

**EFFECTIVENESS OF PROGRAM EVALUATION
THROUGH THE HEC PRESCRIBED SELF-ASSESSMENT
MODEL IN IMPROVING THE QUALITY OF DEGREE
PROGRAMS IN A PUBLIC SECTOR UNIVERSITY IN
PAKISTAN**

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Abstract

Program evaluation is a mandatory requirement of Higher education Commission (HEC), Pakistan. All degree and diploma programs, after the completion of each academic cycle, are required to prepare a report called Self-Assessment Report (SAR) based on the parameters prescribed by the HEC. With the establishment of Quality Assurance Agency (QAA), Quality Enhancement cells were established in eighty six public and private sector universities all over Pakistan to promote and assure quality culture in higher education. They were given the task to implement Quality Assurance through program evaluation using Self-Assessment Model.

The purpose of the current research project was to study the impact of program Evaluation through Self-Assessment on the quality of undergraduate and postgraduate degree programs. The study was a survey study based on the data collected from one hundred faculty members belonging to fifteen undergraduate and postgraduate programs in the field of Medical and Allied Health Sciences where Self-Assessment was implemented to evaluate these programs in a public sector university in Karachi.

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Analysis of the data has revealed tremendous changes in the performance and quality of the selected programs who have undertaken implementation of sustained program evaluations through Self-Assessment exercise. The exercise has led to systematically improving the quality of Program Mission, Objectives, Outcomes and Curriculum Design and organization by identifying the strengths and areas for improvement of the programs.

Key Words: Quality Assurance, Program Evaluation, Self-Assessment, Quality Enhancement Cell

Introduction:

The concept of Quality Assurance *in higher education is not new* as it has always been one of the major concerns of institutes *providing higher education* to establish a system that can ensure and enhance the *effectiveness of the teaching and* learning processes at work in their respective academic institution, *a system that is* sustained and can identify areas for improvement at each *level by eliminating root cause* responsible to cause the problem. Similarly, the education providers have always *been* concerned to have teams of trained *officials* who can assess, *identify, analyze and rectify* the issues and problems arising from any flaw in the *system so that the quality of* education can be made ensured at all level. Since there is so much expansion of higher education institutions, in the current era, who are offering unique academic programs in varied disciplines. These programs, when offered, need to have a proper quality check at each step from the start to the end to ensure that the processes of enrollment, registration, examination, dissemination of knowledge in the offered areas or specialties, delivery mechanism, assessment and evaluation and all related requirements are of a standard value. To ensure all this, the institutions need to have a well-established and fully functioning QA system that can evaluate the programs against set standards. Quality Assurance applies a series of activities, strategies, approaches and mechanisms to monitor and measure the quality of academic services in any academic institution.

Quality Assurance Agency (QAA) of Higher Education Commission (HEC), Pakistan was established in 2005 with the aim to devise policies for monitoring and measuring the maintenance and improvement of the quality in higher education by integrating the element of

quality in higher education systems and by developing practical guidelines and policies for the enhancement of education in Pakistan through a sustainable and effective QA System to promote quality culture at all levels so as to achieve higher level of academic excellence to meet national and international standards for each program..

Gradual Growth of Quality Assurance Network in Pakistan

QAA of HEC took initiative of establishing Quality Enhancement Cells (QEC) in all public and private sector universities in Pakistan to uplift the standards of quality of higher education by implementing uniform guidelines for all degree awarding institutes to attain uniformity across Pakistan.

The establishment of QECs was done in different phases. Following is the graphical presentation of the year wise gradual growth of QECs established in public and private sector universities across the country.

Table A. illustrates the phase wise growth of QECs Network in public and private sector universities all over Pakistan.

Phase/ Year of Establishment	No. of QECs established	Education Sector
Phase I (2005-6)	10	Public Sector
Phase II (2007-8)	20	Public Sector
Phase III (2009-10)	15	Public Sector
	17	Private Sector (W Category)
Phase IV (2010-11)	24	Public Sector
Total	86	Both Sectors

Table A: Phase wise Establishment of QECs

Initially, QECs were established in 30 Public sector universities aiming to implement a quality assured system for all degree programs. Gradually, more universities were included phase wise. Now there are 86 universities altogether including private and public sector universities where QECs are fully functioning.

QAA,HEC, Pakistan made these QECs responsible to implement Program Evaluation using Self-Assessment Model to evaluate the quality of each degree program. The term 'Program Evaluation', in any academic organization or degree awarding institute, is generally used to define a structured and systematic procedure to monitor the overall effectiveness and efficiency of the program including the efficiency and effectiveness of the teaching and learning processes as well as the adequacy and smooth functioning of the supporting facilities such as library, computer lab, science lab and other related infrastructure and process control facilities or services which help in the attainment of the stated mission and objectives of the program.

Program Evaluation has become a major function of QA departments working in higher education institutes. QECs started Program Evaluation through Self-Assessment prescribed by the QAA-HEC.

Self-Assessment Model Prescribed by the HEC

HEC Prescribed Self-Assessment Model to conduct Program Evaluation. Following are the parameters prescribed by the HEC for Self-Assessment:

- Criterion 1: Program Mission, Objectives and Outcomes
- Criterion 2: Curriculum Design and Organization.
- Criterion 3: Laboratories and Computing Facilities.
- Criterion 4: Student Support and Advising
- Criterion 5: Process Control
- Criterion 6: Faculty
- Criterion 7: Institutional Facilities
- Criterion 8: Institutional Support

Each Criterion has an 'Intent' or statement of requirements to be met and is divided into several standards and further divided into Sub Standards which describe how the intents are minimally met. So, all in all, there are thirty one standards to be addressed by each degree program, well supported by objective evidences to meet the HEC requirements.

The current study was focused on the evaluation of the effectiveness of the first two criteria namely; 'Criterion **01: Program Mission, Objectives and Outcomes** and Criterion **02: Curriculum Design and Organization**' of this Self-Assessment Model which was implemented in fifteen selected programs in a public sector university in Pakistan.

Review of Related Literature

Over the past few decades, Quality Assurance (QA) has emerged as a field of emerging profession, a field of great interest and educational reform in higher education institutions all over the world. Quality Assurance and assessment agencies have been established separately to address the challenges and issues regarding the promotion of quality culture and establishment of quality assurance systems to monitor and measure the efficiency of the academic programs on regular basis.

