

QUALITY ASSURANCE TOOLKIT FOR ODL INSTITUTION: A REVIEW STUDY OF UTTARAKHAND OPEN UNIVERSITY

Jeetendra Pande

Assistant Professor- Computer Science
Uttarakhand Open University, Haldwani-263139, INDIA
jpande@uou.ac.in & jpande@uou.ac.in

Alka Singh

Assistant Professor, Central Institute of Educational Technology
National Council for Educational Research and Training
Sri Aurobindo Marg, New Delhi-110096
Email: edu.alkasingh@gmail.com

Manas Ranjan Panighari

Program Officer- Education
Commonwealth Educational Media Centre for Asia,
New Delhi, INDIA
mpanigrahi@col.org

Karunesh Saxena

Professor- Faculty of Management Studies,
Moham Lal Sukhadia University, Udaipur, INDIA
karuneshsaxena@gmail.com

ABSTRACT

Accessible quality higher education system can have a multifaceted positive impacts at national as well as global level. In India, higher education is provided to the students through various ways including regular, distance and open learning modes. The Gross Enrolment Ratio (GER) in higher education in India is likely to increase in the coming years due to expansion of youth population in India. In such case, the Open and Distance Learning (ODL) Institutions has to play major role to ensure quality in teaching, learning, research and community participation. The purpose of the present paper is to assess, analyse and promote plans for further improvements and quality assurance of an ODL institute. One of the ODL institute, Uttarakhand Open University (UoU) was selected as sample for the present study. The data was collected through atoolkit developed by Commonwealth Educational Media Centre for Asia (CEMCA) for commonwealth Asia to engage ODL institutions to reflect on various aspects. The present review study includes leadership, governance, programme/course design, courseware/material development, learner admission and enrolment, academic and administrative support to learners, evaluation process, infrastructure facilities including ICT facilities, output/outcome quality, human resource and ambience of research.

Introduction

In recent years, the increased numbers of Indian students in higher education search for the opportunity of completing degree / diploma / certificate courses linked with employment prospects. They explore the flexible mode of learning. The expansion of higher education has increased the role of Open and Distance Learning (ODL) Institutions in India. It has been recognised that the modern distance education with use of technology started in 1969 with the establishment of Open University of UK (OUUK)(Jung, Wong, & Belawati, 2013).

According to the sixth report of All India Survey on Higher Education (2015-16), 799 Universities, 39071 colleges and 11923 Stand Alone Institutions are situated in India for providing higher education to the youth of India(MHRD, 2016). Notably, distance education mode of teaching and learning has become useful for large number of students. It has more relevancein remote areas which are untouched to the mainstream. In the above mentioned AISHE report, it is presented that 34.6 million with 18.6 million boys and 16 million girls has been estimated to be enrolled in higher education institutions, comprising of 11.05% enrolments in distance mode. The Gross Enrolment Ratio (GER) in Higher education in India is reported 24.5% that likely to be increase in the coming years due to expansion of youth population in India. In such case, the main challenge of ODL institutions are to ensure quality in teaching, learning, research and community participation.

For the purpose, there is urgent need to adapt mechanisms to check quality of higher education. More emphasis is on ODL institutions with respect to various criteria. These criteria are widely covered in a Quality Assurance Toolkit for Open and Distance Learning (ODL) Institution developed by Commonwealth Educational Media

Centre for Asia (CEMCA)(Saxena & Panigrahi, Quality Assurance Toolkit for Open and Distance Learning (ODL) Institutions, 2019).

Before applying the above-mentioned quality assurance toolkit to review quality status of Uttarakhand Open University, it is important to express the brief background of the university. In the year of 2005, Uttarakhand Open University (UoU) was established by an Act of Uttarakhand Legislative Assembly (vide Act No. 23 of the Uttarakhand Government) based on the philosophical values of Open and Distance Learning (ODL). The focus of the UoU is to provide easy access of quality education to different sections of society. The main objective of the University is to develop trained and skilled human resource for sustainable development and progress. Similarly, the university aimed to disseminate knowledge and skills through distance learning, using the flexible and innovative methods of education to ensure 'independent learning'. Following the ODL approach, the university caters to the development of schedule tribes, women, and those who have been left out of mainstream education. At the same time, the University has evolved considerably and has been successful in reaching out to the unreached.

Quality Assurance in Distance Education

Traditionally, quality of a Distance Education Institution (DEI) is perceived to be inferior to that of in-person formal education system. Quality is highly subjective therefore it is an abstract concept. The quality of service system is difficult to be managed as the customer(learner in this case) expectations are very high. In fact, quality is the key which if managed properly can sustain the ODL institutions in the long run. Many educational institutions are going for Quality Management System (QMS) certification ISO 9000 which helps them in better documentation of educational activities in that organization. Quality management is that aspect of the overall management function that determines and implements quality policy(Saxena, Quality Centered Strategic Planning in IGNOU,, 1997).

Quality cannot be thrust upon any system; it has to be built into the process. Hence Quality Assurance (QA), which is based on prevention paradigm, is the assurance that a certain level of quality will result from the system. Such an approach prevents inferior quality to be generated by the system(Saxena & Panigrahi, Quality Assurance Toolkit for Open and Distance Learning (ODL) Institutions, 2019).

Quality management is that aspect of the overall management function that determines and implements quality policy (Saxena, Quality Management Practices in Indian Manufacturing Organizations, 1997).

The objective of the paper is to use the quality assurance toolkit proposed by (Saxena & Panigrahi, Quality Assurance Toolkit for Open and Distance Learning (ODL) Institutions, 2019) to check and review the quality of Uttarakhand Open University in terms of various criteria covered in the toolkit. It shall pave the way to the institution to work better in future and take valuable initiatives for the development of community.

Research Methodology

Quality Assurance Toolkit for Open and Distance Learning (ODL) Institutions

The purpose of the toolkit is to prepare ODL institution to self-assess and analyse themselves and promotes plans for further improvements for quality assurance. The toolkit was developed by Commonwealth Educational Media Centre for Asia for commonwealth Asia to engage ODL institutions to reflect on their leadership, governance, programme/course design, courseware/material development, learner admission and enrolment, academic and administrative support to learners, evaluation process, infrastructure facilities including ICT facilities, output/outcome quality, human resource and ambience of research. The main objective of the toolkit is for quality assurance to make it a community of practice.

Data Collection and Analysis

The Quality Assurance Toolkit for Open and Distance Learning (ODL) Institution was used to collect the data from the participants. The data was collected during a workshop on 'Quality Assurance Toolkit for ODL Institutions' held from 27 to 28 March, 2019 organised by UoU in collaboration with CEMCA. The glimpses of the workshop presented below. The participants included academic, technical, administrative and other non-teaching staff working in Uttarakhand Open University. The data was tabulated, analysed and interpreted quantitatively using average, range and standard deviation.

Demographic Profile of the Respondents

There were 14 assistant professors comprising 34 % of the sample participated in the study. However, 7 academic associates (17%), 7 non-teaching staff (17%), and 4 academic counsellors (9.8%) were also involved. Among others (2.4%), professors, regional directors, ICT staff, associate professors etc were representing the

sample. Notably, majority of sample was designated as assistant professor in the present study followed by academic associates and non-teaching staff of the university.

