-institution level. This will allow for ensuring that the mission, goals, objectives of the institution, college, programs and administrative units are monitored for performance with direct oversight based on information from the DWH leading to informed decision making.

Figure 5.9: Dashboard for Strategic Planning and BSC and Developmental Planning

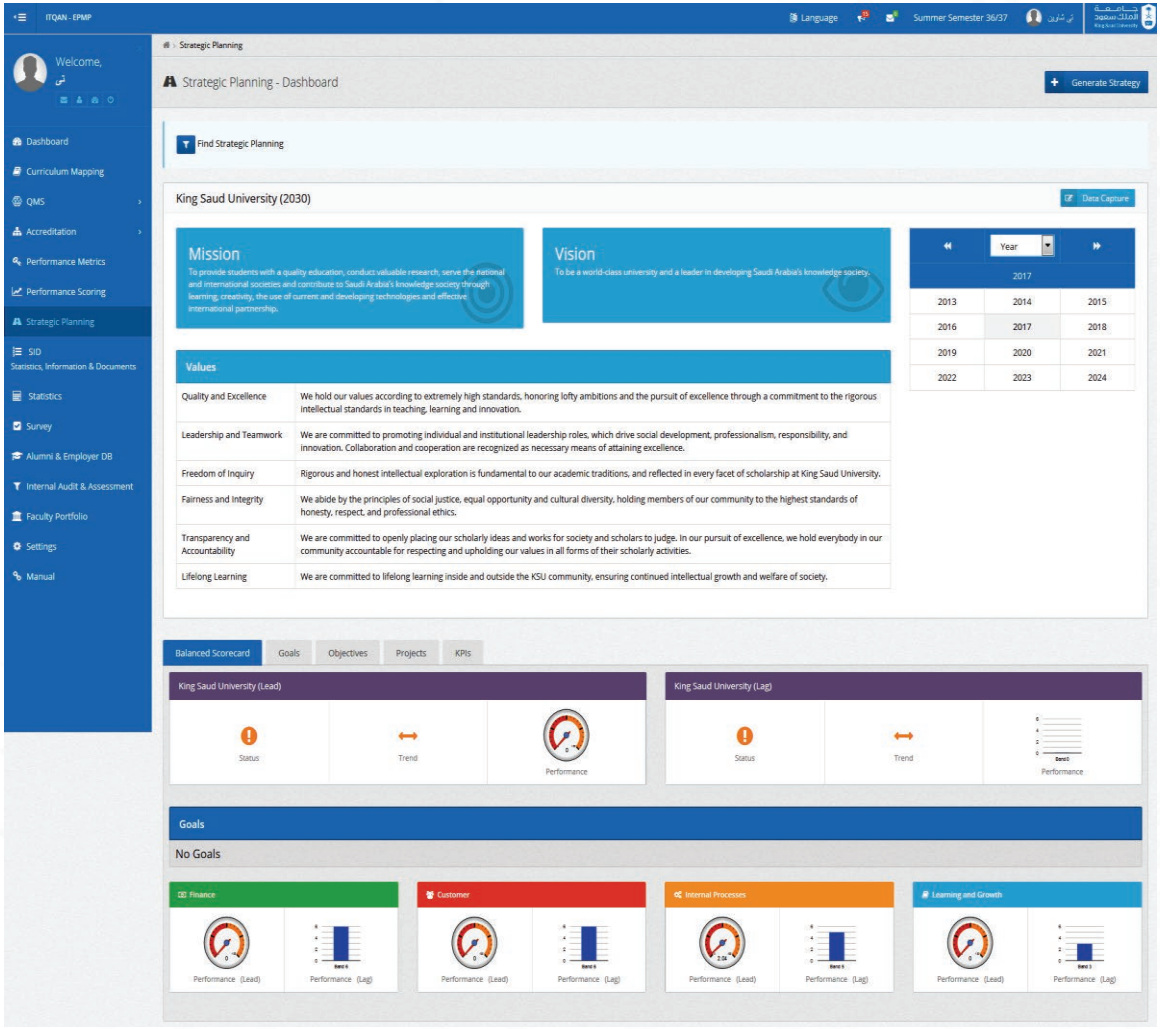


Figure 5.10: Dashboard for Strategic Planning and BSC for College

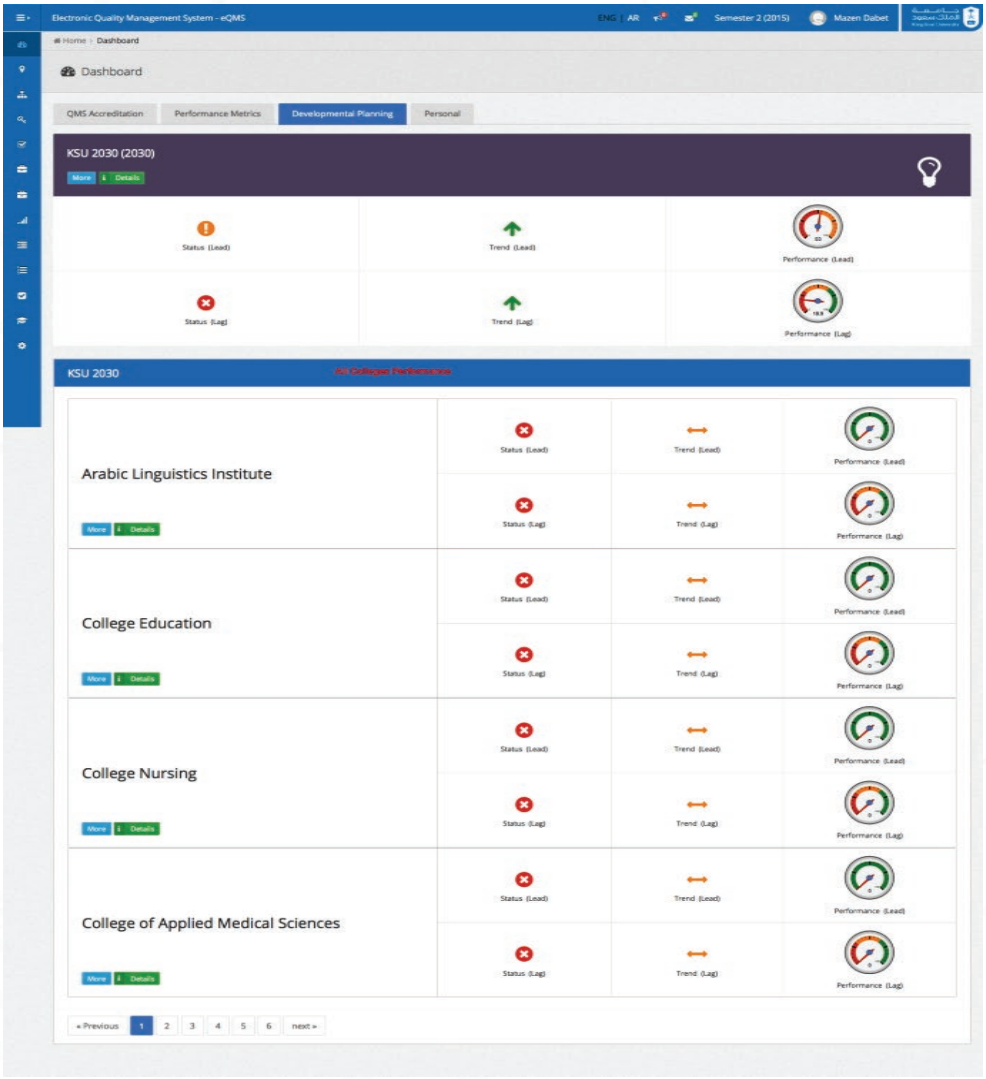


Figure 5.11: Dashboard for Strategic Planning and BSC for Programs within selected college

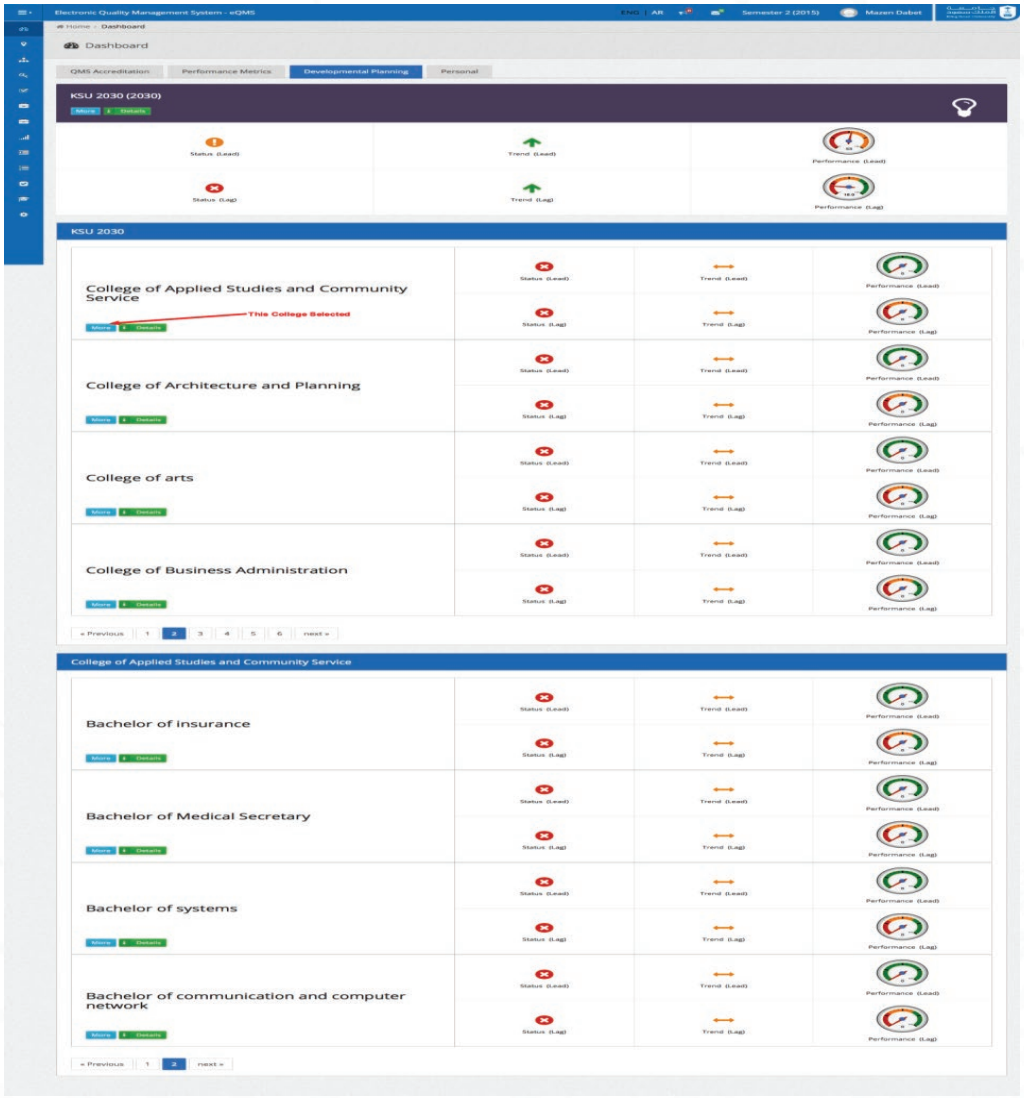
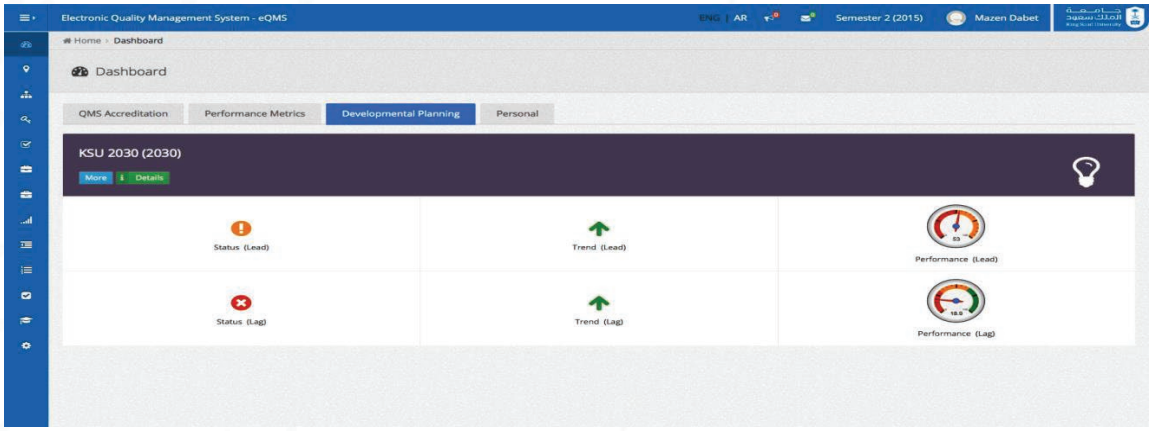