The term QA simply refers to a 'systematic approach to quality'. (Collins, 1994) It is a 'systematic management and assessment procedures' carefully designed and implemented to attain the quality in the specified domain or institute and thus to win the confidence and trust of its key stakeholders in the overall management and the results achieved. (Herman G, 1998) Stakeholders are individuals and groups who have a major interest in that institution or system and its achievements.

To quote Dill and Beerkens (2010), one of the most important steps taken towards the educational reforms in higher education is the introduction of systematic quality assurance. (Dill and Beerkens 2010). Katarina et al have pointed out that the establishment of QA is on two levels: one is at national level and the other is at institutional level. That simply means that at national level quality assurance agencies are working as governing bodies and at institutional level, higher education institutions have built their own internal QA systems to monitor their teaching and learning processes under the strict control of the organization and management. (Katarina Mårtensson, Torgny Roxå & Bjørn Stensaker, 2012)

'L. Bornmann and et al regard structured and systematic quality assurance procedures as an essential of higher education reforms. (L. Bornmann, S. Mittag & H.-D. Daniel, 2006) Similarly, El Khawas and et al supplement this idea that concerns related to quality assurance in higher education have become a central focus in both 'developing and transitioning countries.' (El-Khawas et al. 1998; El-Khawas 2002)

Faisal et al (2010) describes the significance of quality assurance systems mentioning the fact that the rapid growth and increase in higher education in terms of new academic programs in multi disciplinary fields, poses great challenges for the institutions to take effective measures to monitor the provision of quality education which is not possible without having a structured and organized QA system within the institution that can use proper strategies and procedures on ongoing basis to measure the efficacy of each program so that the program can produce outcomes at par the set criteria. (Faisal Aqlan , Omar Al-Araidah & Tarek Al-Hawari, 2010)

While defining how assurance principles work in an academic higher education institution, Frazer (1992, p.11) explains that since the Quality Assurance system keeps on checking and monitoring the whole processes of teaching and learning, the institute which has such a vigilant QA system becomes 'a self-critical community of students, teachers, support staff and senior managers each contributing to and striving for continued improvement'. (Frazer, 1992, p.11)

El-Khawas Elaine (2013) maintains that although the concept of QA has not yet been understood fully, it holds a central place in policy documents regarding quality in higher education. In many countries, it has covered a long journey where it has earned a formal status and authority by the government to officially play the role of a Regulatory, Monitoring and Policy Making Body to regulate, monitor and uplift the standard of higher education. (El-Khawas Elaine, 2013)

Currently, there are quality assurance agencies functioning in most of the countries across the world and despite having variations in their structure, due to the local context, these agencies are working, more or less, on a same theme, even the approach being followed by them is almost same with a bit differences. For example, these agencies develop a model of assessment and evaluation which involves both internal and external quality assurance mechanisms, performance reviews, progress measurement and formal reporting of all these. (Stensaker & Harvey, 2011)

Some of the initiatives that these QA agencies have introduced to strengthen the higher education sector all over the world, include capacity building, development of policy documents, effective strategies for conducting academic review and audits, improved techniques for performance indicators etc. some QA networks have introduced and implemented Qualification Frameworks.

All these instruments and educational reforms serve the functions of valuable resources to strengthen the quality assurance in higher education. (Middlehurst, 2011)

The fact is that QA has emerged as a new promising profession in today's world, for it has brought about several positive changes in higher education by developing a 'specialized base of knowledge and useful standards, guidelines and procedure documents that have proved to be effective sources and tools for initiating good practices in maintaining quality in higher education. (El-Khawas ,2013)

QAA established by the HEC, Pakistan also devised certain policy document, standards and assessment and evaluation tools and made QECs responsible to implement them in their respective university. The prime job of QECs as assigned by the QAA-HEC was to conduct program evaluation using Self Assessment approach.

Program evaluation is a tool used to check and validate the efficacy of the program that how well or how effectively a program is meeting its stated vision, mission and objectives. Program evaluation provides the program developers, program runners and program users with a structured guideline to see what they are planning, implementing and delivering to the program stakeholders is as per the planned components and planned curriculum. It also helps them measure how far the program is achieving its stated goals and objectives. (Fleischman H.L. & Williams L, 1996)

Cathy (2008) also maintains the same that Program Evaluation is a tool of Quality Assurance that is used in most of higher education institutions with an aim to improve the quality of the program. Although the evaluators or QA officials often have to face severe resistance from the faculty and management while implementing this useful tool and they have to face problems in making them realize that the results of such evaluations are for the benefit of the program if the recommendations are followed, eventually they come to admit that such practices really prove to be fruitful in enhancing the program quality because it does not focus on highlighting the weaknesses of individuals who are running the programs but the overall intended and actual goals and practices of the program are evaluated and appraised. (Cathy Bray, 2008)

Another group of researchers Rossi et al have regarded the process of program evaluation as ‘the systematic application of scientific methods to assess the design, implementation, improvement or outcomes of a program’ (Rossi & Freeman, 1993; Short, Hennessy, & Campbell, 1996). “Processes reflect the way people organize their work. Good processes represent a necessary condition for high quality.” (Massy 2003: 165) Likewise, Kirkpatrick defines Program evaluation as a systematic process of utilizing data to judge a given program. (Kirkpatrick & Kirkpatrick, 2006)

With the emergence of Quality Assurance demands in higher education, the higher education institutions that have been acclaimed to be providing quality education “are called into question the capacity of the university sector to deliver quality outcomes”. (Harker, 1995: 31)

In some educational contexts, program evaluation and program assessment are used synonymously however, there is a difference between the two as pointed out by Suskie (2004) Evaluation focuses on the 'appropriateness and quality of a program or curriculum' whereas assessments focus on the 'achievements' of individual learners.(Suskie, 2004).