Table 1: Designation wise distribution of participants

Designation	Frequency	Percentage (%)
Assistant Professor	14	34.1
Non-Academic Staff	7	17.1
Academic Associate	7	17.1
Academic Counsellor	4	9.8
Others	9	2.4
Total	41	100.0

The below Table 2 and Figure 1 represent the gender wise distribution of the sample participated in the study. Among 41 university staff, majority of them were male with 82.9% participated in the present study. On the other hand, only 17.1 % were female. This shows the actual classification of male and female staff in Indian university system.

Table 2: Gender wise distribution of participants

Gender	Frequency	Percentage
Male	34	82.9
Female	7	17.1
Total	41	100.0

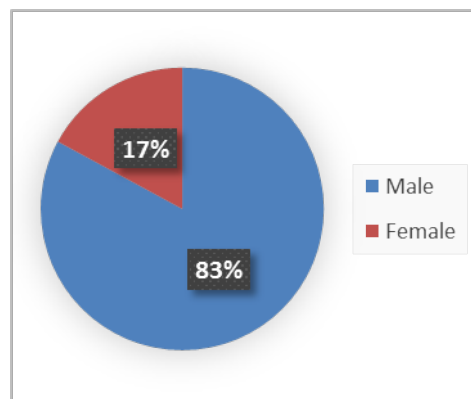


Figure 1: Graphical presentation of Gender-wise distribution

Findings of the Study

Overall Responses on Quality Assurance Toolkit

There were 10 criteria which was tested in quality assurance toolkit for ODL institutions with statements on 4-point scale. The scale comprised never (0), rarely (1), sometimes (2) and always (3).

Table 3 and Figure 2 present the overall response of participants on quality assurance toolkit. As discussed before, there were ten key criteria for improving and assuring quality of teaching and learning in an ODL institution. These criteria are leadership and governance, program or course design, courseware or material development, learner admission and enrolment, learner support, evaluation process, infrastructural facilities, output or outcome quality, human resource and ambience of research in the institution.

During the workshop, the participants' responses on above separate criteria were analysed to have a complete representation. Interestingly, overall they marked UoU's quality improvement and assurance statements between 'sometimes' and 'always'. Program or course design represents the highest mean with 2.48 showcasing high quality course designing and presenting to learners. As the quality of program or course design is effective, learner admission and enrolment also get impacted (Mean = 2.45). Similarly, evaluation process also shows average to high quality with 2.41 mean value. In terms of courseware on material development for various programs of the university, the mean was reported to be 2.39. It correspondingly embodies better quality of learning materials. On the other hand, the technical and other infrastructure facilities (Mean = 2.33), leadership and governance system (Mean = 2.30), human resources (Mean = 2.29) and learner support system (Mean = 2.25) at the university presented adequate quality but with possibility of improvement in future. The ambience of research (Mean = 2.17) and overall outcome quality (Mean = 2.04) of UoU are required to be improved as it

is reported sometimes adequate, not always. Thus, the university have scope for providing and engaging in quality research and other academic inputs to get best output quality. Finally, it was found that there can be opportunities in improving and assuring quality of above ten criteria with core focus on human resources, learners support, ambience of research and the overall output quality of the university. The figure 2 displays the graphical presentation of all ten criteria in descending order based on quality assurance toolkit.

Table 3: Overall Participants' responses on Quality Assurance Toolkit

Sr. No.	Criteria of Quality Assurance Toolkit	Mean
1.	Programme / Course Design	2.48
2.	Learners Admission and Enrolment	2.45
3.	Evaluation Process	2.41
4.	Courseware / Material Development	2.39
5.	Infrastructure	2.33
6.	Leadership & Governance	2.30
7.	Human Resources	2.29
8.	LearnerSupport	2.25
9.	Ambience of Research	2.17
10.	Output/Outcome Quality	2.04

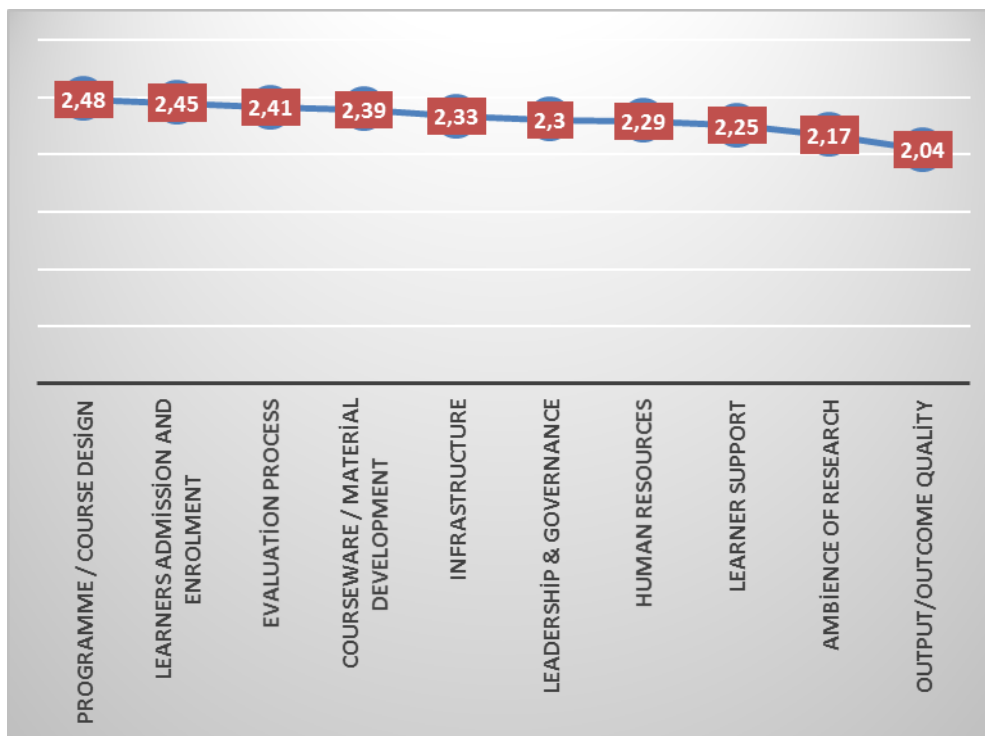


Figure 2: Criteria-wise distribution of Mean on Quality Assurance toolkit criteria

Leadership and Governance

As shown in Table 4, one of the standards to explore quality in any higher education institution specially ODL institutions functioning, leadership and governance play a significant role. It was reported that most of the participants accepted the continuous availability of a separate Internal Quality Assurance Cell (IQAC)/ Quality Management Department in Uttarakhand Open University for monitoring the overall quality of institutional operations (Mean = 2.902; SD = 1.98). They agreed that the top management and academic leaders of the university are accountable for quality assurance and improvement (Mean = 2.463; SD = 0.67) and workout to promote the quality culture in the university (Mean = 2.415; SD = 0.77). Therefore, the set goals of the university are demarcated within the arena of vision and mission of the university (Mean = 2.439; SD = 0.54) to integrate quality issues with the overall strategic planning of the university (Mean = 2.317; SD = 0.60). Notably, they reported that sometimes, the administrative and academic authority of UoU practice eGovernance measures to monitor overall performance (Mean = 2.171; SD = 0.73) and communicate with different stakeholders to get instant feedback on quality of facilities (Mean = 2.146; SD = 0.79). Further, it was found that appropriate physical and financial resources are occasionally provided for quality assurance and improvement (Mean = 2.073; SD = 0.78). Moreover, Quality manual with checklist, troubleshooting list, Standard Operating

Procedures (SOP) are infrequently developed and communicated to internal stakeholders (Mean = 1.805; SD = 0.95).