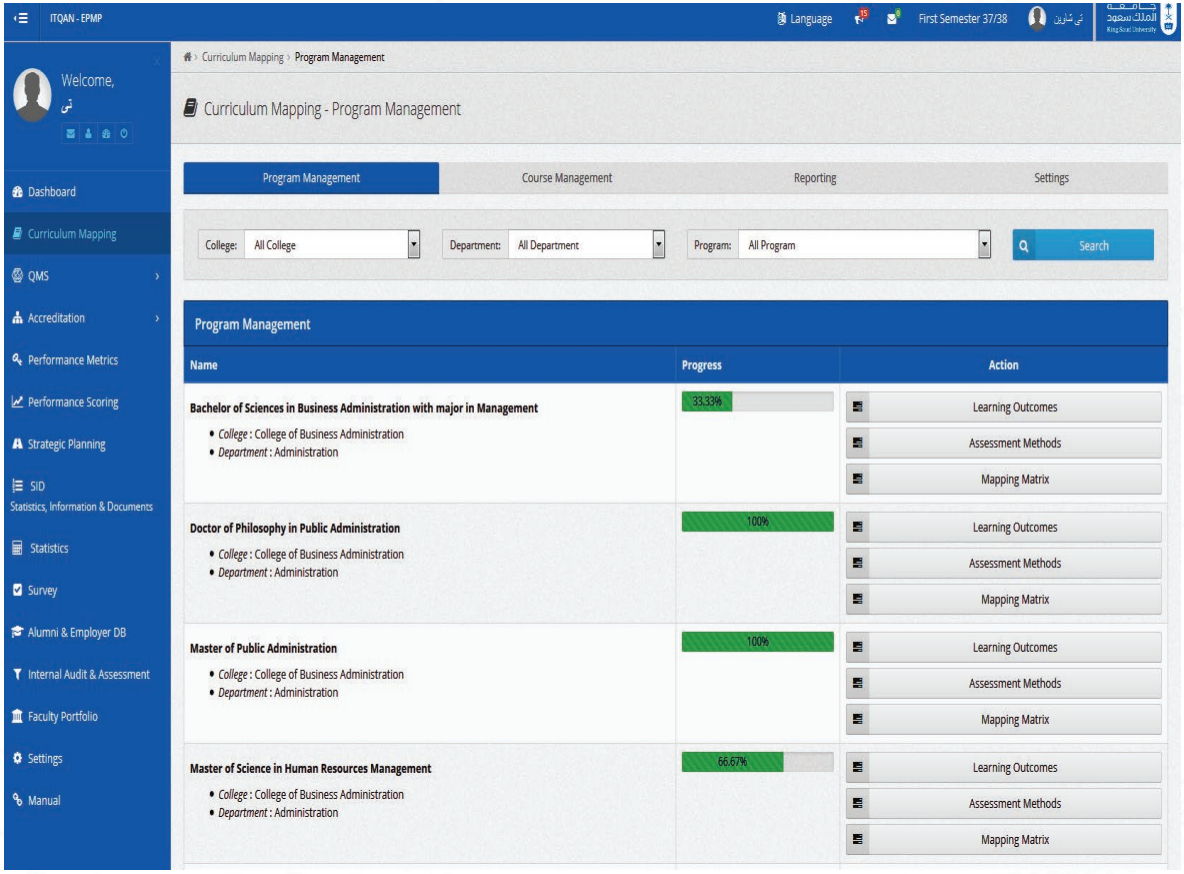
Figure 5.12: Developmental Planning from recommendations of IAA and accreditation



5.6.4. Curriculum Mapping Module

A required best practice in quality management and accreditation for the curriculum mapping (Figure 5.13) is the definition & design of program learning outcomes (PLO) (Figure 5.14) and course learning outcomes, the mapping of the CLO to the PLO based on the program objectives in the PLO & CLO mapping matrix Figure 5.15. At the course level, the assessment methods for the CLO for each of the student is shown all of which are reported as part of the course student assessment rubric. There is also a facility for the assessment of all the students' performance in a course (Figure 5.16) leading to the reporting of the course competency index (Figure 5.17).

Figure 5.13: Curriculum mapping of the objectives, learning outcomes & assessment



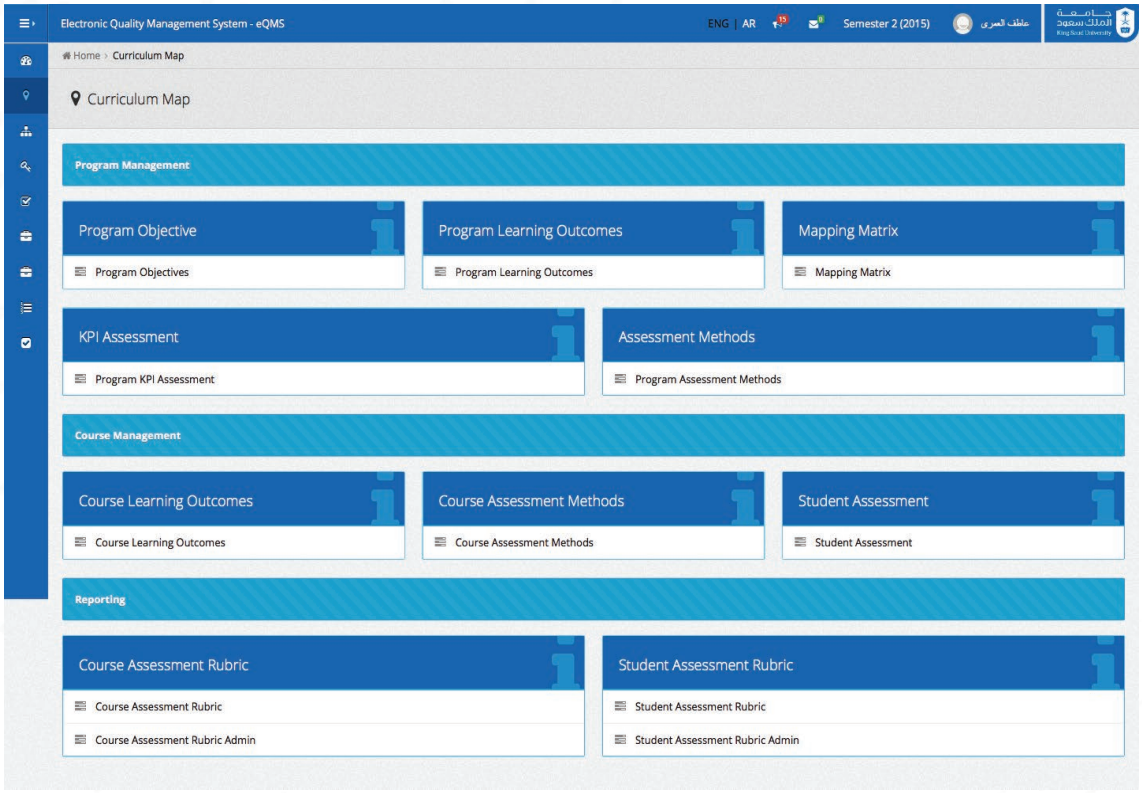

Electronic Quality Management System - eQMS
ENG | AR
Semester 2 (2015)
Home › Curriculum Map
Curriculum Map
Program Management
Program Objective
Program Objectives
Program Learning Outcomes
Program Learning Outcomes
Mapping Matrix
Mapping Matrix
KPI Assessment
Program KPI Assessment
Assessment Methods
Program Assessment Methods
Course Management
Course Learning Outcomes
Course Learning Outcomes
Course Assessment Methods
Course Assessment Methods
Student Assessment
Student Assessment
Reporting
Course Assessment Rubric
Course Assessment Rubric
Course Assessment Rubric Admin
Student Assessment Rubric
Student Assessment Rubric
Student Assessment Rubric Admin