QAA-HEC, Pakistan introduced Self Assessment approach and prescribed a Self Assessment Model based on eight criteria. Program Self-Assessment yields several benefits such as a better and increased understanding of the effectiveness of learning resources used to carry out educational activities, identification of the strengths of the program as well as the areas for improvement. (Andrade and Valtcheva 2009)

Self Assessment being one of the most powerful tools of program evaluation provides the evaluators with a kind of ownership of the strengths and weaknesses of the program they are running and evaluating. Self Assessment is basically judging one’s own quality of work for the purpose of further improvement (Rolheiser & Ross, 2000). This involves an objective judgment to identify strengths and weaknesses and to bring improvements in them. (Paris & Ayres, 1994; Wiggins, 1998). Oakland (1999) maintains in his study that self assessment helps in finding out areas for improvement. It aims to formulate a sustainable evaluation mechanism to check both academic processes as well as outcomes of any academic service or program to strengthen the quality and the performance of the organization (Stahl, 1998). Roseanna & Mandia (2011) assert

that Self-Assessment can work as an important 'lens' through which one can see how to enhance learning to improve the program. (Roseanna Bourke & Mandia Mentis, 2011)

Rauf (2008) is of opinion that the quality of institutional performance is directly dependent upon the effective, continuous, ongoing self assessment exercises because it involves all the significant areas of a program or a service including the alignment among its various elements like mission, objectives, outcomes, students' and faculty's contribution to achieve them, infrastructure and support services to facilitate them, the control processes and feedback from its various stakeholders, to make a whole.

Heidi et al (2009) concludes in their research that enough evidence is available to prove that self assessment leads to self efficacy or self improvement. To justify their point of view, they have cited studies conducted by Paris and Paris (2001) who have also promoted the same notion that self assessment encourages progress review and monitoring. Schunk and Ertmer (1999) are also of the same opinion that "the opportunity for self-assessment promoted self-efficacy" (Schunk and Ertmer p. 257, 1999)

With the emergence of Quality Assurance demands in higher education, the higher education institutions that have been acclaimed to be providing quality education are called into question for their capacity to deliver quality outcomes (Harker 1995: 31). Although there is a rapid growth of academic programs in higher education and lot of quality assurance measures have been adopted to uplift the provision of quality, Stensaker (2006) has noted that despite the fact that there are a growing number of studies on quality assurance, there is a lack of research on the impact of quality assurance measures at program and institutional level. Deirdre Lillis (2012) has regarded the methodological issues surrounding the assessment of the impact of quality assurance processes as a major challenge. (Stensaker, 2006).

In Pakistan too, there are very few published examples of tested impact studies of QA tools implemented in higher education. Therefore, this STUDY has focused not to evaluate the effectiveness of the core activities of the higher education institutes like teaching, research etc, but to evaluate the effectiveness of QA tools, specifically Self Assessment, to measure whether

or not such tools are leading to improving the quality of the academic programs in the targeted areas.

Objectives of the Study:

The current study was to evaluate the effectiveness of the Self-Assessment Model used as a tool of quality assurance in improving the quality of undergraduate and postgraduate programs being offered in a public sector university in Pakistan in terms of designing and implementing the Program Mission, Objectives and Outcomes and the Curriculum Design and Organization.

Research Methodology

The current study was a Survey Study which followed the following stepwise procedure:

Step I: Self-Assessment Model was implemented in fifteen academic programs. Relevant Feedback Forms were also implemented wherever they were applicable in the selected programs.

Step II: Program Evaluation/ Self Assessment Reports were reviewed at two levels: First by QEC then, by Subject Experts using a prescribed checklist (see Appendix I)

Step III: A questionnaire was constructed based on fifteen parameters. Out of fifteen, four were related to the Self Assessment Criterion 01: Program Mission, Objectives & Outcomes, four were concerning the Self Assessment Criterion 02: Curriculum Design & Organization and seven were related to the Self-Assessment Feedback Forms. 1-3 Rating Scale was used where 01 referred to 'Yes', 02 referred to 'Don't Know' and 03 referred to 'No'. (See Appendix II)

Step IV: The questionnaire was circulated among 100 faculty members to collect their feedback to record their perception regarding the impact of the Self Assessment to improve the quality of the Program Mission, Objectives & Outcomes and Curriculum organization and also to record the gradual strengthening of Quality Assurance of the selected programs using this model. Out of hundred (100), total ninety three (93) faculty members responded.

Step IV: The findings were studied, analyzed and evaluated quantitatively using SPSS. Conclusions were drawn and documented. Finally, recommendations were made for further studies in the related areas.

Qualitative Analysis of the Data

SARs of the selected programs were reviewed at two levels to identify strengths and areas for improvement:

QEC Level Review: QEC reviewed the SARs using the SAR checklist and recorded the feedback that was shared with the concerned Program Teams with a request to revise it to incorporate the suggested changes.

Some Major Findings included:

- The absence of Program documented Vision and Mission or if vision and mission were there, their alignment with organization vision and mission was missing
- Program Objectives were mostly generic and their phrasing was not clear. Mostly they missed action verb and reflected only cognitive domain of learning.
- Assessment tools for program objectives and outcomes were either missing or not properly documented
- Program outcomes, too, were neither derived from the program objectives nor they were linked with the course/group of courses
- Curriculum document was not organized.
- Syllabus breakdown in lectures was missing in some programs
- Course outcomes for each were mainly missing
- Dated Course outlines were not available
- There was no mechanism of students and faculty course evaluation
- There was no structured mechanism for teachers evaluation
- similarly, little consideration was found regarding the feedback from graduating seniors, alumni, faculty and employer

Subject Experts Level Review:

Some common findings shared by the subject experts included:

- Soundness of assessment tools for certain program objectives
- Some deviation was found in Credit hour allocation and standard course coding and justification was not given
- Feedback data was missing and if it was there, it was not properly organized, processed and analyzed. No root cause analysis was done and no corrective preventive action plan was followed.

- Little consideration was given to check quality of teaching delivery.

Outcomes of the Qualitative Reviews

QEC documented Assessment Team/ Subject Expert's observations in a table called SAR Implementation Plan Summary. (See Appendix III) These observations were shared with the concerned program providers. They were requested to suggest rectification plan for each by mentioning the due date of the implementation, Resources Required and Responsible Body. QEC, then, took the follow up on or after that due date, and made sure with objective evidences that rectification had been done.

Quantitative Analysis through the Questionnaire:

After the completion of the SAR cycle, a questionnaire was designed to collect feedback from the faculty in the programs where Self Assessment was implemented to document the effectiveness of these exercises.

Questions given in the questionnaire were divided into three major groups:

- **Group 01** considered perception of the faculty regarding the documentation of the Program Vision, Mission, Objectives and Outcomes.
- **Group 02** addressed the areas related to Curriculum design and organization including the documentation of an organized curriculum document, with outcomes for each course, syllabus breakdown in lectures and course mapping with the course outcomes.
- **Group 03** took into account if the programs had the structured feedback mechanism for its various stakeholders concerning course review by students and faculty, graduating, alumni and employer surveys, feedback from program employees and also Teachers' Evaluation from students.