Table 4: Participants' responses on Leadership & Governance

S.No.	Items related to Leadership & Governance	N	Range	Mean	Std. Deviation
1.	There exists a separate Internal Quality Assurance Cell (IQAC)/ Quality Management Department in the institution which monitors the overall quality of operations.	41	10.0	2.902	1.9850
2.	Top Management and Academic Leaders of institution own responsibility for quality assurance and quality improvement.	41	3.0	2.463	.6744
3.	Institutional goals are specifically delineated and are in conformance with vision and mission of organization.	41	2.0	2.439	.5499
4.	Top management promotes quality culture in the institution.	41	3.0	2.415	.7738
5.	Quality issues are integrated with the overall strategic planning of the institution.	41	2.0	2.317	.6099
6.	E-Governance measures are used to monitor overall performance including quality related issues.	41	2.0	2.171	.7383
7.	Top management and Academic Leaders communicate on a regular basis with different stakeholders of the institution to get instant feedback on the quality of services.	41	3.0	2.146	.7925
8.	Adequate resources (Physical and Financial) are made available for Quality Assurance and Improvement.	41	2.0	2.073	.7871
9.	Quality manual with checklist, troubleshooting list, Standard Operating Procedures (SOP) is developed and properly communicated to internal stakeholders.	41	3.0	1.805	.9545

Program/Course Design

The Table 5 shown below represent the perspective of UoU staff towards their program and course design. They reported that the courses and programmes offered in the university are designed with well coordination and collaboration within the system and with external academic and industry experts (Mean = 2.634; SD = 0.69) with sound rationale and justification for offering various courses in distance blended and e-Learning mode (Mean = 2.659; SD = 1.45). The courses' objectives, outcome activities, assignments etc. are properly articulated and well aligned with each other (Mean = 2.610; SD = 0.58) to meet the needs of learners for gaining knowledge developing skills and make them better citizens (Mean = 2.488; SD = 0.59). The respondents found that the courses identify its need and prepare assessment exercise before contemplating to launch any new program. (Mean = 2.463; SD = 0.59). From time to time, it was found that the external stakeholders such a society, industry, alumni and parents are involved in program design to make it more systematic and sequential approach (Mean = 2.317; SD = 0.68). With well-designed courses or programmes, the UoU staff also reported that national skill qualification framework of India is followed occasionally while designing the learning outcomes of the programs (Mean = 2.268; SD = 0.63).

Table 5: Participants' responses on Programme / Course Design

S. No.	Items related to Programme / Course Design	N	Range	Mean	Std. Deviation
1.	There is a sound rationale and justification for offering distance/ blended/eLearning programmes.	41	10.0	2.659	1.4596
2.	The programme design process is well coordinated within the system with co-option of some external academic and industry experts.	41	3.0	2.634	.6984
3.	Programme/Course objectives, outcome, activities and assignments are properly articulated and well aligned with each other.	41	2.0	2.610	.5864
4.	The programme is capable of meeting the needs of learners to gain knowledge, develop skills and make them better citizens.	41	2.0	2.488	.5967
5.	Need identification and assessment exercise has taken place before contemplating to launch any new programme.	41	2.0	2.463	.5957
6.	The programme/ courses are periodically updated to	41	3.0	2.439	.6726

	keep pace with dynamically changing environment.				
7.	Programme design is done following a systematic and sequential approach in which views of external stakeholders such as society, industry, alumni and parents are collected and collated.	41	2.0	2.317	.6870
8.	Learning outcomes of programme are well designed and are in conformance with National Skill Qualification Framework of respective country of origin of programme.	41	2.0	2.268	.6334

Courseware/Material Development

After designing courses and programmes, courseware as well as material development is essential as shown in Table 6. It is supported by the respondents that teaching staff of UoU continuously gets trainings for designing and documenting self-Instructional Materials, Self-Learning Material and eContents (Mean = 2.756; SD = 1.44). With the training, sometimes, detailed material development manuals are used to develop the courseware and materials (Mean = 2.488; SD = 0.59) with continuous support of outside experts (Mean = 2.634; SD = 0.48) ensuring the quality with reviewing the content, format and language before delivering the course (Mean = 2.561; SD = 0.59). The courses are digitalised and available on website most of the times (Mean = 2.512; SD = 0.63). As the courses are developed with the support of trained UoU staff and external experts, appropriate instructional design is safeguarded to achieve the intended learning outcomes (Mean = 2.463; SD = 0.59). The respondents found that some of the courseware are packaged with adequate mix of print, audio and video, Open Educational resources (OERs) and Massive Open Online Courses (MOOCs) to make it more dynamic (Mean = 2.341; SD = 0.72). However, it was reported that anti plagiarism test was applied only occasionally (Mean = 2.171; SD = 0.70). On the other hand, it is to be noted that OERs and MOOCs are occasionally integrated in some of the selected courseware with encouraging the learners to use the same (Mean = 2; SD = 0.77). However, the academic courses are sometimes launched before developing the entire duration of the program (Mean = 2.049; SD = 0.77).

Table 6: Participants' responses on Courseware / Material Development

S. No.	Items related to Courseware / Material Development	N	Range	Mean	Std. Deviation
1.	Teaching staff is given training for designing and documenting Self- Instructional Material (SIM), Self-Learning Material (SLM) and E-Contents.	41	10.0	2.756	1.4453
2.	Services of outside expert are utilized for Courseware/Material Development	41	1.0	2.634	.4877
3.	Quality of study material is properly reviewed before delivering it to the learner by the content, format and language editor.	41	2.0	2.561	.5937
4.	The Institution has digitized the course material which is available on its website.	41	2.0	2.512	.6373
5.	The detailed material development manual is prepared which is strictly followed by the experts.	41	2.0	2.488	.5967
6.	The development of learning material is based on sound instructional designs and is fully capable of achieving the intended learning outcomes.	41	2.0	2.463	.5957
7.	The courseware is adequately packaged with right mix of study material (Print, Audio & Video), E-contents, Open Education Resources (OER) and MOOCs.	41	3.0	2.341	.7283
8.	Anti-Plagiarism test on the material is carried out to avoid giving substandard material to the learner.	41	2.0	2.171	.7036
9.	Academic programs are implemented only after all materials (print and online) have been developed for the entire duration of the programme.	41	3.0	2.049	.7730

10.	Open Education Resources (OER) and Massive Open Online Courses (MOOC) are properly integrated in Courseware/Material Development and learners are encouraged to use the same.	41	3.0	2.000	.7746
-----	---	----	-----	-------	-------

Learner Admission and Enrolment

When the courses are designed and study & related materials are prepared, the programmes are open for admissions and enrolment for the learners. In Table 7, the respondents reported their perspectives on learner admission and enrolment in various courses offered inUoU. it was found that the students can enrol themselves online, and facilities such as lateral entry, vertical mobility and flexibility in choice of courses are available to them at all times (Mean = 2.585; SD = 0.70). Generally, the learners are enrolled from diverse background (Mean = 2.512; SD = 0.63) as the university undertakes various promotional activities (Mean = 2.415; SD = 0.77)and provide adequate information about the course to the prospective group of learners (Mean = 2.390; SD = 0.77). Notably, it was reported that the quality policy of UoUoccasionally provides objectivity and transparency in students' admissions (Mean = 2.390; SD = 0.77).

