

ISO STANDARDS FOR QUALITY EDUCATION AND TRAINING FOR FACILITATING ACCESS TO GREY LITERATURE

C.P.Ramasesh ⁽¹⁾ and N. Chowdappa ⁽²⁾

ABSTRACT

To increase the level of the user satisfaction and to continually improve upon the performance of service in libraries, imparting education training and is found a prerequisite condition for librarians who are involved in visualizing, acquiring, organizing and facilitating access to GL collection. Paper mainly focuses on the issues concerned with the performance of the professionals and the modus operandi of training at the Centre for Information Science and Technology (CIST), University of Mysore, under ISO 9001 standards of quality monitoring system. Paper highlights the eight principles of quality management system and describes issues concerned with quality audit and corrective measures and preventive measures to overcome defective procedures. Paper also depicts improvement in quality performance at the library of the CIST based on the feed-back of students during the years 2005 to 2009. Attempt is also made to highlight the aspects related with the proof of quality education.]

KEY WORDS: *ISO Standards, Library services; Grey literature, User education; Grey literature, Orientation programme; QMS, Grey literature; Grey literature, Customer delight.*

Standards are primary source of information which gives specification for uniformity and consistency in practice and production. Standards are evolved by national / international bodies. The International Organization for Standardization (ISO) is a world-wide federation established in Geneva. It has the responsibility of evolving standards depending upon the need across the world. Specifically speaking, the ISO 9001 is a generic Standard for building, operating and documenting quality management system. The mission of ISO is to provide international standardization to facilitate world wide exchange of goods and services.

1. **C.P.Ramasesh**, Deputy Librarian, University Graduate Library, University of Mysore, Mysore-570005, India. E.Mail : cpramasesh@gmail.com.

2. **N.Chowdappa**, Librarian, BMS College of Engineering, Bull Temple Road, Hanumanth Nagar, Bangalore-560019. E.Mail: ncbmsce@yahoo.co.in

In India, the Ministry of Human Resources Development (Education) has been allocated Rs.445 billion for the plan outlay. This in fact is a real big boost. On account of this several reforms have been brought.

1. Encourage 'Quality Research'
2. Encourage 'Brain Gain Policy'
3. 'Quality Assessment' and 'Accreditation' has become mandatory
4. Conduct of 'Teacher Capacity Building' programmes.
5. Conduct of 'Employable Skill Development programmes.

While coming to the realm of education and training for library and information services, it has become more and more technology oriented due to the application of information and communication technology. There is really a special emphasis for hands-on experience and learning skills. This in fact necessitates the appropriate orientation, as well as, quality education and training. One of the means of achieving the quality and excellence in education and training is to go for ISO certification. To be specific, the needs for ISO are;

- Day-by-day the needs of students are becoming more and more stringent
- To continually improve the quality of training and education, including the curriculum and the lesson plan
- Uniformity is insisted for global marketing of products and services
- Provide confidence to top management regarding quality being achieved and sustained.
- Provide confidence to the customers (students) that the intended quality is being delivered in education and training programmes.
- To reduce the cost of operation and waste to the maximum extent for the benefit of students/trainees.
- To get international recognition as top class / world class organization as far as quality education is concerned. Above all, it adds in gaining public opinion.

- To meet the needs of students/trainees constantly beyond expectations through periodical evaluation. Above all helps to achieve the 'Customer Delight'.

PRINCIPLES OF Q.M.S : The quality management system (QMS) necessitates the need for application of certain principles. There are a set of eight principles which need to be adopted for achieving quality in performance. They are

- 1) Student focused organization
- 2) Development of leadership qualities
- 3) Involvement of people
- 4) Process approach
- 5) Systems approach
- 6) Continual improvement
- 7) Factual approach to decision making
- 8) Mutually beneficial supplier relationship (relationship with service providers).

IMPLEMENTATION OF ISO STANDARD: Noticing the need and importance of quality in education, the management has to decide the steps to be taken for preparation. There are several issues which are to be considered at the preparatory stage.

1. **Defining the quality policy** - The organization has to define its policy in broader terms. It is on this statement all functions and activities will be evolved or determined. Policy statement will be usually idealistic yet achievable. Everyone in the organization should have commitment to the policy stated by the organisation.
2. **Stating the objectives** - The organization has to state all its objectives in the light of the above stated policy statement. As far as possible, the objective will have to be quantifiable or measurable. Measurable objectives help the organization to demonstrate continual improvement.

3. **Preparation of quality manual** - The manual giving the details of the organization, its functions and activities, responsibilities of the staff, the curriculum and the relevant divisions has to be prepared.
4. **Preparation of procedure manual** - The procedure manual states the lesson plans, the instructions for theory classes and practical sessions, including the tests, assignments, project work / field work and so forth, indicating the number of hours per topic to be covered. Accordingly, the entire programme has to be executed. All necessary instructions for conduct of theory and practical sessions will have to be indicated in the procedure manual. The procedure for the management of library services ,duties and responsibilities of each staff, the list of quality records to be maintained by every staff will also be stated.
5. **Curriculum design** - In the educational institutions, the design of the curriculum plays a major role. It is the main indication of the quality / excellence. The curriculum needs to be improved every year noticing the trends and developments on one hand and the ways and means of facilitating access to grey resources on the other. The procedure also include the search strategies and on-line information resources available. The design indicates number of hours of theory classes, practical sessions, tests, project work, field work etc.
6. **Feedback** - For effective implementation of the education and training programme, feedback from students/trainees as to the clarity, expression, subject coverage, interaction, knowledge in the subject and effectiveness of teaching of each staff need to be collected. The data be tabulated and interpreted for demonstration of improvements in the system.
7. **Training matrix** - Training is an important ingredient and therefore periodical training needs to be conducted for staff to keep them abreast of recent trends and also to develop skills in handling IT based curriculum. The ISO version

released in the year 2008 gives emphasis for training. Every year a training matrix be prepared seeking the area of training needed by every staff member and the training has to be conducted well in time to ensure what they teach and train in the class and lab is up-to-date. This way there is sufficient room to increase the competency of the personnel.