Analysis of the Questionnaire:

Analysis of the results was done using frequency tables where $n = 93$ of 100. The questionnaire was circulated among 100 faculty members belonging to 15 academic programs out of which undergraduate programs were = 11 while postgraduate programs were = 04. Out of 100 faculty members 93 responded to share their perception regarding the 'Effectiveness of Self Assessment Exercise' implemented in their respective program. The rating scale 1-3 was used where 1=Yes,

2= Don't Know and 3= No. The responses obtained from the questionnaire have been shown in Frequency Table and the Pie Chart for each question. (See Appendix IV)

Discussion on Findings of Group 01 Questions from 1-4:

One of the most significant improvements identified in programs where Self-Assessment had been implemented using HEC prescribed model was the proper documentation of the Program Vision and Mission statements. As evident from the frequency tables for Qs.1 & 2, 87 (with 93.55%) faculty members out of 93 marked 'Yes' to the question regarding the availability of the proper documented Program Vision that sets the future direction for the program to be achieved. Similarly, 86 (with 92.47%) respondents marked their perception as 'Yes' to the question number 02 that was regarding the availability of the Program Mission Statement that serves the purpose of means to reach to the ends that has been set in the vision.

Before implementing the Self-Assessment, the programs either had only the Mission statement of the institute or that of the organization even that was not somewhere in proper alignment with each other. Through Self-Assessment, they were trained on how to devise Program Vision and Mission in line with Institution or college as well as university vision and mission. After this exercise the program teams were able to see if the core elements of the program mission were reflected in the college mission and how well they both could contribute to achieve the organization's vision and mission.

In addition to this, in question no. 3 i.e. regarding the availability of the documented, measureable program objectives, the frequency table shows that 81 (with 87.10%) out of 93 responses were marked as 'Yes' and in question 4, for program outcomes, 80 (with 86.02%) out of 93 were marked 'Yes'. This shows the effectiveness of the SA exercise as before the implementation of SA, program objectives and outcomes were not properly documented. Even if they were available, there were some major deficiencies which required thorough improvement and revision.

First such lacking was that the objectives were not derived from the Program mission. Similarly, the objectives and outcomes focused only on cognitive domain of learning, there was little consideration reflected for the psychomotor and affective domains of the learning. Then, they

had either missed to include action verbs to show the desired behavior to be inculcated in the learners or they had made it too generic. Likewise, program objectives and outcomes were not linked with each other and the program contents or courses were also not linked with program outcomes. Another important area for improvement that was identified during this process was that the measuring tools and strategies for most of the objectives were missing. There was no structured mechanism to measure if the program objectives and outcomes were achieved or not.

However, the implementation of the SA exercise has provided the program teams of the concerned programs enough insight and sufficient training to look into these areas on ongoing basis as a major focus of their teaching and learning activities. Changes have begun to take place and will go for further improvement in future.

Discussion on Responses for Group 02 Questions from 5-8

The second group of the questions in the questionnaire that was used to survey the perceptions of the faculty members of the selected programs who had participated in the SA exercise was based on the areas related to the Curriculum Design and Organization. The improvement identified in this area is also satisfactory as the Frequency Table of Question 05, i.e. the availability of the organized curriculum document, clearly shows the number of responses received as 'Yes' is 86 (with 92.47%) out of 93.

Similarly, as evident from the Frequency Tables for Question 06, i.e. if the Program had syllabus breakdown in lectures for each course, 77 (with 82.80%) informants out of 93, reported with 'Yes' which is again a quite good progress. As for the question 07 in this group, i.e. regarding the availability of the syllabus breakdown in lectures for each course, 83 (with 89.25%) faculty members out of 93 have marked as 'Yes'. Finally, the last question in this group, i.e. Q.8, surveyed about if the program contents / courses were mapped with the program outcomes, 78 (83.87%) respondents out of 93 marked their perception as 'Yes'.

Before implementing the Self-Assessment, the program curriculum document was mainly the list of courses with very broad objectives and summative assessment plan. There was not any organized course specification document. Course outcomes were also too generic and no

integration with courses was mapped. The implementation of the Self-Assessment brought great improvements as the program teams learnt to be very conscious to set inclusion and exclusion criteria for each course in the program. Moreover, it also enabled them to set and incorporate formative and summative activities for each course to assess the effectiveness of the teaching and learning processes.

Discussion on Responses for Group 03 Questions from 9-15

Feedback from the concerned stakeholders is very necessary for the program management to learn the satisfaction level of their students, faculty, alumni, as well as employers as it provides the program providers with the firsthand knowledge about how well they are successful in meeting their expectations. It helps them identify areas for improvement.

Prior to the program evaluation through self-assessment, there was no structured mechanism for collecting feedback regarding course review, teachers' evaluation etc. However, after the SA exercise, the program teams began to realize the worth of collecting feedback from these stakeholders to get to know what they feel about the programs' standing.

Summary of Results

The overall responses received in this group are ranging from:

- 73 (with 78.49%) of the respondents out of 93 said 'Yes' for question 9 i.e. Students Course Evaluation
- 67 (with 72.04%) of the respondents out of 93 said 'Yes' for question 10 i.e. Faculty Course Review
- 76 (with 81.72%) of the respondents out of 93 said 'Yes' for question 11 i.e. Teachers Evaluation
- 52 (with 55.91%) of the respondents out of 93 said 'Yes' for question 12 i.e. Graduating Students Survey
- However, since Alumni and Employer Surveys were not conducted directly by the program teams or institutes but through a centralized department, faculty was not sure if they had been implemented or not. Therefore, the response level in question 13 & 14 fell into second option i.e. 'don't know ' in the questionnaire. 31 (with 33.33%) of the respondents out of 93 said 'Yes' while 34 (with 36.56%) replied with 'don't know for question 13 i.e. Alumni Survey Form. Similarly, 33 (with 35.40%) of the respondents out of 93 said 'Yes' while 35 (37.63%) replied with 'don't know for question 14 i.e. Employer Survey Form.

- Finally, 43 (with 46.24%) of the respondents out of 93 said 'Yes' for the question 15 i.e. Faculty /Employee Survey Form.