Figure 5.14: Program Learning Outcomes

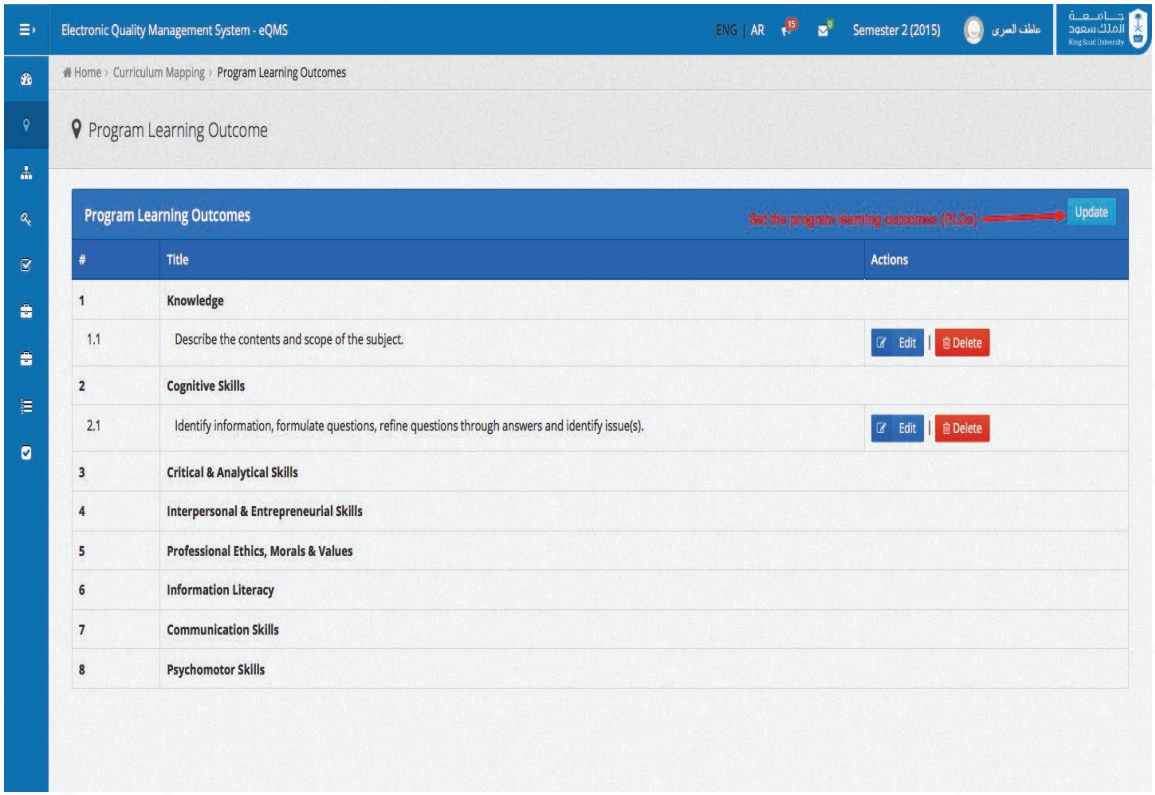


Figure 5.15: Program and Course Learning Outcomes Mapping Matrix

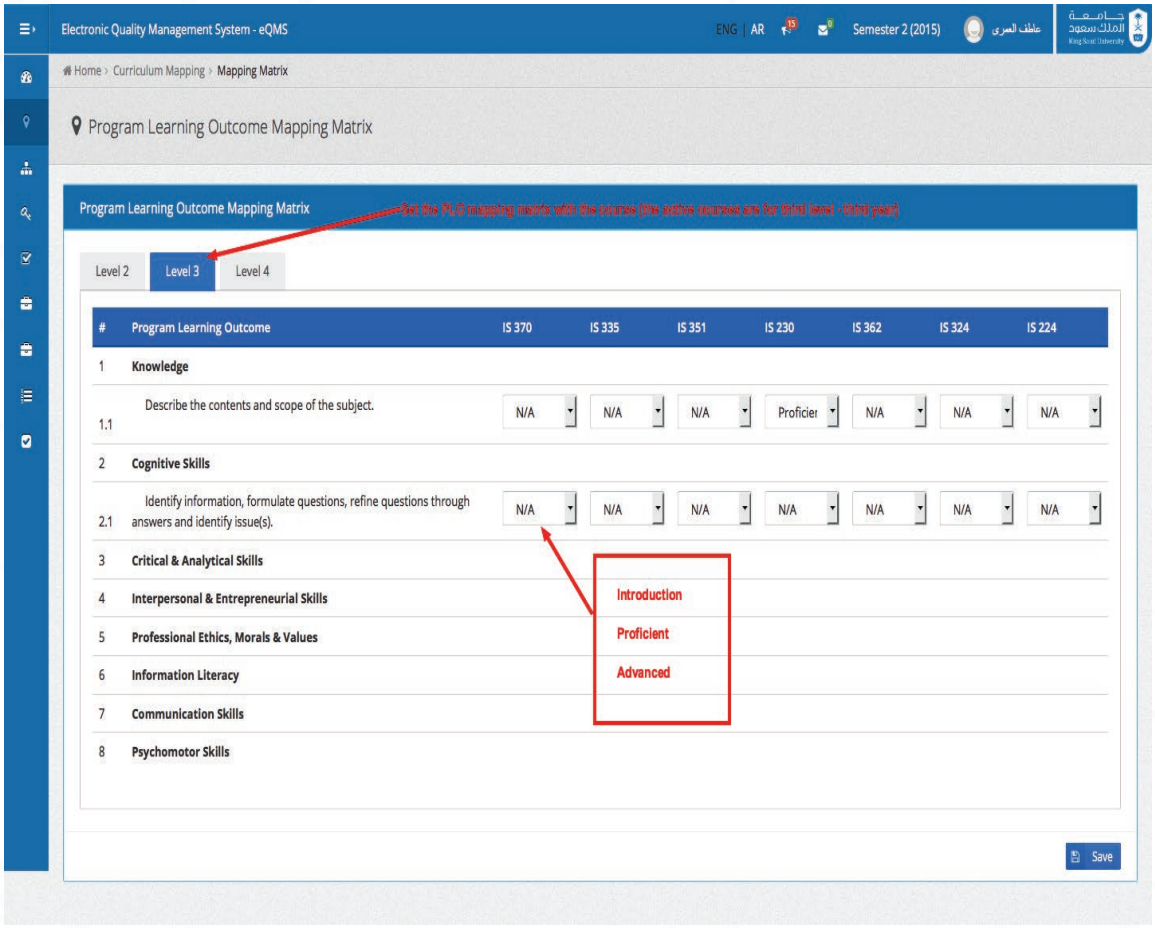


Figure 5.16: Students Assessment for a sample course

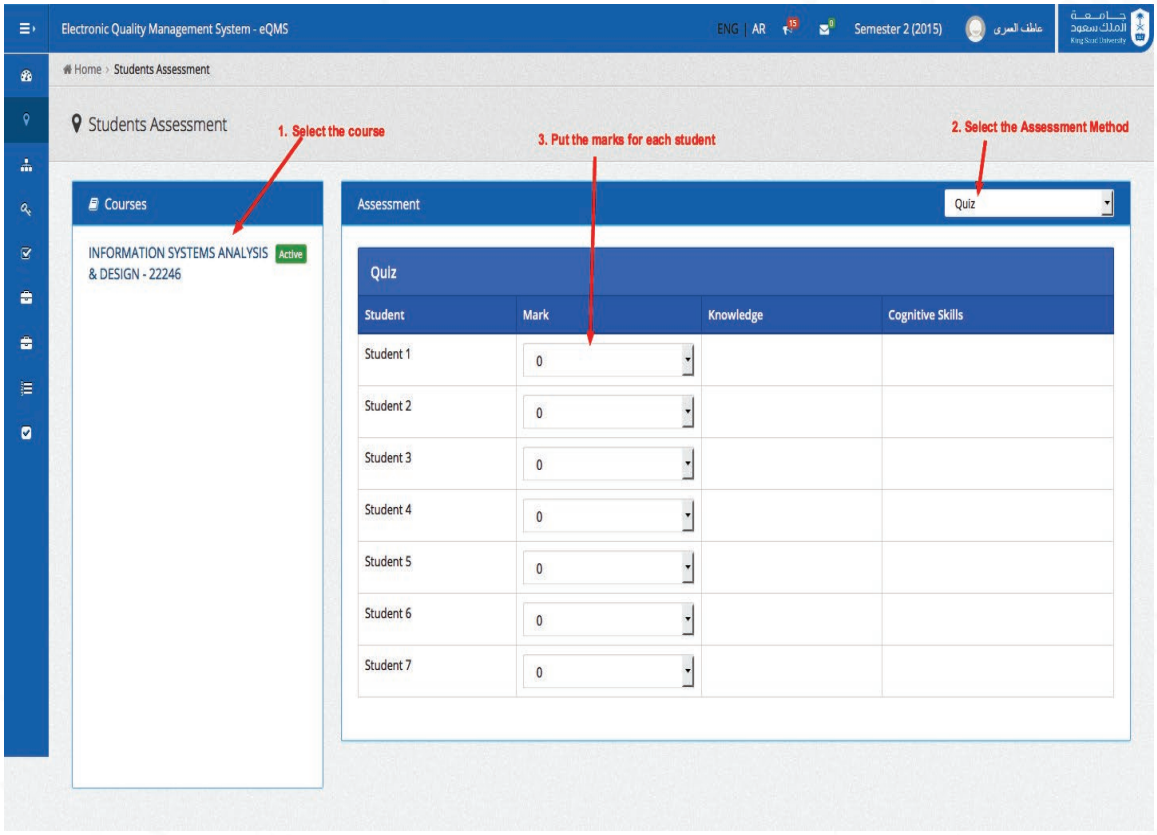
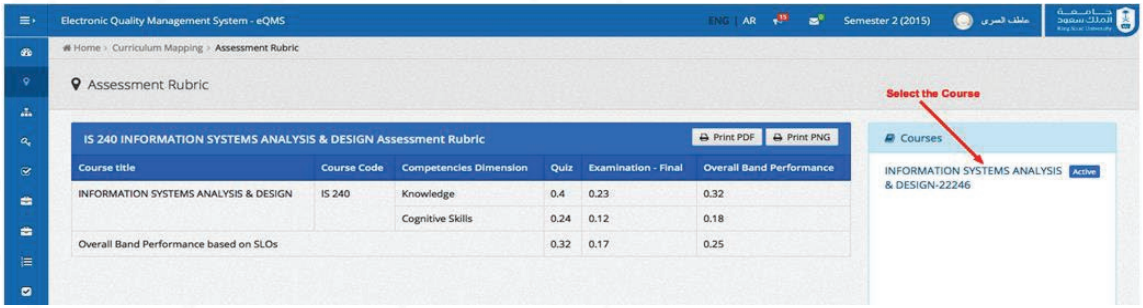


Figure 5.17: Competency index of the assessment rubric for a course



5.6.5. Course Management Module

A key part of the accreditation requirements is Course Management of the Course Specification (CS) & Report (CR) to ensure the course goals, course learning outcomes, teaching strategies & pedagogy and assessment rubrics and methods are defined. This tedious semester works needs to be prepared and used as feedbacks for development and improvements. The selection of a course in a program together with all the sections and the accumulated performance of all the sections within the same course is shown in Figure 5.18.

Figure 5.18: Selection of course of program for course management

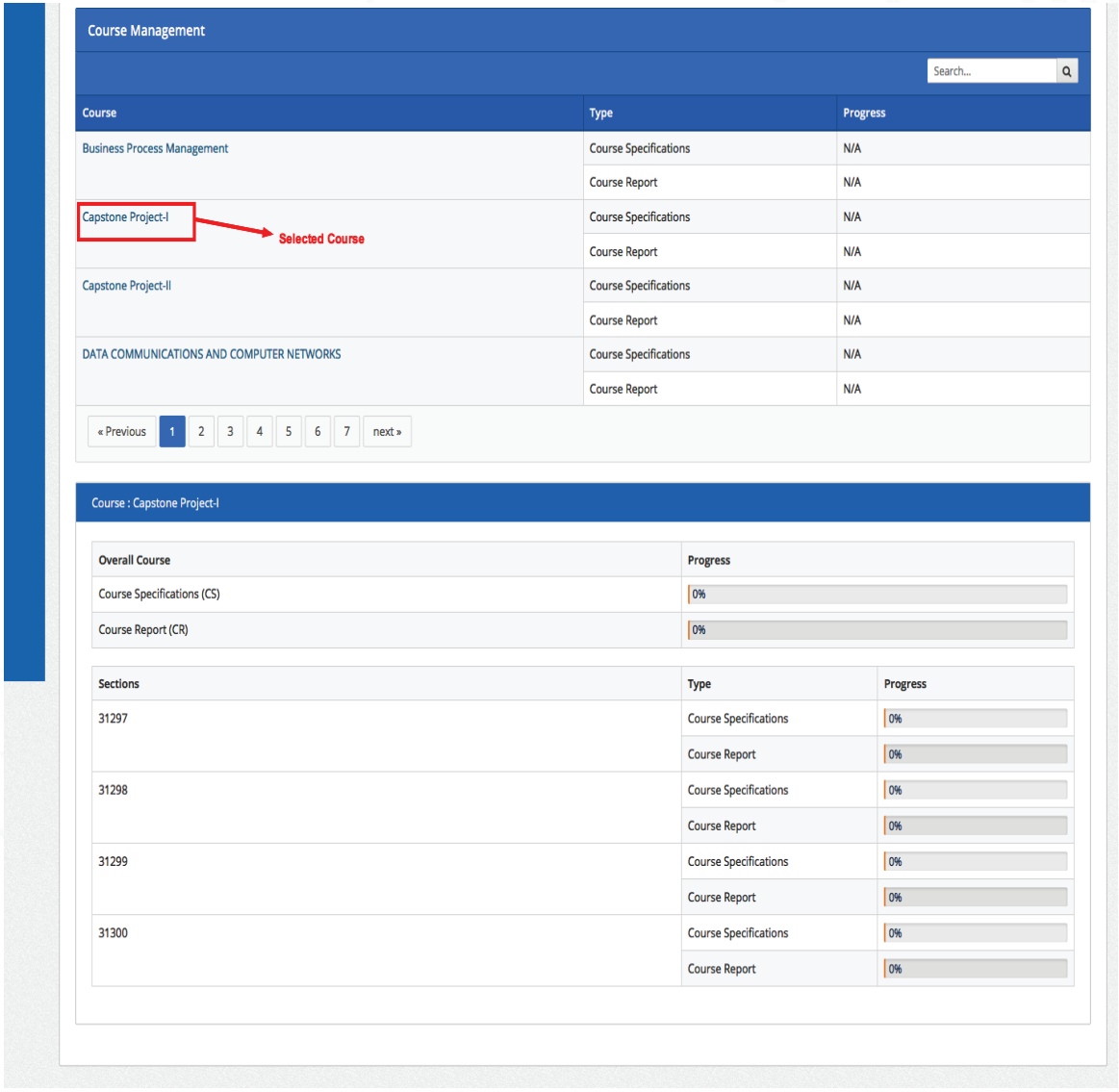


Figure 5.19 shows the details of the key components of the Course Specifications & Course Reports where the facilities of data inputs, viewing, editing and integration or printouts are available to prepare the CS and CR reports each semester. All these are kept in the SID data base for retrieval and reporting and archiving to provide evidence of performance during the internal audit and assessment and accreditation exercise. A sample of the grade components is shown in Figure 5.20.

Figure 5.19: Details of components Course Specifications & Course Reports

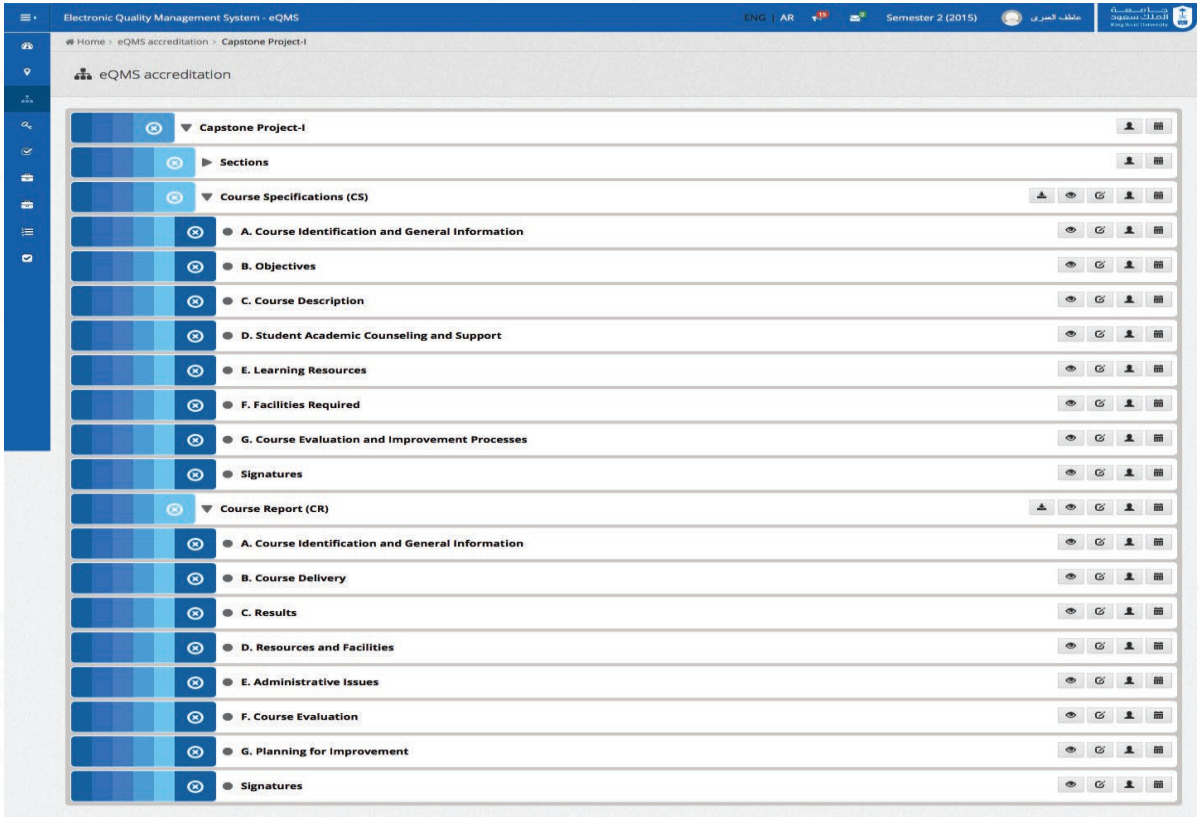
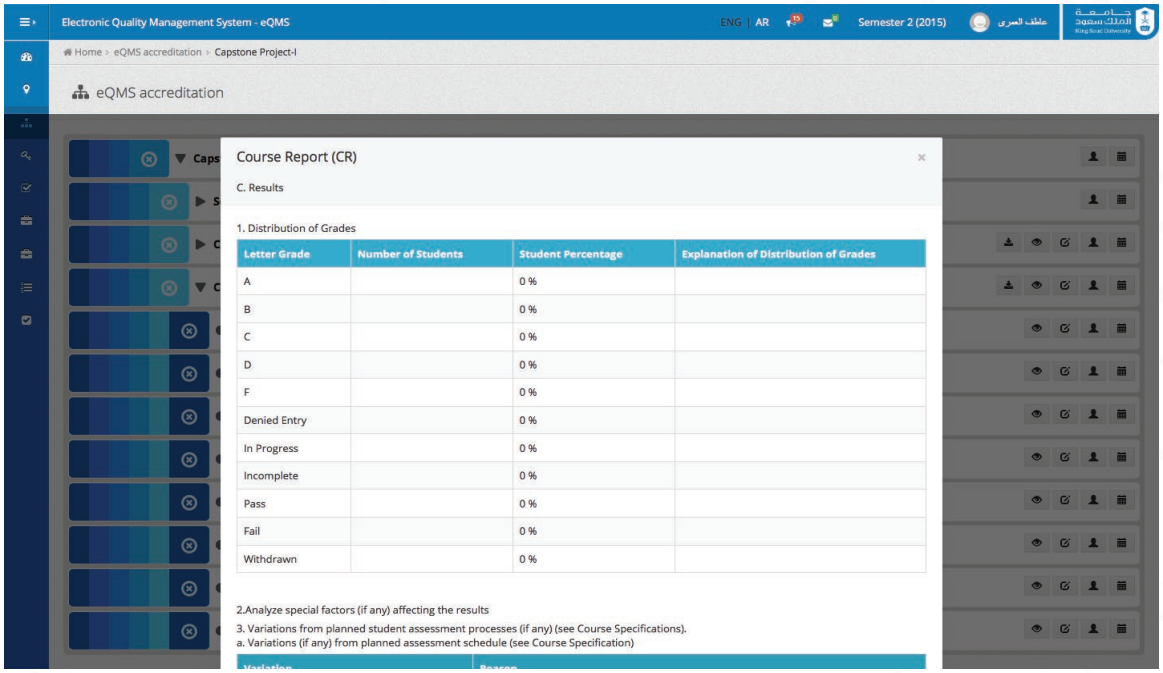