Table 7: Participants' responses on Learners Admission and Enrolment

S. No.	Items related to Learner Admission and Enrolment	N	Range	Mean	Std. Deviation
1.	The Institution has provision for Online admission/ Lateral Entry/ Vertical mobility/ Flexibility in choice of courses.	41	3.0	2.585	.7062
2.	The Institution reaches out to the diversified learner groups viz. Women/Disabled/Disadvantaged/Minority/Jail inmates.	41	3.0	2.512	.6373
3.	Promotional activities are undertaken by the institution to reach the target groups.	41	3.0	2.415	.7738
4.	Information about the programmes offered is provided to the prospective group of learners.	41	3.0	2.390	.7707
5.	Full objectivity and transparency in students' admission which is guided by Quality Policy.	41	3.0	2.390	.7707

Learner Support

After enrolment of the students in the university, learners support is an important task. Table 8 reveals the respondents' observation towards the learners' support provided in UoU. It was reported that academic calendar, time table, and exam schedule are always properly communicated to the learners in timely manner (Mean = 2.610; SD = 0.62) using well prepared database of learners which helps in facilitating the learner's progression in the respective course (Mean = 2.585; SD = 0.66). In addition, different geographical locations and far-off places are most of the time covered by efficient and convenient registration system for the learners (Mean = 2.366; SD = 0.69). Sometimes, the guidance and counselling sessions are also conducted for disseminating information to the dispersed learners of the University (Mean = 2.366; SD = 0.66). Notably, the students' handbook or program guide are made available most of the time to all enrolled learners (Mean = 2.341; SD = 0.76). This was not possible for the university to always strictly adhere their schedule (Mean = 2.268; SD = 0.70), keep the learner tracking system (Mean = 2.268; SD = 0.67), use ICT tools and techniques to connect the learner and offer helpline services (Mean = 2.195; SD = 0.67), offer comprehensive and timely feedback on assignments through counselling and problem solving sessions (Mean = 2.171; SD = 0.77), improve learners support services to enrol a large number of students (Mean = 2.146; SD = 1.68), train study centre staff for better learner support (Mean = 2.073; SD = 1.66), conduct induction programs for new learners (Mean = 1.976; SD = 0.72), use learner satisfaction service survey for quality enhancement based on recommendations of students of the university (Mean = 1.951; SD = 0.89).

Table 8: Participants' responses on Learner Support

S. No.	Items related to Learner Support	N	Range	Mean	Std. Deviation
1.	Proper communication takes place with learners regarding academic calendar, time table, exam schedule well in time.	41	2.0	2.610	.6276
2.	Database of learners and their profile has been prepared which is used to provide appropriate support and facilitate his/her progression in the programme.	41	3.0	2.585	.6699
3.	The registration system is efficient and convenient for learners	41	3.0	2.366	.6984

	located in different geographic locations.				
4.	The Institution has provisions for informing, advising; counselling for its dispersed learners.	41	3.0	2.366	.6617
5.	Student Hand Book/ Programme Guide is made available to all the enrolled learners.	41	3.0	2.341	.7619
6.	The Institution strictly adheres to their schedule to minimize distress among learners.	41	3.0	2.268	.7080
7.	Learner tracking system is in place to help the learner complete the course in time and also to reduce dropout rate.	41	2.0	2.268	.6717
8.	Information technology tools and techniques are used to connect with learners (MOODLE/ MOOC platforms) and to offer helpline services to them.	41	2.0	2.195	.6790
9.	Teaching staff provide comprehensive and timely feedback on assignment to student and are available for counselling and problem solving.	41	3.0	2.171	.7714
10.	Learner support services are improved/increased with increasing numbers of students enrolled.	41	11.0	2.146	1.6817
11.	Study center staff is given proper training to make them more proficient in learner support.	41	11.0	2.073	1.6642
12.	The Institution organises Induction Programme for its new learners.	41	3.0	1.976	.7241
13.	Learner satisfaction survey is conducted on a regular basis and amendments in the system are made based on unanimous recommendations of learner / students' community.	41	3.0	1.951	.8931

Evaluation Process

Table 9 reported the UoU staff responses on evaluation process practiced in the university. They reported that objectivity and authenticity are always practiced in evaluation process (Mean = 2.732; SD = 1.44) moderating all forms of assessment with the approval of competent authority (Mean = 2.537; SD = 0.63). To ensure aptevaluation, the model question papers with answers are provided to the learners on institutional website (Mean = 2.537; SD = 1.55). It was found that the evaluation process is based on to test knowledge and skills as per particular course objective and intended learning outcome in which the learners are enrolled (Mean = 2.512; SD = 0.77). Most of the time, the suitable weightage is given to continuous assessment and term end exam (Mean = 2.463; SD = 0.74) and exam process is completed on time without any error (Mean = 2.439; SD = 0.67). Sometimes, the systematic examination process is applied for preparation of question paper and evaluation of answer books (Mean = 2.341; SD = 0.91). The respondents observed that it is difficult for the university to always integrate latest technological development to regularly update evaluation process (2.317; SD = 0.75), use anti-plagiarism software for evaluating project reports dissertation and assignments (Mean = 2.220; SD = 0.82) and give proper feedback to learners' internal assignment paper (Mean = 2.073; SD = 0.90) all the time.

Table 9: Participants' responses on Evaluation Process

S. No.	Items related to Evaluation Process	N	Range	Mean	Std. Deviation
1.	There is provision for full objectivity and authenticity in the evaluation process.	41	10.0	2.732	1.4496
2.	Moderation of all forms of assessment is done by the institution with the approval of competent authority.	41	2.0	2.537	.6363
3.	Model question papers and answers are made available to the learners through institutional website.	41	11.0	2.537	1.5508
4.	The evaluation mechanism is properly developed to test the student knowledge and skills as per the programme/course objective and intended learning outcomes.	41	3.0	2.512	.7785
5.	There is a proper mix of continuous assessment and Term End Exam (TEE) in the evaluation progress with appropriate weightage.	41	3.0	2.463	.7449
6.	The evaluation is done in a timely manner and is error free i.e. the result is published within the time frame through website.	41	3.0	2.439	.6726
7.	A systematic pre examination process is followed for preparation	41	3.0	2.341	.9113

	of question papers and evaluation of answer books.				
8.	The evaluation process is regularly updated and latest technological development is integrated with it.	41	3.0	2.317	.7563
9.	Institution uses anti plagiarism software for project reports, dissertations etc.	41	3.0	2.220	.8220
10.	Learner is given proper feedback in terms of their internal assignments paper.	41	3.0	2.073	.9053

Infrastructural Facilities

As shown in Table 10, the respondents revealed that UoU has proper plans to invest in infra structural facilities to keep pace with the growth in student enrolment (Mean = 2.634; SD = 1.49). The University has appropriate technology based infrastructural facilities to support learners to conduct examination, keep record of the students (Mean = 2.585; SD = 0.70), and provide overall academic programs through distance mode (Mean = 2.537; SD = 0.71). Therefore, they are capable to co-ordinate and monitor the rolling out of academic programs (Mean = 2.366; SD = 0.79). Due to diverse geographical locations, the communication between head office and distance Education centre cannot be managed always (Mean = 2.366; SD = 0.73). The University provide adequate learning resources through stocked and virtual library facilities including e journals and e resources (Mean = 2.268; SD = 1.58). Sometimes, students at remote areas gets connected through teleconferencing and videoconferencing (Mean = 2.244; SD = 0.73). Some of the study centres under university has management and maintenance system of equipment (Mean = 2.220; SD = 0.82), facilities for recording studios photography equipment, editing facilities etc to enable learning management system (Mean = 2.171; SD = 0.80), and a system to assess the usability of infrastructure resources (Mean = 2.146; SD = 0.57). The university headquarter and some study centres provide facilities of counselling room and library occasionally (Mean = 2.098; SD = 0.83).