Conclusion

Based on the data obtained through the survey designed to measure the effectiveness of the HEC model of the Self-Assessment leading to improve the quality of the selected academic programs, it can be deduced that the SA model has brought in significant changes in the quality of the degree programs.

The significant improvements resulted from the Self-Assessment were recorded mainly in three major domains: One was the setting up of the program vision, mission, objectives and outcomes, the cornerstones of the educational planning and management required to set present and future directions, goals and their integration to check if all components were contributing substantially to accomplish the institution's vision and mission or they needed synchronization.

The other domain was the organized and structured curriculum and course specification documents which were not just documents but were also operational at each level. The alignment between program vision and mission to that of institution vision and mission, the alignment between program objectives and program mission, the integration between program objectives and program outcomes and also the mapping of the program contents/ courses with program outcomes were all documented and made operational. These areas were the most significant and time consuming areas as it took long to convince program providers to revise and modify the previous old versions and incorporate the suggested changes to meet the HEC requirements.

Finally, the third domain where improvements were marked after the implementation of the SA model was related to the establishment of a very structured feedback mechanism from concerned stakeholders of each selected program. This feedback helped the program providers see where they needed improvements and modification in teaching and learning strategies and activities to maximizing the achievement of the desired results.

LIST OF REFERENCES

1. Andrade, H., and A. Valtcheva (2009). "Promoting Learning and Achievement through Self-Assessment" *Theory into Practice* 48 (1): 12–19
2. Bornmann L., S.Mittag² & H.-D. Daniel. (2006), *Quality Assurance in Higher Education – Meta Evaluation of Multi-Stage Evaluation Procedures in Germany*. *Higher Education* 52: 687–709
3. Cathy Bray (2008): Program evaluation of the sustainability of teaching methods, *Environmental Education Research*, 14:6, 655-666
4. Collins, P. (1994). Approaches to quality. *The TQM Magazine*, 6-3.
5. Deirdre Lillis (2012) Systematically evaluating the effectiveness of quality assurance programmes in leading to improvements in institutional performance, *Quality in Higher Education*, 18:1, 59-73, DOI: 10.1080/13538322.2012.663549
6. Dill, D.D., and M. Beerkens, eds. (2010). *Public policy for academic quality: Analysis of innovative policy instruments*. Dordrecht: Springer.
7. El-Khawas Elaine (2013): Quality assurance as a policy instrument: what's ahead?, *Quality in Higher Education*, 19:2, 248-257
8. El-Khawas, E. (2002). Quality assurance for higher education: Shaping effective policy in developing countries. In D.W. Chapman & A.E. Austin (eds.), *Higher Education in the Developing World: Changing Contexts and Institutional Responses*. Westport, CT: Greenwood Publishing Group Inc, 197–215.
9. El-Khawas, E.,(1998), 'Strong state action but limited results: perspectives on university resistance', *European Journal of Education*, 33(3), pp. 317–30.

10. Faisal Aqlan , Omar Al-Araidah & Tarek Al-Hawari (2010) Quality assurance and accreditation of engineering education in Jordan, *European Journal of Engineering Education*, 35:3,311-323, DOI: 10.1080/03043797.2010.483608
11. Fleischman H.L, Williams L. (1996), 'An Introduction to Program Evaluation for Classroom Teachers', November 1996
12. Frazer, M. (1992), 'Quality Assurance in Higher Education' in *Quality Assurance in Higher Education*, ed. A. Craft, Falmer Press, London.
13. Harker, B. "Postmodernism and Quality." *Quality in Higher Education* 1.1 (1995): 31–39.
14. Harman, G. (1998). "The Management of Quality Assurance: A Review of International Practice" in *Higher Education Quarterly*, 0951-5224. Volume 52, No. 4. October 1998, pp 345-364.
15. Heidi L. Andrade , Xiaolei Wang , Ying Du & Robin L. Akawi (2009): Rubric-Referenced Self-Assessment and Self- Efficacy for Writing, *The Journal of Educational Research*, 102:4, 287-302
16. Katarina Mårtensson, Torgny Roxå & Bjørn Stensaker. *Studies in Higher Education* (2012): From quality assurance to quality practices: an investigation of strong microcultures in teaching and learning, *Studies in Higher Education*, DOI:10.1080/03075079.2012.709493
17. Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels* (3rd ed.). San Francisco: Berrett-Koehler.
18. Massey, W.F., 2003, *Honouring the Trust: Quality and cost containment in higher education* (Bolton, MA, Anker Publishing).
19. Middlehurst, R., (2011), 'Accountability and cross-border higher education: dynamics, trends and challenges', in Stensaker, B. & Harvey, L. (Eds.) *Accountability in Higher Education: global perspectives on trust and power* (pp. 179–202) (New York, Routledge).

20. Oakland, J.S. (1999), "Total Organizational Excellence: Achieving World Class Performance", Butterworth – Heinemann, Oxford.
21. Paris, S., & Ayres, L. (1994). *Becoming reflective students and teachers*. Washington D.C.: American Psychological Association.
22. Raouf, A (2008) "Continuous Improvement of Higher Education Quality", Proceedings of the 2nd International Conference on Assessing Quality in Higher Education. pp 288-289.
23. Rolheiser, C., & Ross, J. A. (2000). 'Student self-evaluation, what do we know?' *Orbit*, 30(4), 33–36.
24. Roseanna Bourke & Mandia Mentis (2011): Self-assessment as a process for inclusion, *International Journal of Inclusive Education*, DOI:10.1080/13603116.2011.602288
25. Rossi, P. H., & Freeman, H. E. (1993). *Evaluation: A systematic approach* (5th ed.). Newbury Park, CA: Sage Publications, Inc.
26. Schunk, D., & Ertmer, P. (1999). Self-regulatory processes during computer skill acquisition: Goal and self-evaluative influences. *Journal of Educational Psychology*, 91, 251–261.
27. Stahl, T. (1998), "Self-Assessment: A Royal Road to Quality Assurance for Continuing Training", *Vocational Training: European Journal* #5, pp 33-45.
28. Stensaker, B. & Harvey, L. (Eds.), (2011), *Accountability in Higher Education: Global perspectives on trust and power* (pp. 245–54) (New York, Routledge).
29. Stensaker, B., (2006), *Impact of quality processes*, paper presented at the 1st European Forum for Quality Assurance, Munich, Germany, 23–25 November.
30. Suskie, L. (2004). *Assessing student learning: A common sense guide*. Bolton, MA: Anker Publishing.