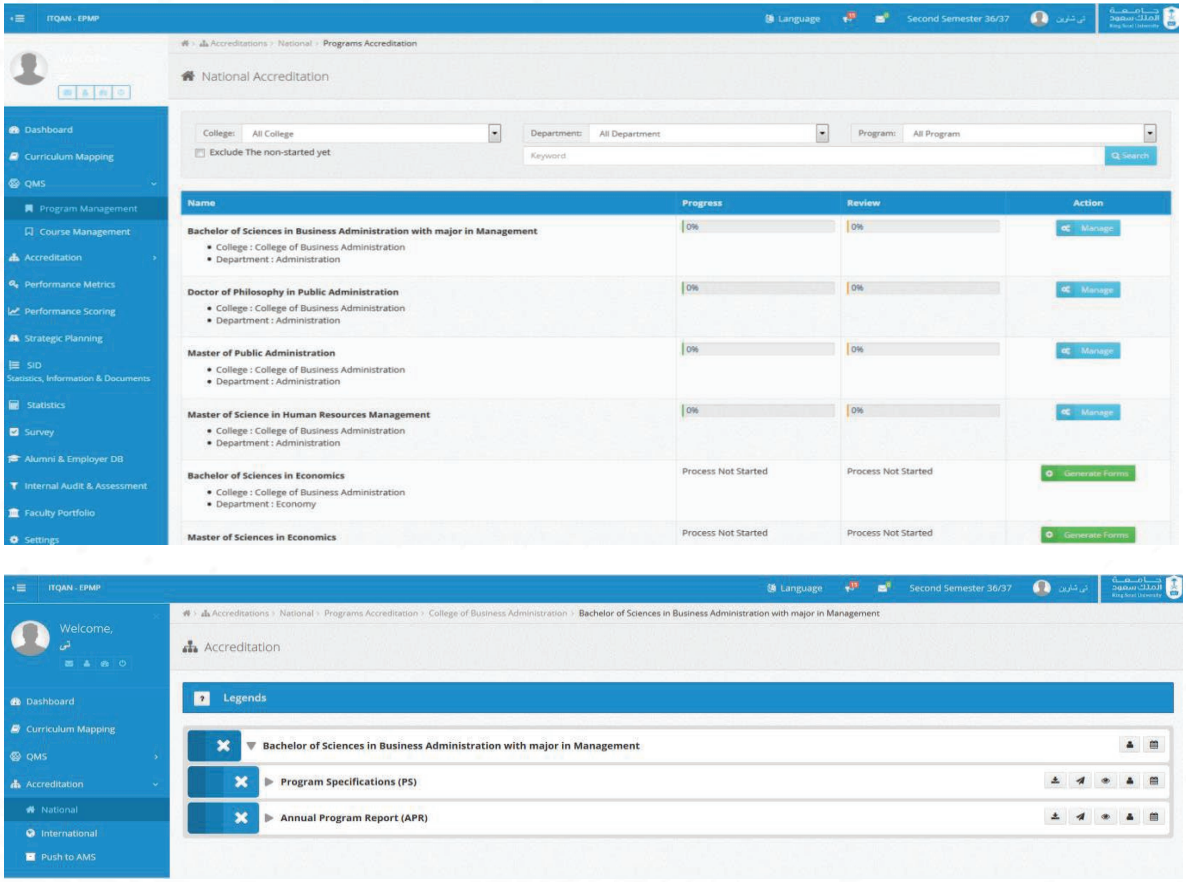
Figure 5.20: Sample of Grades in a Course Report

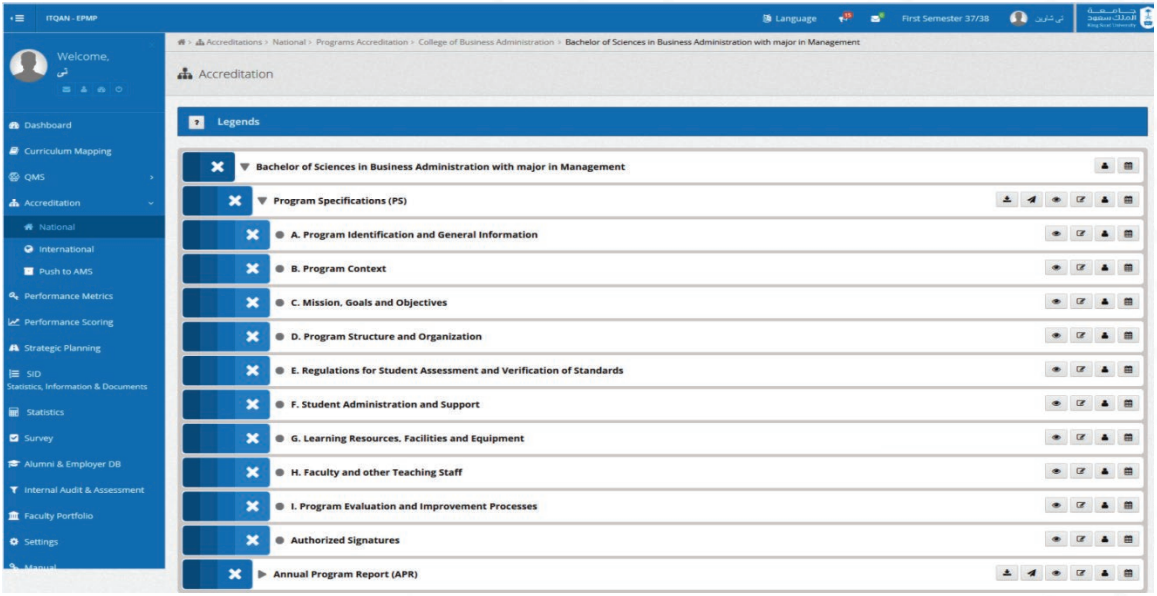


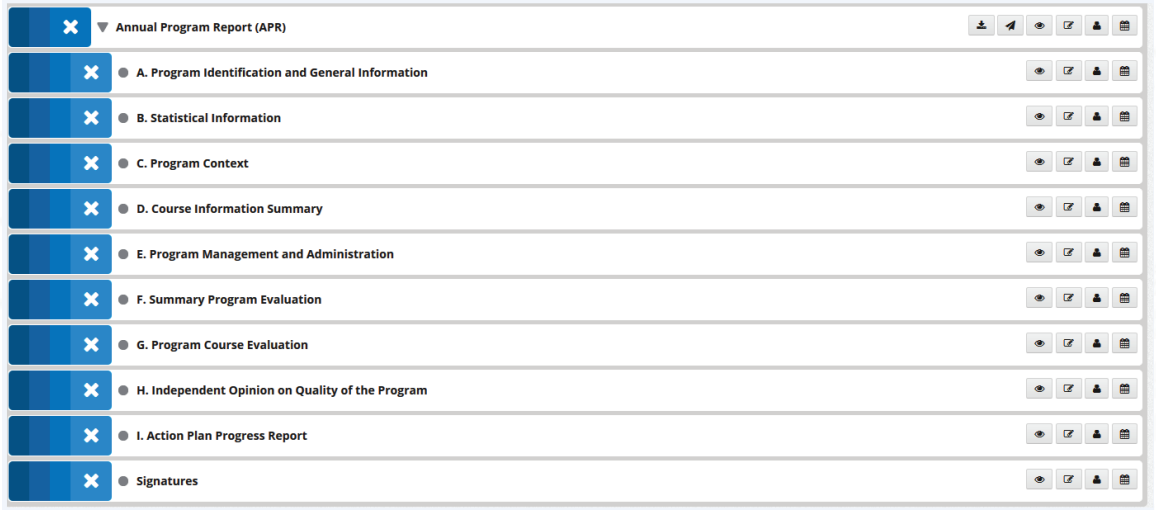
5.6.6. Program Management

The main component is any program is the Program Management. This basically covers two main reports of the (1) Program Specifications, and the (2) Program Report that must be prepared annually at the beginning and end of the academic year. This covers the whole performance of the program in terms of all its courses, teaching and learning assessment based on the main learning outcomes developed from the Curriculum Mapping Module. Key areas of coverage and contents that needs to be reported are shown below.

Figure 5.21: Context and Content Screenshots of Program Management



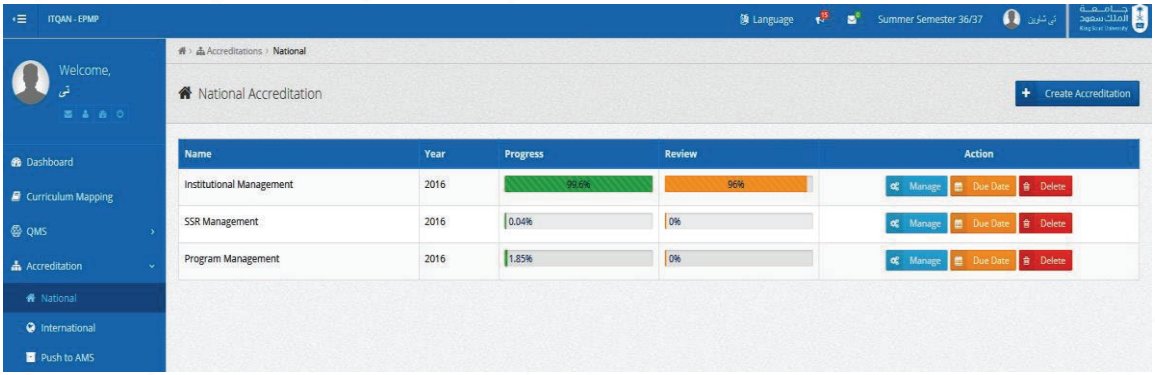

ITQAN - EPMP
Language
First Semester 37/38
Welcome,
Accreditations > National > Programs Accreditation > College of Business Administration > Bachelor of Sciences in Business Administration with major in Management
Accreditation
Dashboard
Curriculum Mapping
QMS
Accreditation
National
International
Push to AMS
Performance Metrics
Performance Scoring
Strategic Planning
SID
Statistics, Information & Documents
Statistics
Survey
Alumni & Employer DB
Internal Audit & Assessment
Faculty Portfolio
Settings
Legends
Bachelor of Sciences in Business Administration with major in Management
Program Specifications (PS)
A. Program Identification and General Information
B. Program Context
C. Mission, Goals and Objectives
D. Program Structure and Organization
E. Regulations for Student Assessment and Verification of Standards
F. Student Administration and Support
G. Learning Resources, Facilities and Equipment
H. Faculty and other Teaching Staff
I. Program Evaluation and Improvement Processes
Authorized Signatures
Annual Program Report (APR)

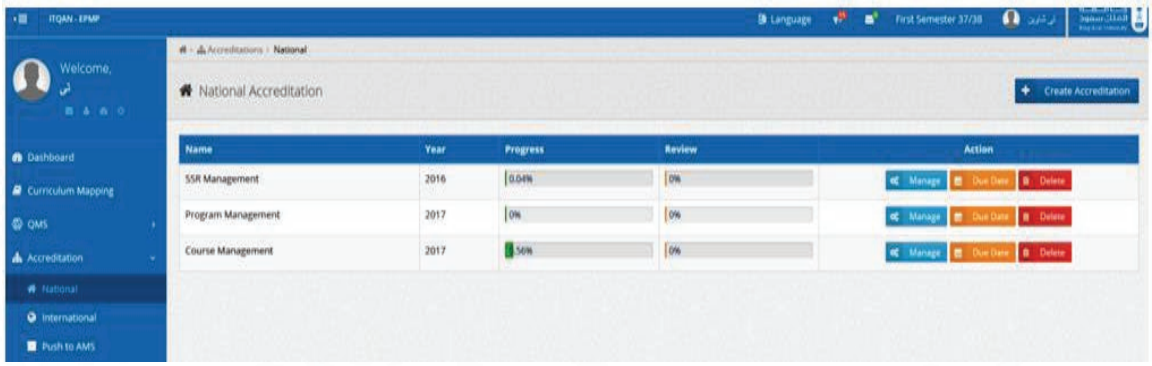

Annual Program Report (APR)
A. Program Identification and General Information
B. Statistical Information
C. Program Context
D. Course Information Summary
E. Program Management and Administration
F. Summary Program Evaluation
G. Program Course Evaluation
H. Independent Opinion on Quality of the Program
I. Action Plan Progress Report
Signatures

5.6.7. Self-Study (SSRP / SSRI)

Ultimately, all these leads to the preparation of Self-Study Report (SSR) in the accreditation module (Figure 5.22), where the key components of the SSR is developed, all of which provides for data inputs, viewing, editing, attaching of documents and integration with other statistics of KPIs from other modules as evidences and finally for the compilation of the SSRI of the self-study of institution and SSRP for the selected program (Figure 5.23).