Table 10: Participants' responses on Infrastructure

S. No.	Items related to Infrastructure	N	Range	Mean	Std. Deviation
1.	The Institution has plans to invest in Infrastructural facilities to keep pace with the growth in student enrolment.	41	10.0	2.634	1.4959
2.	The institution uses appropriate technology for effective institutional functioning like learner support, examination processing and student records.	41	3.0	2.585	.7062
3.	The Institution has adequate and appropriate infrastructure facilities to conduct academics programme through open end distance learning.	41	2.0	2.537	.7105
4.	Distance education centres have capacity to coordinate and monitor the rolling out of academic programmes.	41	3.0	2.366	.7986
5.	There is an efficient communication system between head office and distance education centre located in different locations.	41	2.0	2.366	.7334
6.	The institution has well stocked and virtual library with adequate learning resource to offer access to eJournals and eResources through different repositories.	41	11.0	2.268	1.5815
7.	There is a provision of tele-conferencing and video conferencing of distance learners located in the remote areas.	41	2.0	2.244	.7342
8.	The institution has an effective system for the management and maintenance of equipments.	41	3.0	2.220	.8220
9.	The institution has state of art infrastructure for developing eContents such as recording studios, photography equipment, editing facilities etc. to enable the Learning Management System (LMS) of the Institute.	41	3.0	2.171	.8032
10.	The institution has a system to assess the usability of infrastructure resources/facilities by the learner.	41	2.0	2.146	.5728
11.	There are proper infrastructure facilities for counselling rooms, library etc. at study center and headquarter.	41	3.0	2.098	.8308

Output / Outcome Quality

Apart from leadership to infrastructure the final outcome quality remains important for the success of any institution. Therefore, table 11 represents the responses of participants on output and outcome quality of the

university. It is reported that the graduates from UoU are always employable and skilled enough to meet the expectation of the industry and society (Mean = 2.610; SD = 2.01). The sample reported that one of the aspects to ensure quality of UoU is to assess its graduates in terms of accomplished expected learning outcomes (Mean = 2.220; SD = 0.65). The alumni meet is organised occasionally to support existing learners (Mean = 2.146; SD = 0.65). In addition, the university conduct placement (Mean = 1.659; SD = 0.79) and entrepreneurship development programs infrequently to provide employment to the students including start-ups (Mean = 1.610; SD = 0.77).

Table 11: Participants' responses on Output/Outcome Quality

S. No.	Items related to Output/Outcome quality	N	Range	Mean	Std. Deviation
1.	The graduates of Open and Distance Learning (ODL) institution are employable; capable of meeting the expectations of the industry, society and their country.	41	11.0	2.610	2.0109
2.	Quality of Graduates of an open and distance learning (ODL) institution is assessed in terms of accomplishment of expected learning outcomes.	41	2.0	2.220	.6524
3.	Alumni meet are organized to realize the full potential of alumni support for existing learners and ODL institutions.	41	2.0	2.146	.6543
4.	Placement support is provided to the learners who are in the final stages of their academic programs.	41	3.0	1.659	.7940
5.	Entrepreneurship development camps/programmes are organized to sensitize those learners who want to establish their start up projects.	41	3.0	1.610	.7707

Human Resources

Table 12 shows the responses related to human resources. It was found that most of the time the academic and support staff at UoU are selected in an objective and transparent way (Mean = 2.537; SD = 0.71) having appropriate qualification and exposure in the field of distance education with M.Phil. or PhD (Mean = 2.463; SD = 0.63) for an effective distance mode delivery of services. The training to use latest technological resources including learning management system are provided occasionally to the staff members (Mean = 2.390; SD = 0.73). Sometimes, they are promoted on the basis of better performance appraisal with experience of independent learning and research in the field of ODL including publication and community outreach activities (Mean = 2.317; SD = 0.64). In UoU, optimal mix of youth and experience in both teaching and non-teaching staff is sporadically found (Mean = 2.220; SD = 0.75). Occasionally, staff members are motivated (Mean = 2.171; SD = 0.62) as appropriate ratio of teaching and non-teaching staff are not found always (Mean = 1.976; SD = 1.69).

Table 12: Participants' responses on Human Resources

S. No.	Items related to Human Resource	N	Range	Mean	Std. Deviation
1.	The recruitment and selection policy procedures ensure that the most qualified, experienced and high caliber academic and support staff members are recruited in an objective and transparent way for an open, flexible and distance mode of delivery.	41	3.0	2.537	.7105
2.	The staff members are recruited who are having qualification/exposure in the field of distance education and are having M.Phil/PhD qualification.]	41	2.0	2.463	.6363
3.	Staff is given training to use the latest technological resources including Learning Management System.]	41	3.0	2.390	.7375
4.	The promotion criteria for academic staff are based on a performance appraisal system, and are focused on a wide range of factors, including materials development to enhance independent learning, research that is linked to ODL practice as well as publications and community outreach activities.	41	2.0	2.317	.6496
5.	There is an optimal mix of youth and experience in both teaching and non-teaching staff.	41	2.0	2.220	.7587
6.	Staff is well motivated. Provision exists for career progression and staff development.	41	3.0	2.171	.6286
7.	The ratio of teaching and Non-teaching staff is proper and well maintained so that lop-sidedness does not occur.	41	11.0	1.976	1.6954

Ambience of Research

Besides teaching and learning, research is an important criterion for quality insurance of an ODL institution. As presented in table 13, the university frequently organises seminars and conferences on recent technological developments such as OER MOOCs MOODLE etc (Mean = 2.512; SD = 0.71). On the other hand, the faculty members are regularly encouraged to publish research papers and books (Mean = 2.488; SD = 0.84). Sometimes, the university collaborates with national and international organisations for promoting research and faculty exchange programs (Mean = 2.195; SD = 0.71) where the faculty members mobilise their research resources and participate in sponsored research projects (Mean = 2.049; SD = 0.83). Some of the faculty members infrequently carry out research activities with sufficient resources provided by the university (Mean = 2; SD = 0.77) and motivated to undertake consultancy projects as well (Mean = 1.780; SD = 1.12).

Table 13: Participants' responses on Ambience of Research

S. No.	Items related to Ambience for Research	N	Range	Mean	Std. Deviation
1.	The institution organises seminars/conferences on contemporary issues like OER, MOOCs, MOODLE etc.	41	3.0	2.512	.7114
2.	Faculty members are encouraged to publish research papers and books having ISSN and ISBN respectively.	41	3.0	2.488	.8403
3.	The institution collaborates with national and international institutions for promoting research and faculty exchange programme.	41	3.0	2.195	.7148
4.	Faculty members are encouraged to mobilize the resources for research through participation in sponsored research projects.	41	3.0	2.049	.8352
5.	Sufficient resources are made available for faculty members to carry out research activities.	41	3.0	2.000	.7746
6.	Faculty members are encouraged to undertake consultancy projects.	41	3.0	1.780	1.1294

Other Quality Assurance Factors

Apart from above ten key factors, there were other factors related to quality improvement and assurance responded by the participants with 'yes' or 'no'. There is a separate IQAC or quality management department in UoU as reported by 82.9 % of the respondents. On the other hand, 17% refused the same (Figure 3). Furthermore among 41 respondents, 78% found that quality management team has direct access to the top management while 22% respondents declined the same (See Figure 4).