Appendices

Appendix I

Self Assessment Checklist

CRITERIA AND ASSOCIATED STANDARDS		Yes/No	Issue/ Observation	Possible Evidences
Criterion 1 – Program Mission, Objectives and Outcomes				
Standard 1-1	Program Measurable Objectives			
	Table 4.1 program objectives assessment			
	Document institution, college and program mission statements			
	State program objectives			
	Describe how each objective is aligned with program, college and institution mission statements.			
	Outline the main elements of the strategic plan to achieve the program mission and objectives.			
Standard 1-2	Program Outcomes			
	Table 4.2 outcomes versus objectives			
	Employer Survey			
	Alumni Survey			
	Graduating Student’s Survey			
Standard 1-3	Assessment Results And Improvement Plans			
	Describe the actions taken based on the of periodic assessments			
	Describe major future program improvement plans based on recent assessments.			
	List strengths and weaknesses of the program			
	List significant future development plans for the program			

Standard 1-4	Overall performance Using Quantifiable Measures			
	Indicate the percentage of successful students during study years showing i.e. their average graduating grade point average per semester, time require to complete the program, drop out ratio of students.			
	Employer's survey (to assess the performance of the department graduates)			
	Percentage of Student Evaluation/Assessment results for all the courses and faculty			
	Percentage of research activities i.e. journal publications, funded projects, conference publications per faculty per year and the faculty awarded excellence in research			
	Number of short courses workshops, seminars organized on community service level.			
	Faculty and student surveys results to measure the administrative services provided.			
Criterion 2 – Curriculum Design and Organization				
Standard 2-1	Courses Detailed outline as in item E criterion 2 of the Self Assessment Manual			
	Courses Vs. Objectives			
	Table 4.3 Curriculum course requirement			
	Table 4.4 Courses versus outcomes			
Standard 2-2	Theory, Problem Analysis/Solution and Design in Program			
	Table 4.5 Standard 2-2 requirements			
Standard 2-3	Mathematics & Basic Sciences Requirements			
	Address standards 2-3, 2-4 and 2-5 using information provided in Table 4.4			
Standard 2-4	Major Requirements as specified by Accreditation Body			
Standard	Humanities, Social Sciences, Arts, Ethical, Professional			

2-5	& Other Requirements			
	Address standards 2-3, 2-4 and 2-5 using information provided in Table 4.4			
Standard 2-6	Information Technology Content Integration Throughout the Program			
	Indicate the courses within the program that will satisfy the standard.			
	Describe how they are applied and integrated throughout the program.			
Standard 2-7	Communication Skills (Oral & Written)			
	Indicate the courses within the program that will satisfy the standard.			
	Describe how they are applied.			



Questionnaire

Title: Effectiveness of Program Evaluation through HEC Prescribed Self Assessment Model in Improving the Quality of Degree Programs in a Public Sector University in Karachi, Pakistan

Section I Particulars about the Respondents:

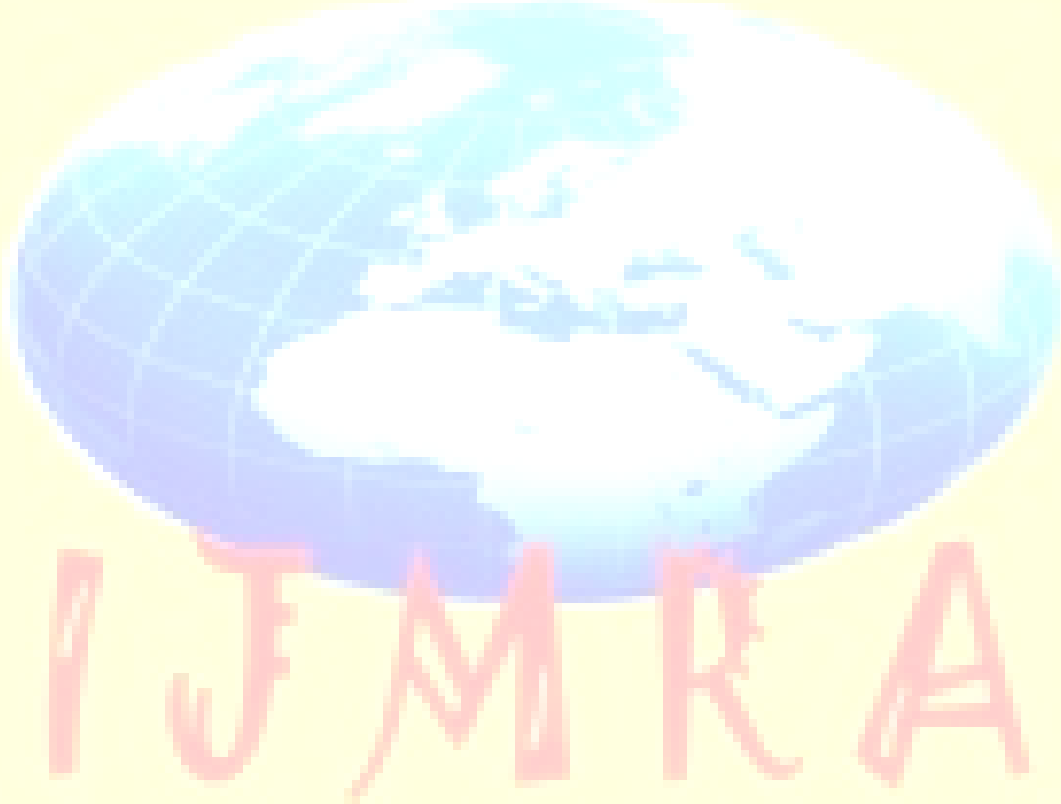
Name (Opt): _____ Designation: _____
 Department/Program: _____ Institution: _____
 Highest Qualification: _____ Experience: _____

Section II: For each question below, please mark a number from 1-3 that best represents your view.