Figure 5.22: e-QMS accreditation and module for the SSR component





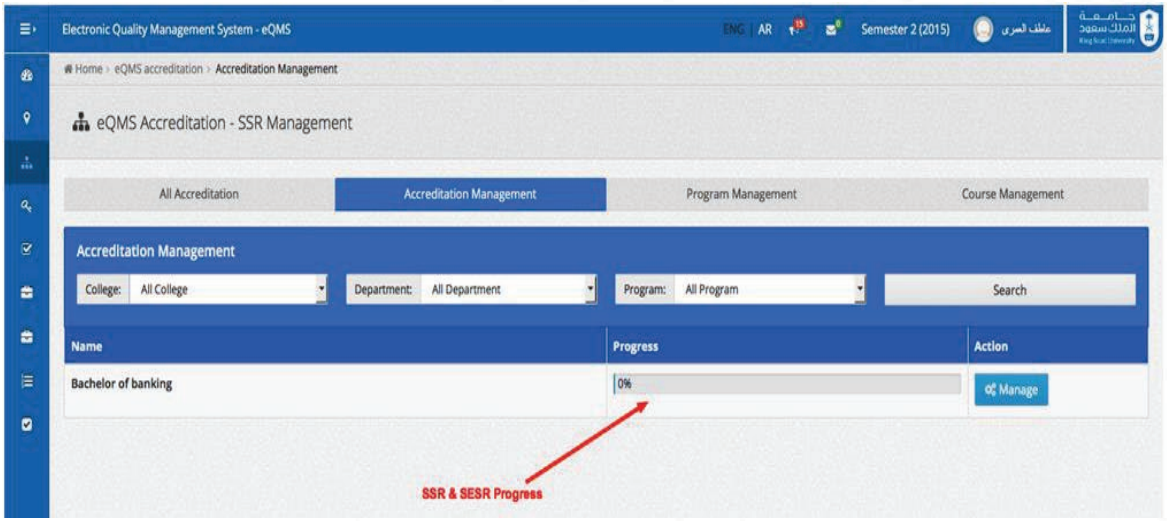
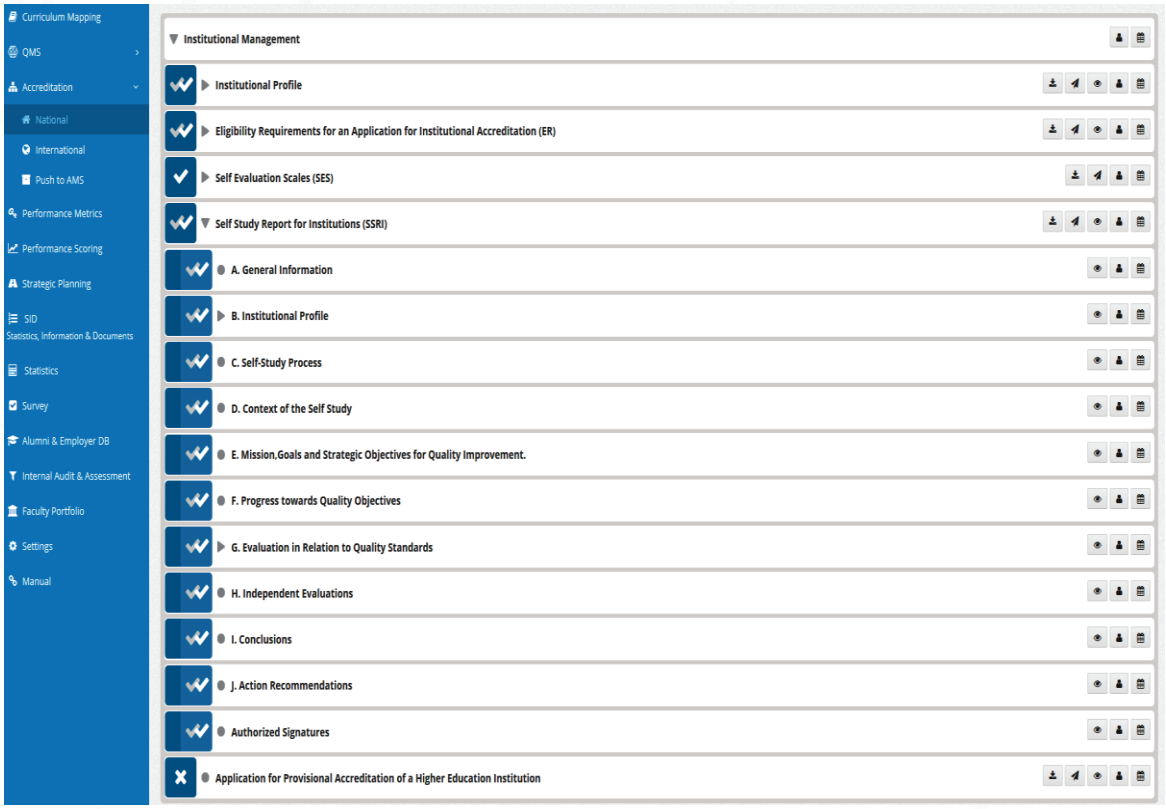
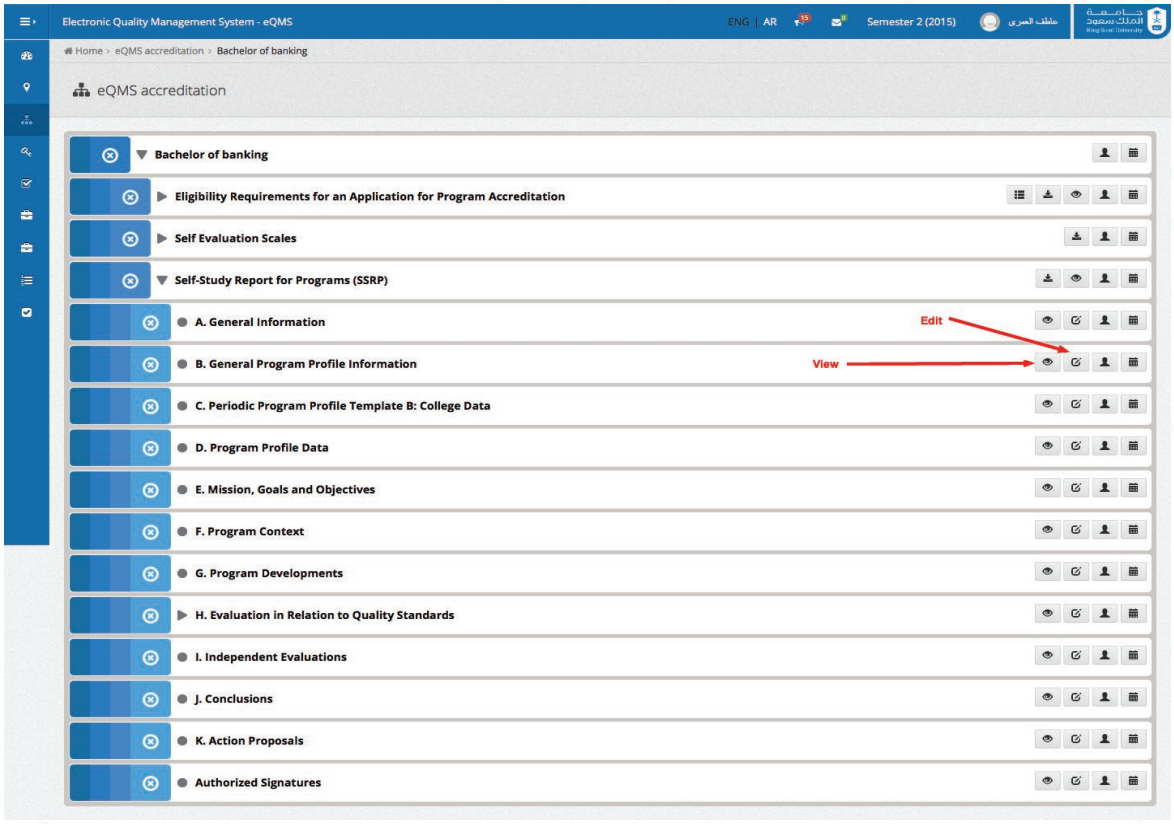

Electronic Quality Management System - eQMS
ENG | AR
Semester 2 (2015)
Home › eQMS accreditation › Accreditation Management
eQMS Accreditation - SSR Management
All Accreditation
Accreditation Management
Program Management
Course Management
Accreditation Management
College: All College
Department: All Department
Program: All Program
Search
Name
Progress
Action
Bachelor of banking
0%
Manage
SSR & SESR Progress

Figure 5.23: Detailed components of the development SSRI and SSRP



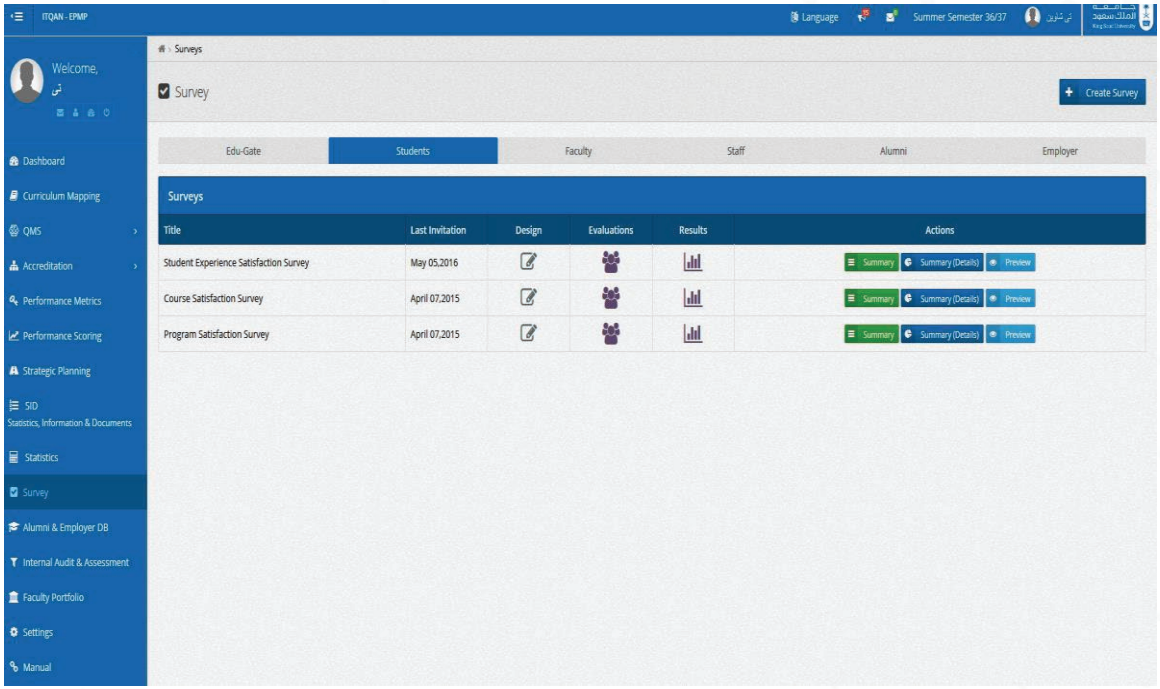

Electronic Quality Management System - eQMS
ENG | AR
Semester 2 (2015)
Home › eQMS accreditation › Bachelor of banking
eQMS accreditation
Bachelor of banking
Eligibility Requirements for an Application for Program Accreditation
Self Evaluation Scales
Self-Study Report for Programs (SSRP)
A. General Information
B. General Program Profile Information
C. Periodic Program Profile Template B: College Data
D. Program Profile Data
E. Mission, Goals and Objectives
F. Program Context
G. Program Developments
H. Evaluation in Relation to Quality Standards
I. Independent Evaluations
J. Conclusions
K. Action Proposals
Authorized Signatures
Edit
View

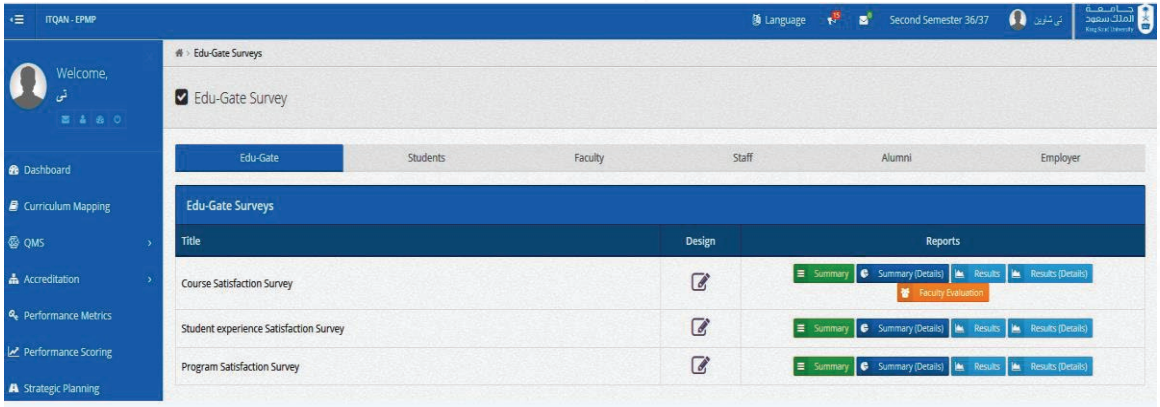
5.6.8. Surveys

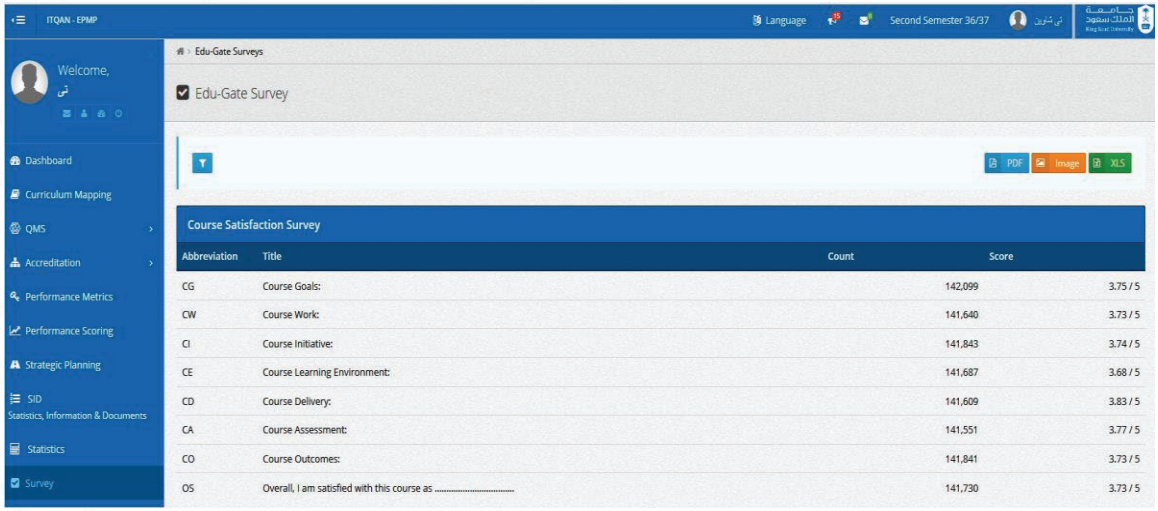
Surveys form a very important indirect assessment of performance qualitatively. The 7 mandated KSU surveys used for the institution, colleges and programs that can be drilled down and aggregated are:

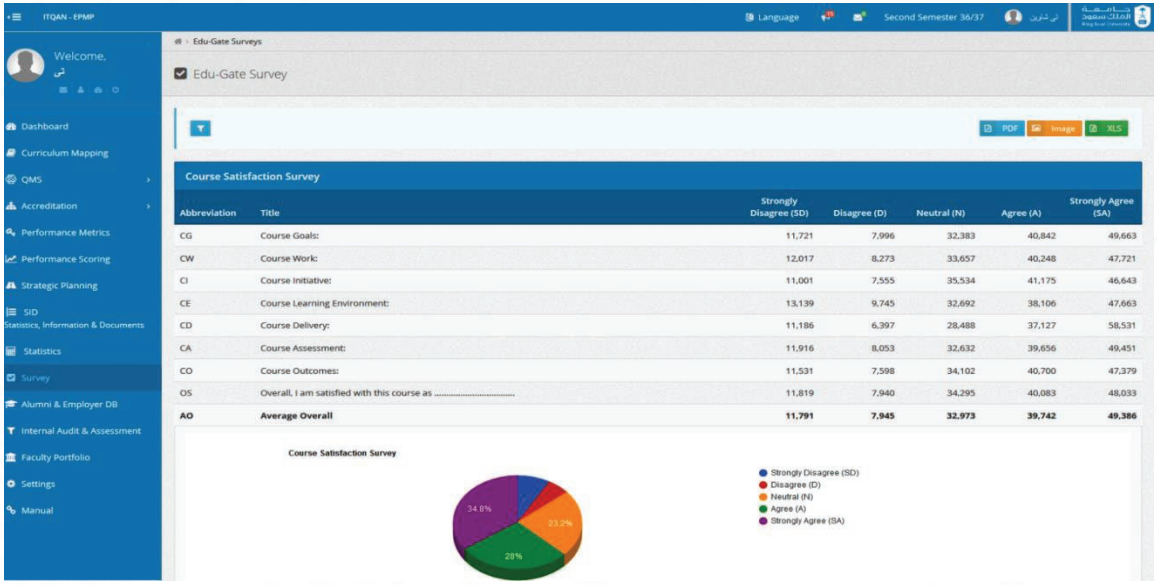
- ***Course Satisfaction Survey*** – surveyed for each course, each section of each program on a semester basis (Figure 5.24 is used to illustrate the surveys of the students of the course). The faculty evaluation for each of the faculty comes from a selected set of survey statements (Figure 5.25).
- ***Student Experience Survey*** – surveyed of graduating students annually as the end of semester
- ***Program satisfaction Survey – surveyed of graduating students annually as the end of semester***
- ***Faculty Satisfaction Survey*** - surveyed of faculty of their satisfaction that includes more of engagement factors annually as the end of semester
- ***Staff Satisfaction Survey*** - surveyed of staff of their satisfaction that includes more of engagement factors annually as the end of semester
- ***Alumni Satisfaction Survey*** – conducted by Colleges of their programs' alumni
- ***Employment Market Satisfaction Survey*** – conducted by Colleges of their employment markets' of their college graduates

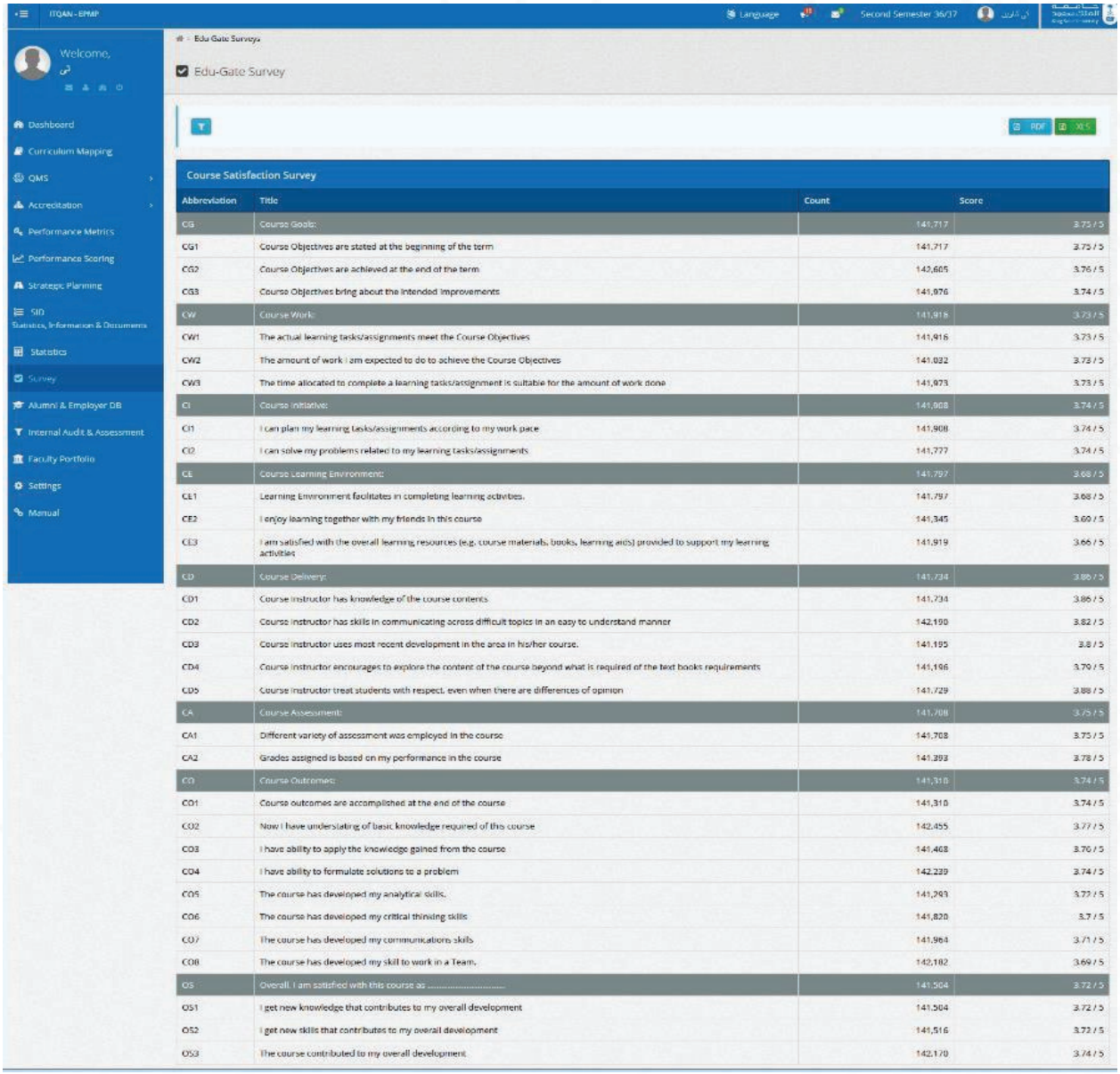
Figure 5.24: Screenshots of Course Satisfaction Survey and Faculty Evaluation






ITQAN - EPMP
Language
Second Semester 36/37
Welcome,
Edu-Gate Surveys
Edu-Gate Survey
Dashboard
Curriculum Mapping
QMS
Accreditation
Performance Metrics
Performance Scoring
Strategic Planning
SID
Statistics, Information & Documents
Statistics
Survey
PDF
Image
XLS
Course Satisfaction Survey
Abbreviation
Title
Count
Score
CG
Course Goals:
142,099
3.75 / 5
CW
Course Work:
141,640
3.73 / 5
CI
Course Initiative:
141,843
3.74 / 5
CE
Course Learning Environment:
141,687
3.68 / 5
CD
Course Delivery:
141,609
3.83 / 5
CA
Course Assessment:
141,551
3.77 / 5
CO
Course Outcomes:
141,841
3.73 / 5
OS
Overall, I am satisfied with this course as .....
141,730
3.73 / 5

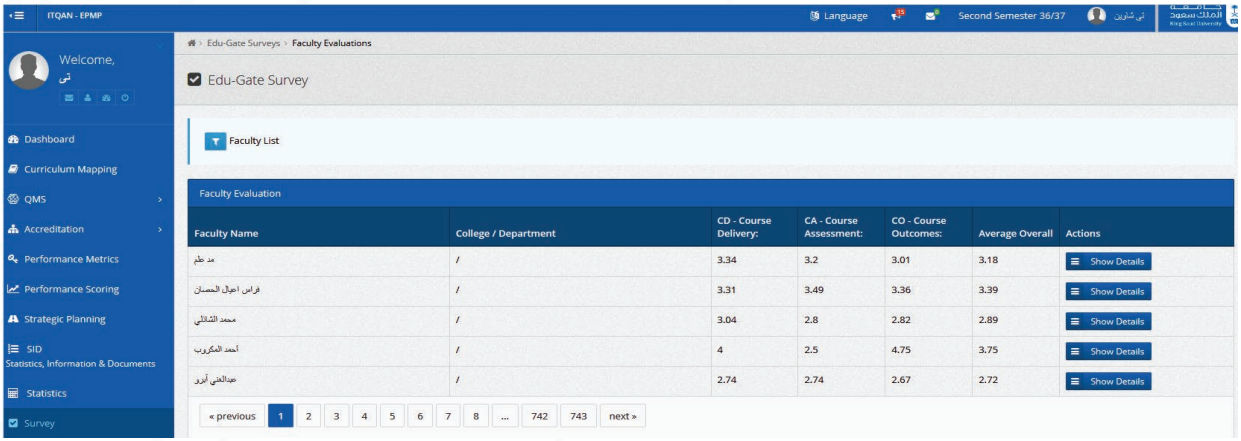

ITQAN - EPMP
Language
Second Semester 36/37
Welcome,
Edu-Gate Surveys
Edu-Gate Survey
Dashboard
Curriculum Mapping
QMS
Accreditation
Performance Metrics
Performance Scoring
Strategic Planning
SID
Statistics, Information & Documents
Statistics
Survey
Alumni & Employer DB
Internal Audit & Assessment
Faculty Portfolio
Settings
Manual
PDF
Image
XLS
Course Satisfaction Survey
Abbreviation
Title
Strongly Disagree (SD)
Disagree (D)
Neutral (N)
Agree (A)
Strongly Agree (SA)
CG
Course Goals:
11,721
7,996
32,383
40,842
49,663
CW
Course Work:
12,017
8,273
33,657
40,248
47,721
CI
Course Initiative:
11,001
7,555
35,534
41,175
46,643
CE
Course Learning Environment:
13,139
9,745
32,692
38,106
47,663
CD
Course Delivery:
11,186
6,397
28,488
37,127
58,531
CA
Course Assessment:
11,916
8,053
32,632
39,656
49,451
CO
Course Outcomes:
11,531
7,598
34,102
40,700
47,379
OS
Overall, I am satisfied with this course as .....
11,819
7,940
34,295
40,083
48,033
AO
Average Overall
11,791
7,945
32,973
39,742
49,386
Course Satisfaction Survey
34.8%
23.2%
28%
Strongly Disagree (SD)
Disagree (D)
Neutral (N)
Agree (A)
Strongly Agree (SA)