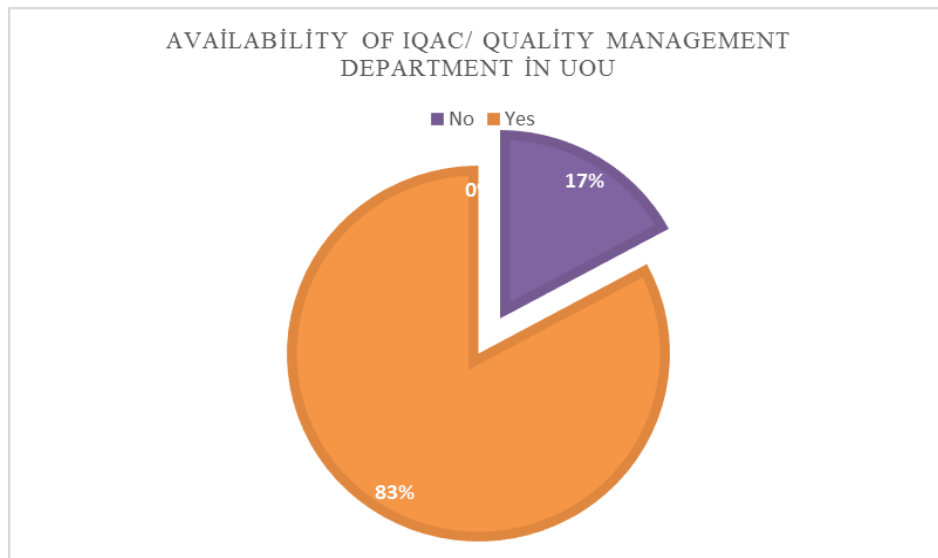


Figure 3: Responses on Availability of IQAC/Quality Management Department in UoU

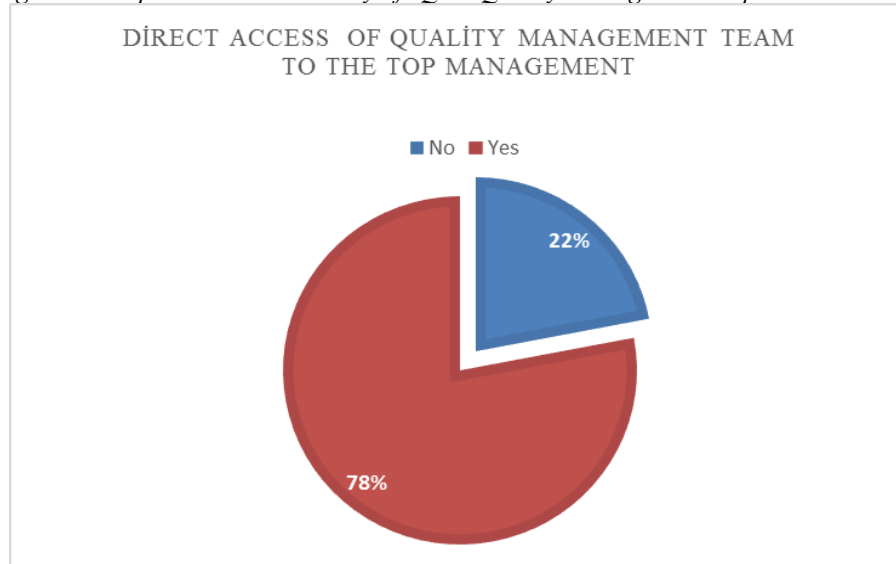


Figure 4: Responses on Quality Management team's Direct Access to the Top Management

As shown in Figure 5, more than 85% of the respondents reported that the recommendations by quality management team of UOU are seriously considered and implemented by academic council / executive council / board of management of the University.

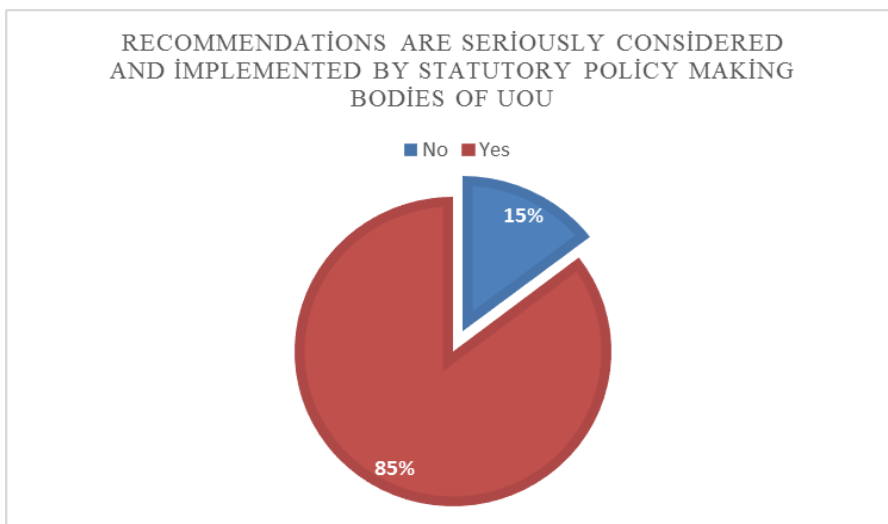


Figure 5: Responses on Implementation of Recommendations by Statutory Policy Making Bodies of UoU

Figure 6 refer that about two third of the respondents (63.4 %)rejected that the university prepare quality assurance policies and processes in the form of quality manual and 61 % said ‘no’ to its circulation to the relevant staff (Figure 7). On the other hand, more than one third of them (36.6 % and 39% respectively) accepted the above (Figure 6 & 7).