Key: 1. Yes 2. Don't Know 3. No

S.No	Parameters	Response
Program Vision, Mission, Objectives and Outcomes		
1	Does your program have documented Vision?	1 2 3
2	Does your program have documented Mission?	1 2 3
3	Does your program have documented measureable Objectives?	1 2 3
4	Does your program have documented measureable Program Outcomes?	1 2 3
Curriculum Design and Organization		
5	Do you have a Curriculum Document?	1 2 3
6	Do you have documented measureable outcome for each course?	1 2 3
7	Do you have syllabus breakdown in lecture for each course?	1 2 3
8	Are the course/ group of courses mapped with Program Documented Outcomes?	1 2 3
Feedback from Stakeholders		

9	Do you collect Students Course Evaluation after each semester?	1	2	3
10	Do you collect Faculty Course Evaluation after each semester?	1	2	3
11	Do you conduct Teachers' Evaluation through students' feedback for each semester?	1	2	3
12	Do you collect feedback from Graduating Students?	1	2	3
13	Do you collect feedback from your Alumni?	1	2	3
14	Do you collect Employers' Feedback of your graduates?	1	2	3
15	Do you conduct Employees' Survey for their job satisfaction?	1	2	3



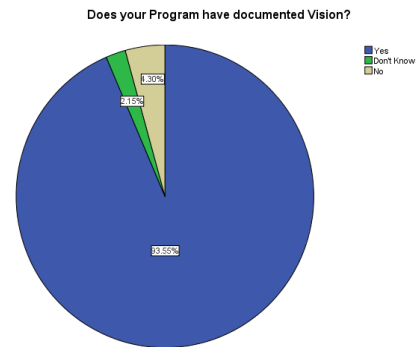
Assessment Results Implementation Plan Summary

Assessment Team Findings	Corrective Action	Implementation Date	Responsible Body	Resources Needed
1				
2				
3				
4				
5				
Chairman's Comments:				
Name & Signature:				
Dean's Comments:				
Name & Signature:				
QEC Comments:				
Name & Signature:				

Appendix IV

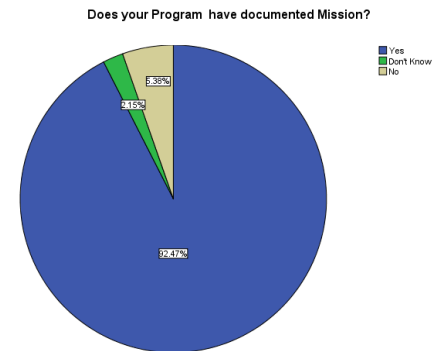
Question # 1: Does your Program have documented Vision?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	87	93.5	93.5	93.5
	Don't Know	2	2.2	2.2	95.7
	No	4	4.3	4.3	100.0
Total		93	100.0	100.0	



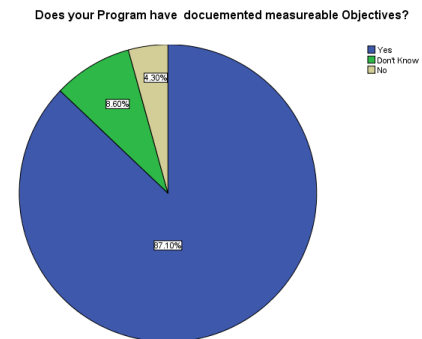
Question # 2: Does your Program have documented Mission?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	86	92.5	92.5	92.5
	Don't Know	2	2.2	2.2	94.6
	No	5	5.4	5.4	100.0
Total		93	100.0	100.0	



Question # 3: Does your Program have documented measurable Objectives?

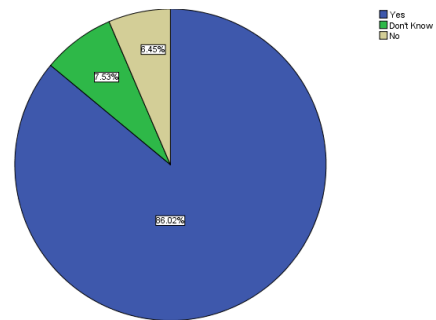
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	81	87.1	87.1	87.1
	Don't Know	8	8.6	8.6	95.7
	No	4	4.3	4.3	100.0
Total		93	100.0	100.0	



Question # 4: Does your Program have documented measurable Program Outcomes?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	80	86.0	86.0	86.0
Don't Know	7	7.5	7.5	93.5
No	6	6.5	6.5	100.0
Total	93	100.0	100.0	

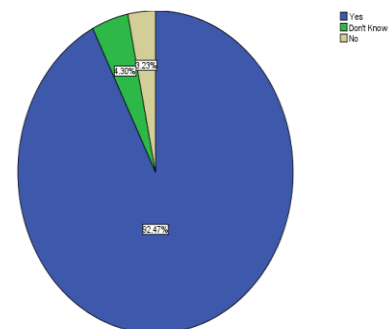
Does your Program have documented measurable Program Outcomes?



Question # 5: Do you have an Curriculum Document?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	86	92.5	92.5	92.5
Don't Know	4	4.3	4.3	96.8
No	3	3.2	3.2	100.0
Total	93	100.0	100.0	

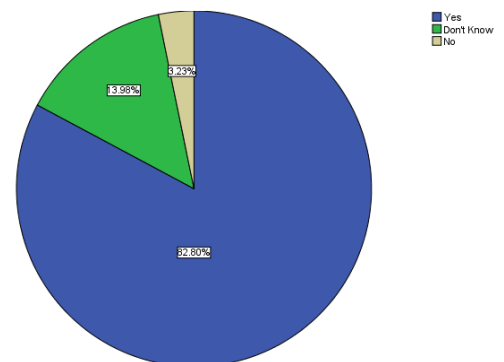
Do you have an Curriculum Document?



Question # 6: Do you have documented measurable outcome for each course?

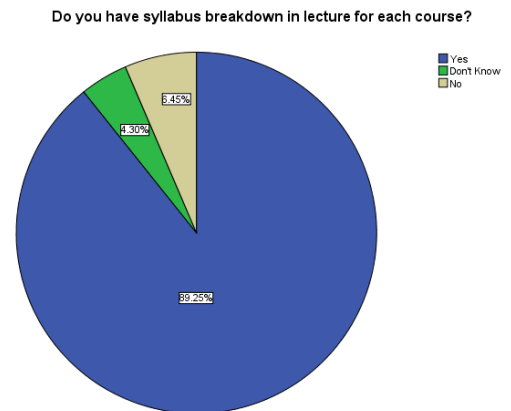
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	77	82.8	82.8	82.8
Don't Know	13	14.0	14.0	96.8
No	3	3.2	3.2	100.0
Total	93	100.0	100.0	

Do you have documented measurable outcome for each course?