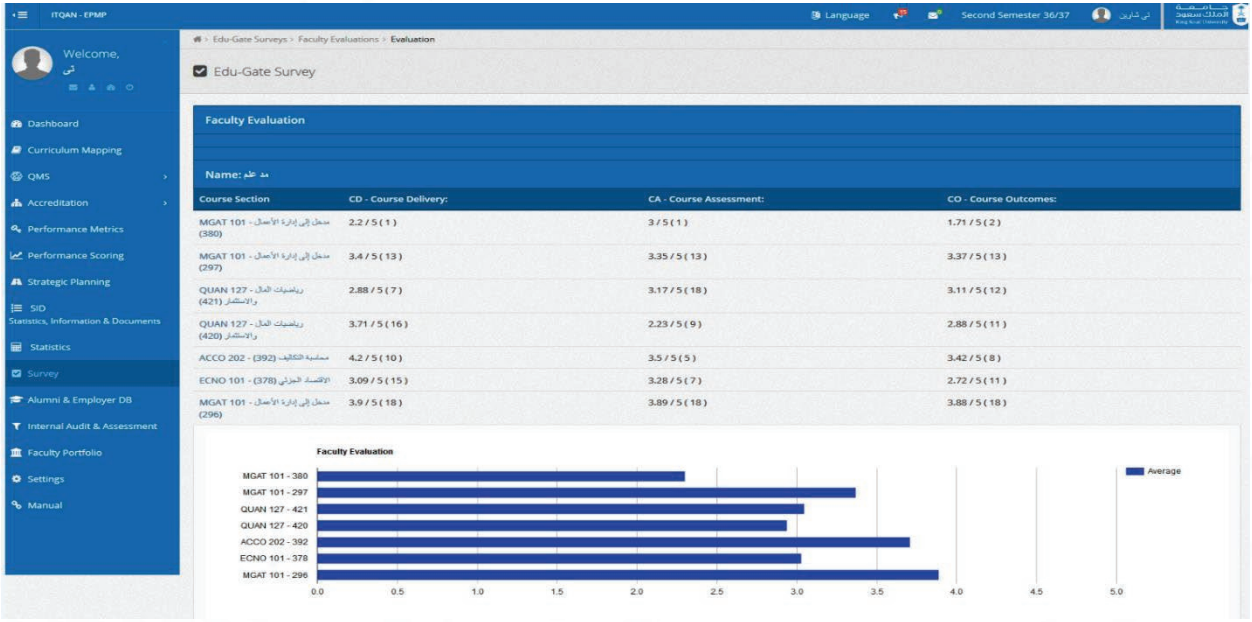


Course Satisfaction Survey

Abbreviation	Title	Count	Score
CG	Course Goals:	141,717	3.75 / 5
CG1	Course Objectives are stated at the beginning of the term	141,717	3.75 / 5
CG2	Course Objectives are achieved at the end of the term	142,605	3.76 / 5
CG3	Course Objectives bring about the intended improvements	141,976	3.74 / 5
CW	Course Work:	141,916	3.73 / 5
CW1	The actual learning tasks/assignments meet the Course Objectives	141,916	3.73 / 5
CW2	The amount of work I am expected to do to achieve the Course Objectives	141,032	3.73 / 5
CW3	The time allocated to complete a learning tasks/assignment is suitable for the amount of work done	141,973	3.73 / 5
CI	Course Initiative:	141,908	3.74 / 5
CI1	I can plan my learning tasks/assignments according to my work pace	141,908	3.74 / 5
CI2	I can solve my problems related to my learning tasks/assignments	141,777	3.74 / 5
CE	Course Learning Environment:	141,797	3.68 / 5
CE1	Learning Environment facilitates in completing learning activities.	141,797	3.68 / 5
CE2	I enjoy learning together with my friends in this course	141,345	3.69 / 5
CE3	I am satisfied with the overall learning resources (e.g. course materials, books, learning aids) provided to support my learning activities	141,919	3.66 / 5
CD	Course Delivery:	141,734	3.86 / 5
CD1	Course Instructor has knowledge of the course contents	141,734	3.86 / 5
CD2	Course Instructor has skills in communicating across difficult topics in an easy to understand manner	142,190	3.82 / 5
CD3	Course Instructor uses most recent development in the area in his/her course.	141,195	3.8 / 5
CD4	Course Instructor encourages to explore the content of the course beyond what is required of the text books requirements	141,196	3.79 / 5
CD5	Course Instructor treat students with respect, even when there are differences of opinion	141,729	3.88 / 5
CA	Course Assessment:	141,708	3.75 / 5
CA1	Different variety of assessment was employed in the course	141,708	3.75 / 5
CA2	Grades assigned is based on my performance in the course	141,393	3.78 / 5
CO	Course Outcomes:	141,310	3.74 / 5
CO1	Course outcomes are accomplished at the end of the course	141,310	3.74 / 5
CO2	Now I have understating of basic knowledge required of this course	142,455	3.77 / 5
CO3	I have ability to apply the knowledge gained from the course	141,468	3.76 / 5
CO4	I have ability to formulate solutions to a problem	142,239	3.74 / 5
CO5	The course has developed my analytical skills.	141,293	3.77 / 5
CO6	The course has developed my critical thinking skills	141,820	3.7 / 5
CO7	The course has developed my communications skills	141,964	3.71 / 5
CO8	The course has developed my skill to work in a Team.	142,182	3.69 / 5
OS	Overall, I am satisfied with this course as	141,504	3.72 / 5
OS1	I get new knowledge that contributes to my overall development	141,504	3.72 / 5
OS2	I get new skills that contributes to my overall development	141,516	3.72 / 5
OS3	The course contributed to my overall development	142,170	3.74 / 5

Figure 5.25 Faculty Evaluation

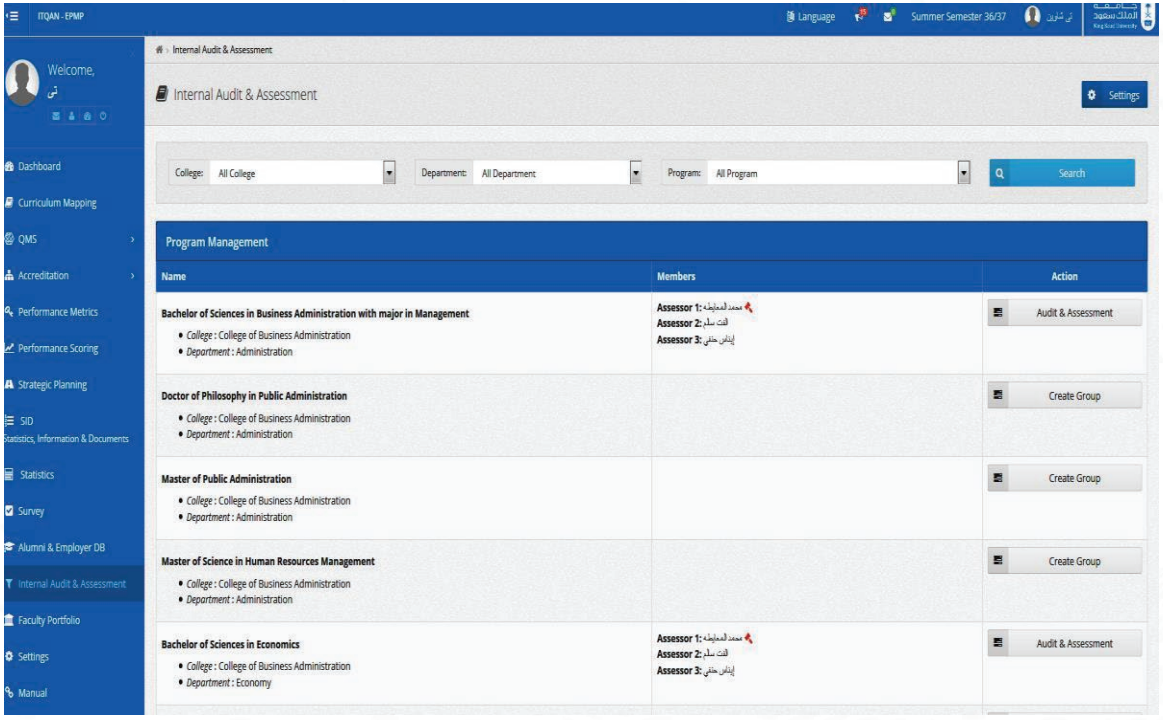


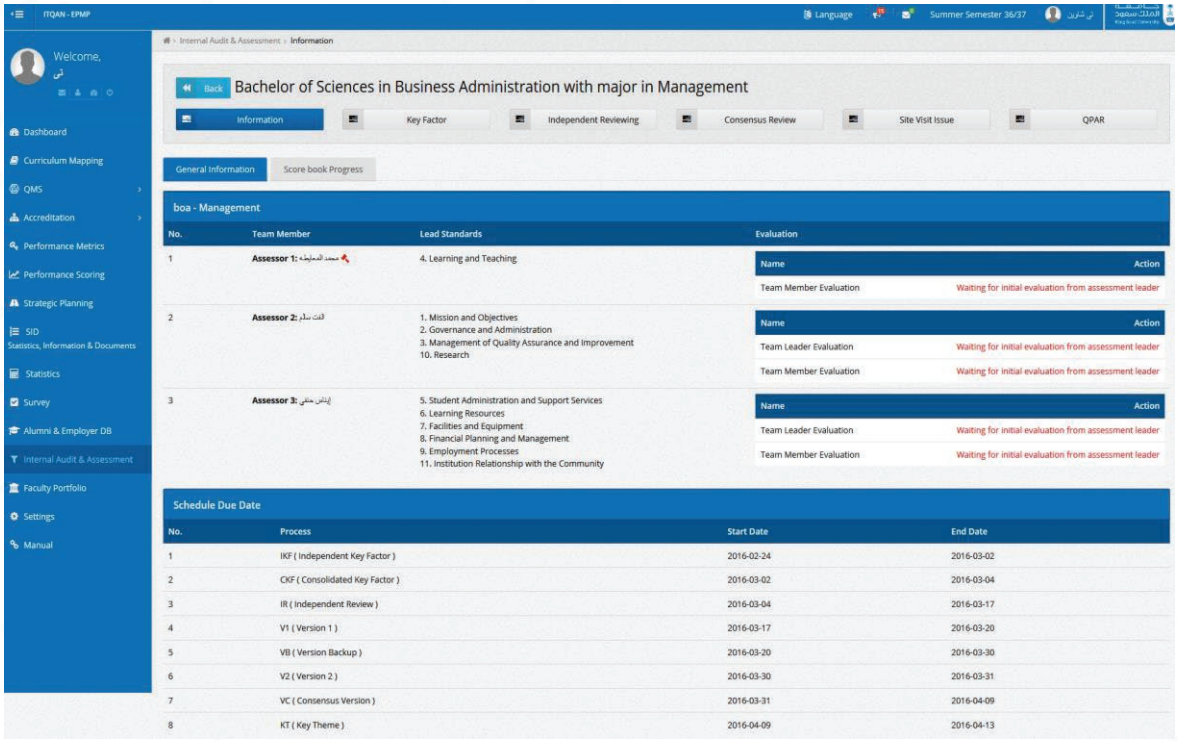


5.6.9. Bi-Annual Internal Audit and Assessment

The bi-annual IAA (Internal Audit and Assessment) is the main internal evaluation of the performance of the programs in between the accreditation and re-accreditation cycles. The key components are used by the KSU-BOAs for their independent and consensus review leading to the site visit and the final QPAR of the program