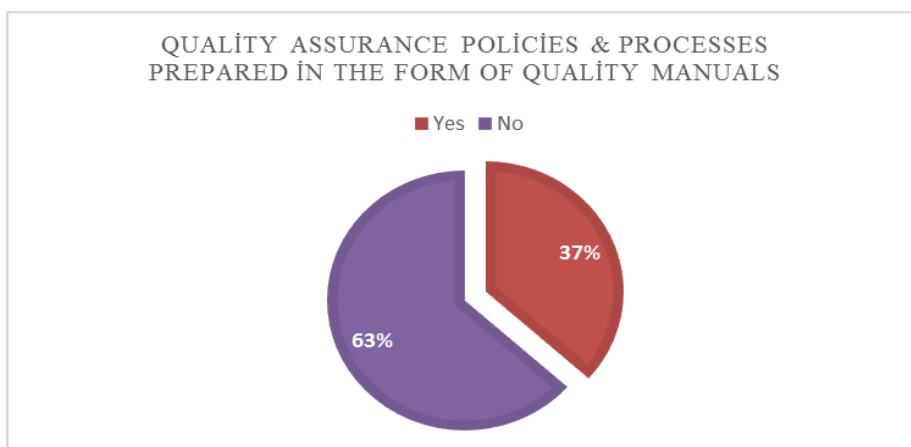


Figure 6: Responses on Preparation of Quality Assurance Policies & Processes

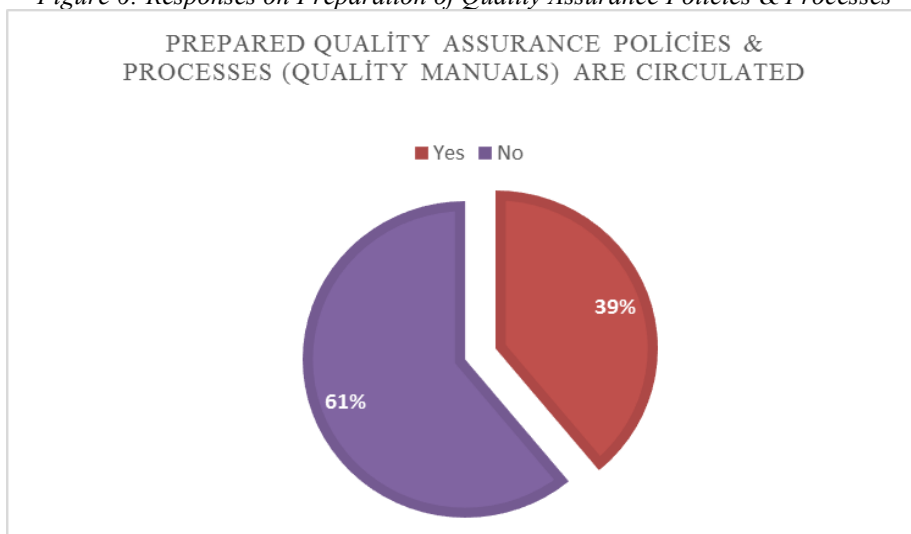


Figure 7: Responses on Circulation of prepared Quality Assurance Policies & Processes

Figure 8 presents that majority of the respondents with 78% revealed that their institution ‘UOU’ is not certified and accredited by external agencies such as NAAC or international accreditations agencies.

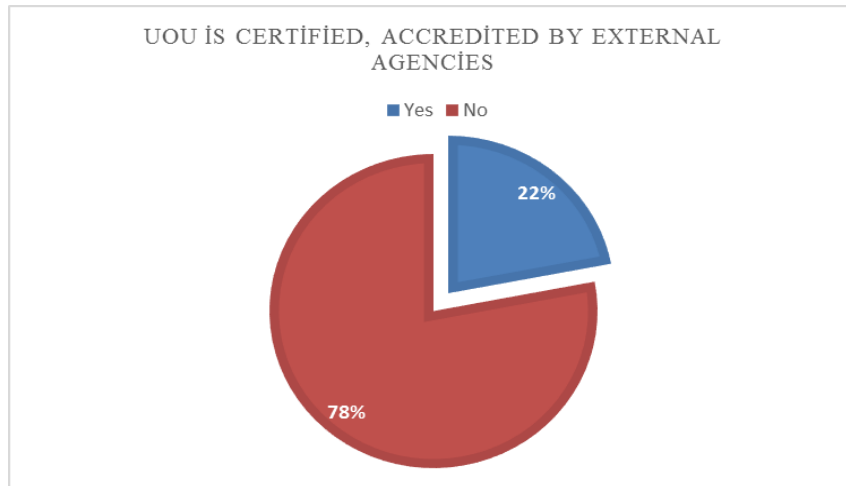


Figure 8: Responses on Certification, Accreditation of UoU by External Agencies

Moreover, they accepted with majority of 90% that they have an appropriate student helpline for grievance redressal mechanism and proper students feedback mechanism for helping students in their institution as shown in figure 9 and 10.

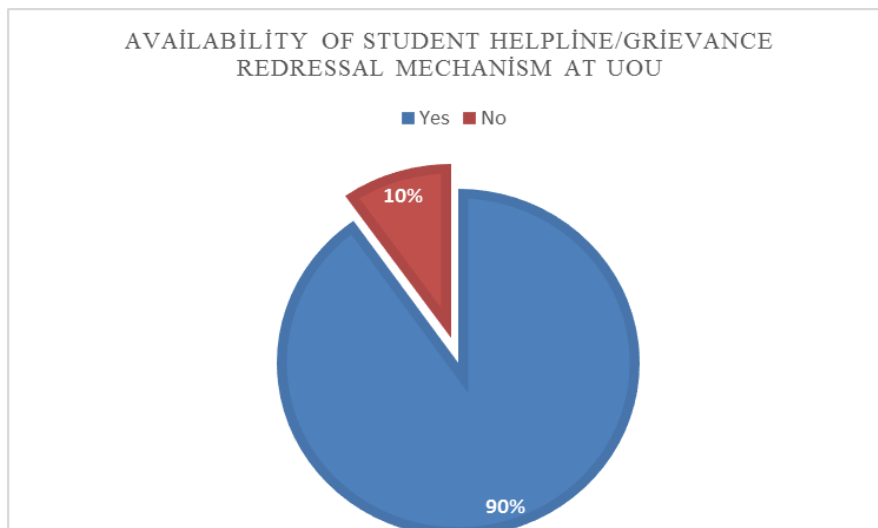


Figure 9: Responses on Availability of Student Helpline/Grievance Redressal Mechanism at UoU

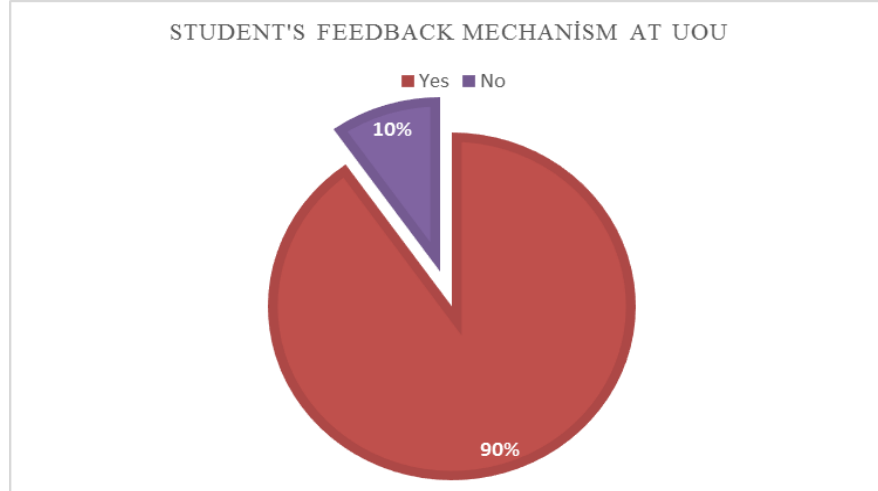


Figure 10: Responses on Availability of Student's Feedback Mechanism at UoU

Figure 11 shows that third fourth of the respondents with 73.2 %were satisfied with the overall quality of their institution and its academic programs as an ODL institution, while rest of the respondents (26.8%) were not satisfied with the same.