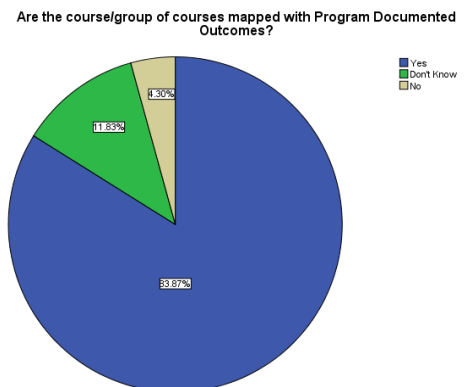
Question # 7: Do you have syllabus breakdown in lecture for each course?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	83	89.2	89.2	89.2
Don't Know	4	4.3	4.3	93.5
No	6	6.5	6.5	100.0
Total	93	100.0	100.0	



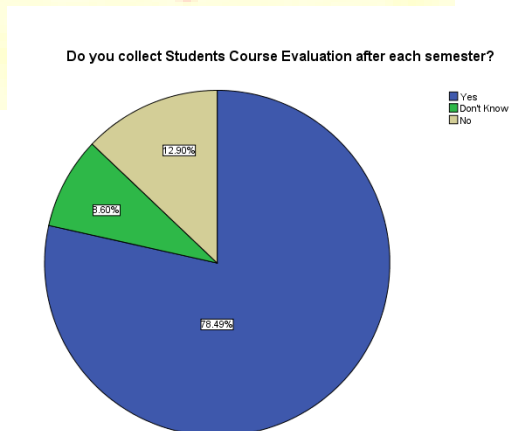
Question # 8: Are the course/group of courses mapped with Program Documented Outcomes?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	78	83.9	83.9	83.9
Don't Know	11	11.8	11.8	95.7
No	4	4.3	4.3	100.0
Total	93	100.0	100.0	



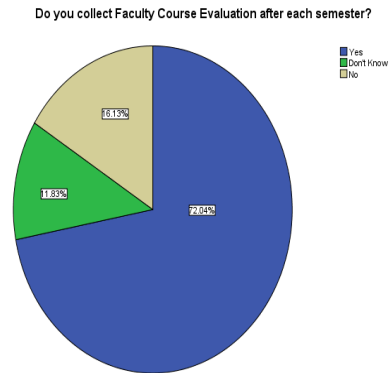
Question # 9: Do you collect Students Course Evaluation after each semester?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	73	78.5	78.5	78.5
Don't Know	8	8.6	8.6	87.1
No	12	12.9	12.9	100.0
Total	93	100.0	100.0	



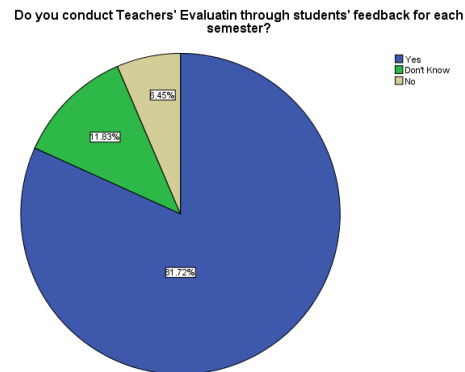
Question # 10: Do you collect Faculty Course Evaluation after each semester?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	67	72.0	72.0	72.0
	Don't Know	11	11.8	11.8	83.9
	No	15	16.1	16.1	100.0
	Total	93	100.0	100.0	



Question # 11: Do you conduct Teachers' Evaluation through students' feedback for each semester?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	76	81.7	81.7	81.7
	Don't Know	11	11.8	11.8	93.5
	No	6	6.5	6.5	100.0
	Total	93	100.0	100.0	

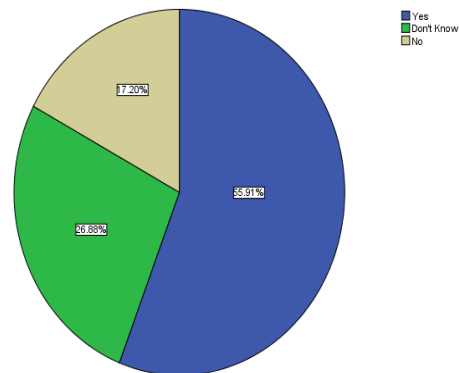


Question # 12: Do you collect feedback from Graduating Students?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	52	55.9	55.9	55.9
	Don't Know	25	26.9	26.9	82.8
	No	16	17.2	17.2	100.0

Total	93	100.0	100.0	
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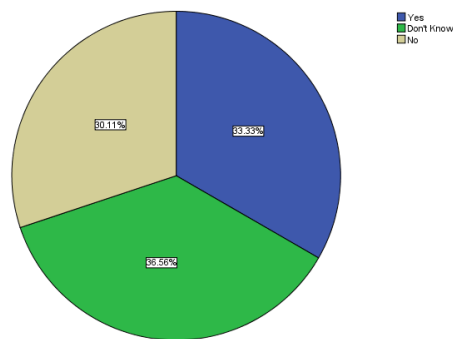
Do you collect feedback from Graduating Students?



Question # 13: Do you collect feedback from your Alumni?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	31	33.3	33.3	33.3
Don't Know	34	36.6	36.6	69.9
No	28	30.1	30.1	100.0
Total	93	100.0	100.0	

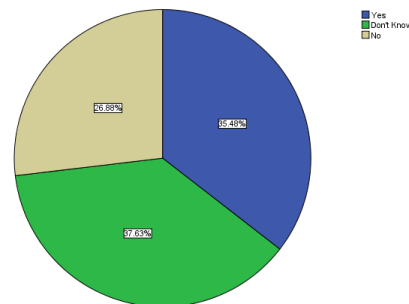
Do you collect feedback from your Alumni?



Question # 14: Do you collect Employers' Feedback of your graduates?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	33	35.5	35.5	35.5
Don't Know	35	37.6	37.6	73.1
No	25	26.9	26.9	100.0
Total	93	100.0	100.0	

Do you collect Employers' Feedback of your graduates?



Question # 15: Do you conduct Employees' Survey for their job satisfaction?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	43	46.2	46.2	46.2
Don't Know	22	23.7	23.7	69.9
No	28	30.1	30.1	100.0
Total	93	100.0	100.0	