Figure 5.26: Context and Content screenshots Internal Audit and Assessment

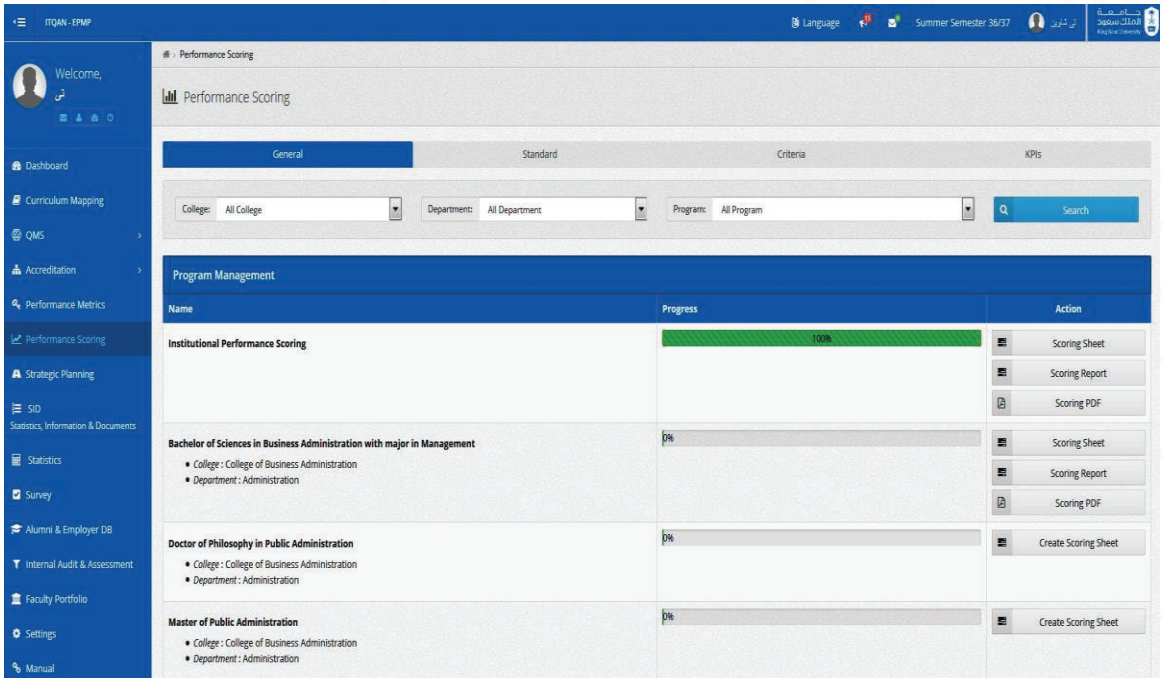


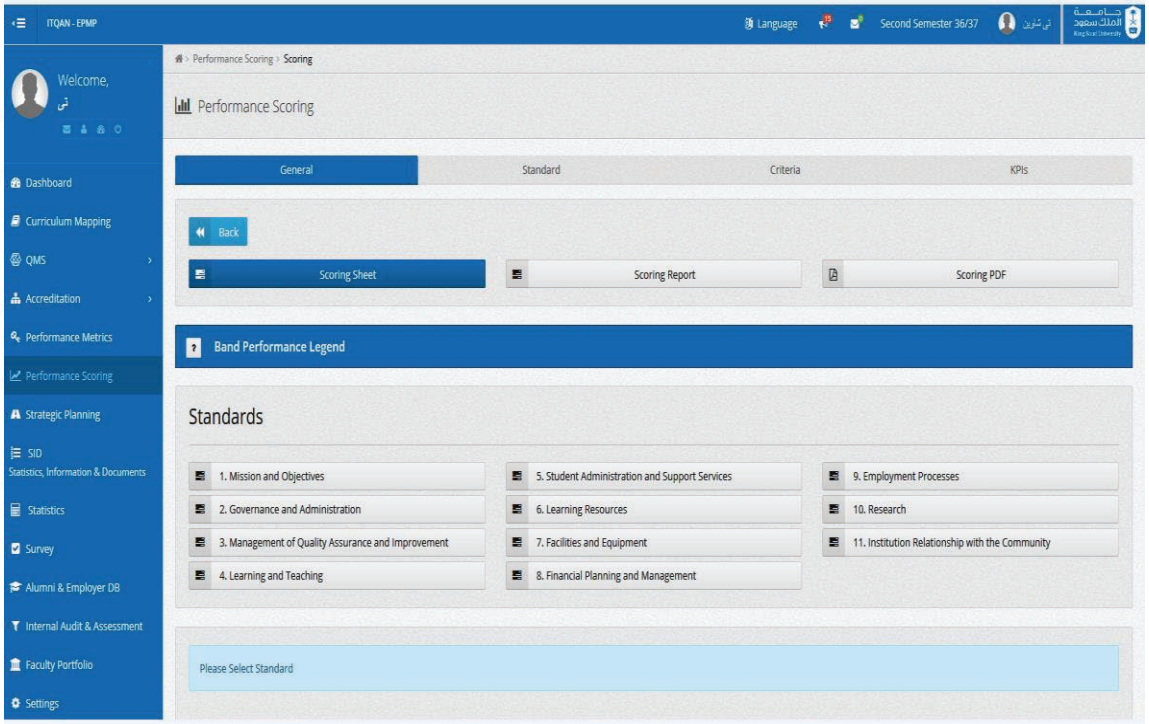


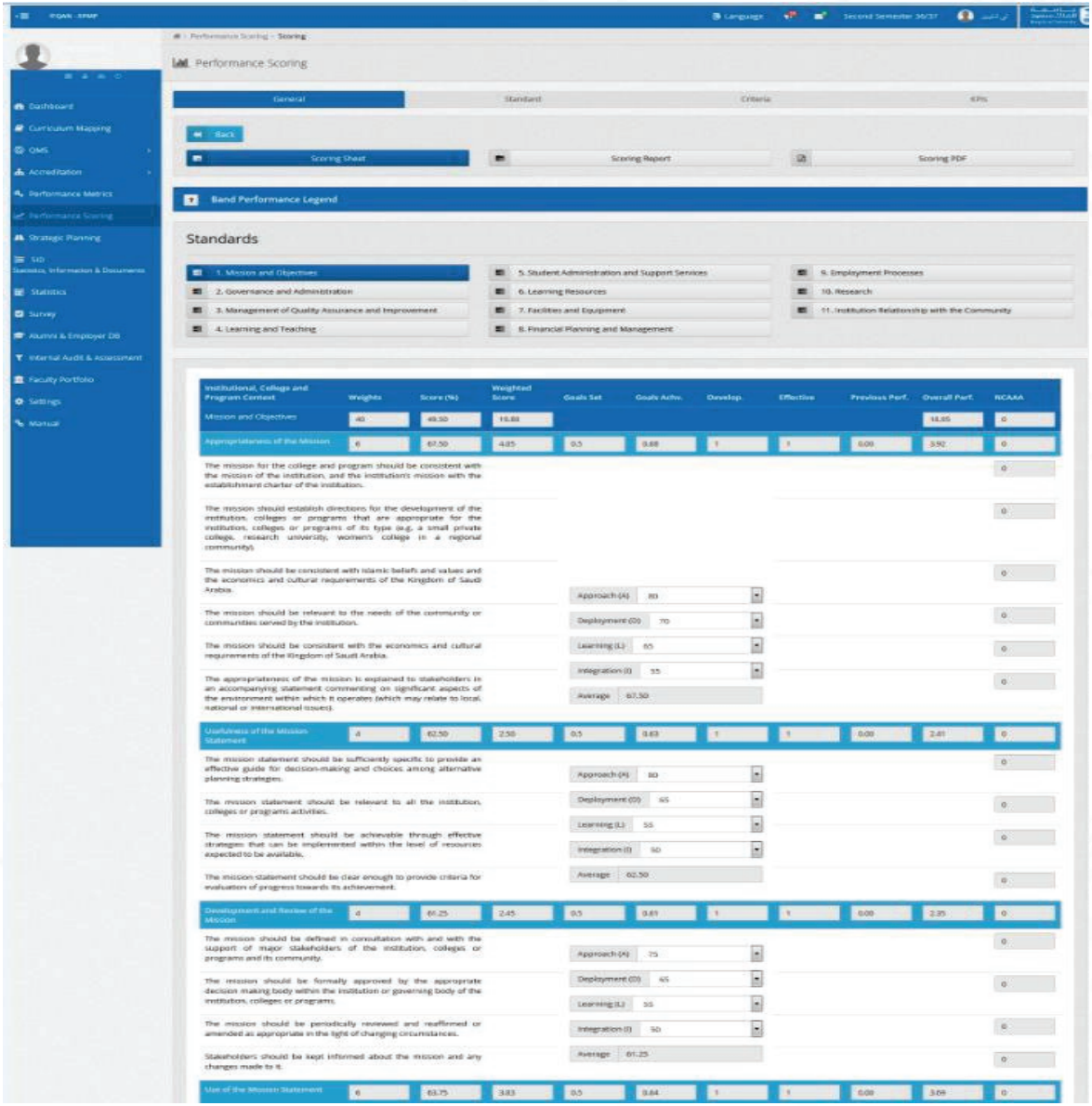
5.6.10. Performance Scoring

The performance scoring based on the evaluation of the process criteria using ADLI (Approach, Deployment, Learning and Integration) by the programs themselves of their performance and by the KSU-BOA as reported in the QPAR is used to determine the performance of the audited and assessed program in their bi-annual IAA (Figure 5.27).

Figure 5.27: Context and Content Screenshots of Performance Scoring




ITQAN - EPMP
Language
Second Semester 36/37
Welcome,
Performance Scoring › Scoring
Performance Scoring
Dashboard
Curriculum Mapping
QMS
Accreditation
Performance Metrics
Performance Scoring
Strategic Planning
SID
Statistics, Information & Documents
Statistics
Survey
Alumni & Employer DB
Internal Audit & Assessment
Faculty Portfolio
Settings
General
Standard
Criteria
KPIs
Back
Scoring Sheet
Scoring Report
Scoring PDF
Band Performance Legend
Standards
1. Mission and Objectives
2. Governance and Administration
3. Management of Quality Assurance and Improvement
4. Learning and Teaching
5. Student Administration and Support Services
6. Learning Resources
7. Facilities and Equipment
8. Financial Planning and Management
9. Employment Processes
10. Research
11. Institution Relationship with the Community
Please Select Standard


Performance Scoring
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Standards
1. Mission and Objectives
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6. Learning Resources
7. Facilities and Equipment
8. Financial Planning and Management
9. Employment Processes
10. Research
11. Institution Relationship with the Community

5.7. Implications of the ITQAN 2020: KSU Performance Management System

In the development of the ITQAN 2020: KSU Performance Management System, it is considered a complete business process redesign that combined 5 separate processes into a singular core process (Ashworth, 1999; Childe *et al.*, 1994; CIM-OSA Committee, 1989) that cuts across 5 different owners and domains rather than based on a fragmented collection of individuals and small scale systems (Tovey, 1991; Mason, 1993), with the output directed to and satisfied the internal and external stakeholders based on their strategic needs (Temporal. 1990; Bolt, 1993; Burach *et al.*, 1997).

As noted by Franco-Santos *et al.*, (2007), the two key characteristics of a business performance management system of "performance measures" and "supporting infrastructure" and the 3 key processes of: "information provision", "measure design and selection" and "data capture" were incorporated into the architectural design of the integrated electronic IQA linking the quality-information-planning dimensions. The performance measurement which has revolutionized into performance management that provides both measures of what had happened and also management that provides opportunities to refine or improve on the "what, why and how" mechanisms in this integrated electronic IQA system.

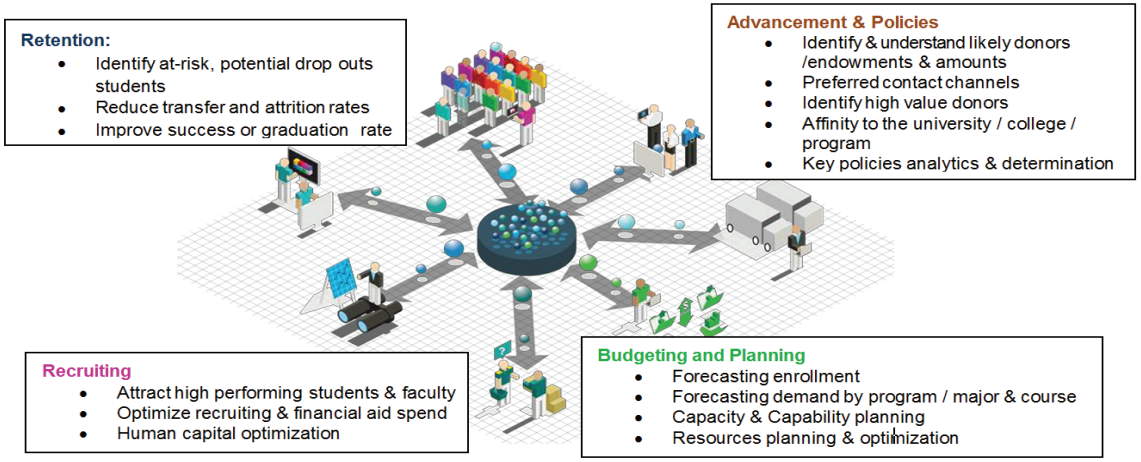
Kennerly and Neely (2002), Oakland's (1999) and Sveiby, (1997) who noted that success depended on people capability, competence and culture (communication, integrity, championship, common understanding, management commitment, individual resistance) and inclusion of stakeholders was clearly important. In this case, the champion (key change agent supported with management commitment) have both strategic and technology expertise to merge the management and technical realms, is highly regarded and placed to call the shots and overcome the cultural and organizational blockage in terms of old mind sets of political domains, resistance, non-cooperation amongst units, past policies and status quo mentality, do only what is ordered with legacy systems that were embedded after decades of non-proactive or reactive actions or initiatives. The champion was able to bring all parties to focus on the key issue that affects the creation of educational value using a push-pull mechanism to reconcile differences and needs of all stakeholders.

The strategic triangularization of the quality-information-planning underscores Rouse and Putterill (2003) proposal of a macro-micro linkage of the: 1) interface between organization and stakeholders, 2) capacity and capability of resources, 3) planning-evaluation and resource-achievement, and 4) the basic core elements of input-activities-output. The operationalization of the organizational strategic needs to

the operational level through the integrated electronic quality-information-planning systems is the key determinant of performance achievement as these are the internal processes that creates and delivers on the educational value.

The KSU ITQAN data warehouse, accumulates and aggregates key data sources from registrar of students data, student academic performances, course and program data, human resources of faculty work performance, financial and facilities and infrastructure resources, all of which are critical to program / college and institution performance and of its stakeholders. Based on this vast access and availability of data, predictive modeling of analytical projections and future environments of policy and planning can be done. This area for enhancements of the system is further strengthened by the Association of American Education Analytics (AAEA), Center for Education Analytics (CEA) and Institutional Research Intelligence (IRI) in "Transforming US Colleges and Education System to be more Competitive in the New World Economy" (AAEA, 2014). This IRI mindset (Djunaidi, 2012), is dependent on key knowledge areas of (1). Mathematical Statistics (2) Multivariate Statistics; (3) Econometrics (4) Regression Analyses (5) Time-series Analyses and (6) Microeconomics Theories (7) Intermediate/Advanced SAS Programming (8) Understanding Different Type of Data. Other key areas for predictive modeling application in HEI can be in areas of retention, advancement & policies, recruiting and budgeting & planning Figure 5.28.

Figure 5.28: Potential areas for Predictive Analytics in Higher Education



Source: Adapted from Tagtow, M, (2014), Predictive Analytics in Higher Education, EKS&H
http://www.infolinkconsulting.com/wp-content/uploads/2014/09/EKSH-Predictive-Analytics-in-Higher-Education-Workshop-Sept-23-2014.pdf

5.8. Conclusion

The ITQAN 2020: KSU Performance Management System showcase the bringing about the success of the ICT of the HEI for its educational aims and mission within the KSU-IR institutional research Framework is reconciled by:

- Bringing about a cross marriage of the strategic management, education management with the IS/IT management as the enabler for quality management and planning management, that must be aligned which is normally easier said than done as it brings about the convergence of 3 very different disciplines. This could be done through the expert knowledge of the champion or change agent who must have practical and working knowledge and skills of the strategic needs of the HEI and the operationalization of the technicalities of ICT and details of the tedious and overwhelming quality management and accreditation requirements.
- Moving from the macro organizational strategic needs to the micro level operational or functional processes needs a new mind-set that calls on the capability and capacity of all the individuals and the organization as one to move in the same strategic direction for a unified holistic mutually aligned accomplishments and achievements. The key factor is in the operationalization of the micro aspect of the macro overview as it is the internal processes and the human capital that must be re-engineered.
- The core processes of teaching-learning-research must be strategically linked via the quality management with the supporting enablers of the ICT through a set of strategic and operational plan that forms the integration and electronic triangularization of the quality-information-planning as expounded in this paper.

In conclusion, even-though the ITQAN 2020: KSU Performance Management System emphasized on the strategic integration of the quality-information-planning trilogy, this does not mean that other concepts and frameworks are irrelevant. On the contrary, as noted by Andersen *et al.* (2006), the quality management, information management and planning management, or for that matter, all aspects of the HEI commitment of educational value to society must be approached from a holistic perspective with a set of appropriate plethora of tools and techniques depending on the situational needs.

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