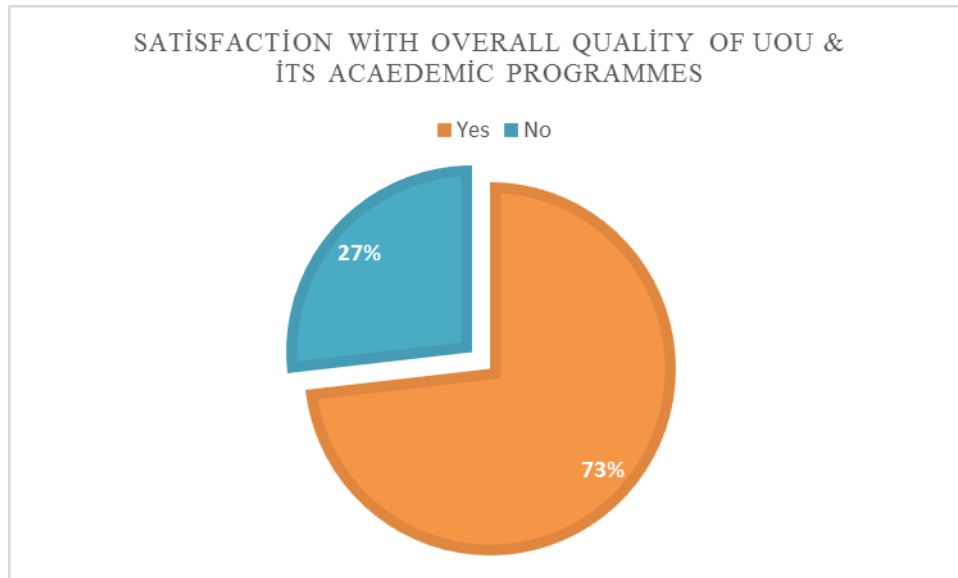


Figure 11: Respondent's Satisfaction with overall Quality of UoU & its Academic Programmes

Conclusion

Overall, the in-house respondents of UoU marked the statements related to quality improvement and assurance of their university largely between 'sometimes' and 'always'. According to the findings, program or course design represents the highest quality. As a result, learner admissions, enrolments, evaluation process, and courseware development are revealed to be positively impacted. In spite of better course design, high enrolments, adequate evaluation process and effective material development, the technical and other infrastructure facilities, leadership and governance system, human resources and learner support system at the university presented high possibility of improvement in future. In addition, the ambience of research is not always appropriate. Consequently, the factors above affect the overall outcome quality of the university.

Majority of the respondents supported the measures taken by top management for overall quality assurance and enhancement of UoU. They found that the courses offered by UoU are based on proper rationale and justification incorporating well framed objectives, learning outcome, activities, assignments, and assessment with coordinated expertise of internal as well as external professionals.

Overall, it was reported that the university is making efforts to train their staff continuously for maintaining the quality of courseware, utilising support of external experts, digitising the courses, integrating technology to present study materials, and offering the courseware with intended learning outcomes. At the same time, the university provides opportunity and practise promotional activities for students from diverse backgrounds to get enrolled online in various courses with anytime, anywhere flexibility.

Overall, the university support the learners with easy and flexible registration system, timely communicating time table, academic calendar, exam schedule etc. In terms of evaluation process, UoU has objective, transparent and authentic system. It supports the learners with appropriate model test papers online before the exam. On the other hand, the technology use and continuous feedback to the learners are reported to remain unmanageable at all times.

UoU has proper plans to invest in infrastructural facilities to keep pace with the growth in student enrolment. It has apt technology to support learners to conduct examination, keep record of the students, and provide its programs through distance mode.

It is reported that the pass outs from UoU are always adequately employable and skilled. For the same, the university conducts irregular placement and entrepreneurship development programs. It has to ensure quality in terms of accomplishing expected learning outcomes.

In terms of human resources, it was found that most of the time, the academic and support staff at UoU are selected in an objective and transparent way. They have appropriate qualification and exposure in the field of

distance education. Nevertheless, the university provide occasional training to them on latest technological resources.

Although, UoU frequently organises seminars and conferences on recent technological developments and the faculty members are encouraged to publish research papers and books, the overall ambience of research at the university is not apt.

Interestingly, there is a separate quality management department in UoU and it has direct access to the top management. It is noted that the recommendations by above-mentioned quality management team are seriously considered and implemented by academic council / executive council / board of management of the University. On the other hand, the university has to prepare and circulate the quality assurance policies and processes as it is not certified and accredited by external agencies such as NAAC or international accreditations agencies. Moreover, they have an appropriate student helpline for grievance redressal mechanism and proper students feedback mechanism for helping students in their institution. It is stimulating to find that academic and other staff of UoU were satisfied with the overall quality of their institution and its academic programs as an ODL institution.

Recommendations

Based on findings of the present study, the following points are recommended for quality improvement and assurance in UoU:

- There can be opportunities for quality assurance with core focus on improving and ensure valuable human resources, learners support, ambience of research and the overall output quality of the university.
- The university has scope for providing facilities to engage in quality research.
- Academic and administrative inputs can be employed to get best output quality.
- Appropriate physical and financial resources need to be allocated.
- It is the need of hour to develop specific quality manuals and procedures with checklist, troubleshooting list, Standard Operating Procedures (SOP) and communicate it to staff members of the university.
- The university should involve internal stakeholders in the process of quality enhancement.
- Adequate services should be provided to all the learners in spite of diverse geographical and other limitations. Technological advancement may be useful in this regard.
- The university should frequently collaborate with national and international organisations for promoting research and faculty exchange programs.
- The university should provide opportunities to its faculty members to mobilise their research resources and participate in sponsored research projects.
- The faculty members should be motivated to carry out research activities more frequently with sufficient resources provided by the university. In addition, they should be encouraged to undertake consultancy projects as well.
- Learning outcomes of the offered programmes should be properly designed in validation with National Skill Qualification Framework of India.
- Programme design should be completed following a systematic and sequential approach. The views of external stakeholders such as society, industry, alumni and parents can be collected and collated.
- Anti-Plagiarism test on the material, project reports, dissertations etc. should be carried out to avoid substandard quality.
- The innovative approach of teaching and learning such as Open Education Resources (OER) and Massive Open Online Courses (MOOC) should be properly integrated in Courseware/Material Development and learners should be encouraged to use the same.
- Study center staff should be trained properly to make them more proficient in learner support.
- The Institution should organise Induction Programme for its new learners as a regular practise.
- The learners should be involved in quality assurance of the university. In this way, learner satisfaction survey should be conducted on a regular basis and amendments in the system are to be made based on unanimous recommendations of learner / students' community.
- The evaluation process should be regularly updated and latest technological development are to be integrated with it.
- As a consistent practice, Learner should be given proper feedback in terms of their internal assignments paper.
- The institution should have proper infrastructure for developing eContents such as recording studios, photography equipment, editing facilities etc. to enable the Learning Management System (LMS) of the Institute.

- The counselling rooms, library etc. at study centres and headquarter should be made available and updated regularly.
- Alumni meet should be organized annually to realize the full potential of alumni support for existing learners and ODL institutions.
- Placement support should be provided to the learners who are in the final stages of their academic programs.
- Entrepreneurship development camps/programmes should be organized to sensitize those learners who want to establish their start up projects.

References

- Cleveland-Innes, M., & Wilton, D. (2018). *Guide to Blended Learning*. Burnbay, Canada: Commonwealth of Learning.
- Jung, I., Wong, T. M., & Belawati, T. (2013). *Quality Assurance in Distance Education and E-learning*. Ottawa: Sage.
- Kanwar, A. (2018). Foreword. In M. Cleveland-Innes, & D. Wilton, *Guide to Blended Learning*. Canada: Commonwealth of Learning.
- Kirkpatrick, D. (2005). *Quality Assurance in Open and Distance Learning*. Canada: Commonwealth of Learning.
- MHRD. (2016). *All India Survey of Higher Education*. New Delhi: MHRD.
- Paraschicheshu, A. O. (2017). Particularities of Management and Quality Assurance in Education. *Economy Transdisciplinarity Cognition*, 12-18.
- Saxena, K. (1997). *Quality Centered Strategic Planning in IGNOU*. New Delhi: IGNOU SLM MS-96.
- Saxena, K. (1997). *Quality Management Practices in Indian Manufacturing Organizations*. ESS Publications.
- Saxena, K., & Panigrahi, M. R. (2019). *Quality Assurance Toolkit for Open and Distance Learning (ODL) Institutions*. New Delhi: CEMCA.