8. Continual improvement - ISO recommends the Kaizen Approach - the continual improvement. Every individual in the organization has a significant role to play, cooperate and contribute to the improvement in the performance of the system. The improvement / performance according to ISO be quantified and the organization should demonstrate continual improvement or step by step improvement.

Each staff in the organisation has his/her own assigned duties and responsibilities. He/she had to concentrate for creativity, cooperate for support, contribute for performance. Work of every staff member is significant and his/her contribution through his own creativity is expected and appreciated. It is on this basis that the organization will demonstrate its improvement, sustenance and quality in service. To achieve the quality at every step, the activities are to be planned and checked for expected results and further improvement. This is popularly called as PDCA method (Plan-Do-Check-Act). The plans that are going to be implemented should have certain characteristics like:

- ◆ To be implemented in short time
- ◆ With least effort, and
- ◆ With minimum resources

CUSTOMER DELIGHT : The concept of improvement in performance has gained momentum on account of the Japanese technique of: "Kaizen Approach", which aims at day-to-day improvement in the organization. Whatever may be the situation today; there should be commitment, cooperation, and contribution from every staff for

improvement of the system. Team work and leadership both are required and emphasized here for sustenance of quality education. By quality they mean the totality of characteristics and features of service that bears its ability to satisfy the stated or implied needs of the customers. Achieving customer delight means serving the customer beyond his expectations Here, all those activities of the organization which intend to gain appreciation of its customers beyond their expectations is the aspect of 'delight'.

Quality Education and Training at CIST: Centre for Information Science and Technology (CIST) is a self sustaining educational institution offering five major information technology courses at post-graduate level.

- Multimedia Production
- Software Development
- E-commerce
- Bio-informatics and
- Geographic Information System

CIST has been rendering educational services under the administrative jurisdiction of the University of Mysore. Of late, to maintain quality performance, the Centre is relying upon the quality manual and feedback of the customers.

To project the performance of CIST during 2005 and 2009, the feed back analysis reports were taken as the source material for the projecting quality performance. The CIST has been conducting user education or orientation programmes for students and librarians on the following aspects.

- Library facilities and services
- Access to information sources
- Participation in collection development

- Use of regional library facilities and services
- Library extension programmes
- Digital library systems

CIST library has a collection of 6130 sources, out of which project works, manuals, and course-ware and report literature form 48.4% of the collection of the library. The students from all the five courses are also trained to make use of the facilities and services of the University Library where the collection exceeds 6,08,400 information resources. Out of the entire collection of the University Library, GL collection constitutes 11.9%. The GL collection mainly comprises of technical reports, theses and dissertations, trade literature, proceedings of the conferences, seminars and workshops and the university publications.

GL Collection at the University and CIST

Sl. No.	CATEGORY OF GL	Total GL Collection at the	
		University Library	CIST Library
1	Project works, Theses and Dissertations	58%	58%
2	Institutional Publications	15%	23%
3	Technical Reports	21%	12%
4	Proceedings of CSW	6%	7%
	TOTAL GL COLLECTION	72400 (11.9%)	2965 (48.4%)

As regards user training / orientation, the CIST librarians as per the guidelines indicated in the quality manual, conduct classes for a period of 3-4 days and obtain feed back from the students. On the other hand, the LIS faculty members handle training classes for librarians for a period of one week. The responses were obtained every year from 190 - 275 students who were studying in CIST.

FEED BACK FROM STUDENTS (QUESTIONNAIRE)

Name Course Year

E = Excellent (81-100%), G = Good (61-80%), S = Satisfactory (41-60%), N = Need to Improve (up to 40%)

01	Teaching Performance	<input type="checkbox"/>
02	Teaching Methodology	<input type="checkbox"/>
03	Library Resources and Services	<input type="checkbox"/>
04	IT Infrastructure Facilities	<input type="checkbox"/>
05	Extension Programmes	<input type="checkbox"/>
06	Counseling and Security	<input type="checkbox"/>

07	Performance of Individual Faculty	
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Name	Paper	<input type="checkbox"/>
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Based on the feedback rating, the below table depicts the improvement in the performance in library services, starting from 2005 to 2009. The feedback rating was obtained as to the performance the library on the three aspects.

- a) Rating on organization and browsing facility.
- b) Rating on the information sources available in the library.
- c) Performance of library staff in rendering information services.

Continual improvement in library resources and services

S.L	RATING ON THE CRITERIA	2005	2006	2007	2008	2009
1	Information Resources/GL Available in the Library	65%	66%	66%	68%	70%
2	Organisation of GL/sources and Browsing Facility	62%	65%	67%	67%	68%
3	Performance of the Library Staff in rendering Service	62%	62%	64%	66%	69%

The statistics in the table shows the continual improvement in the performance over the past five years. The ratings given by the students as excellent performance above 80%; and good performance above 60% are considered here.

CONTINUAL IMPROVEMENT IN LIS (E & G RATINGS)

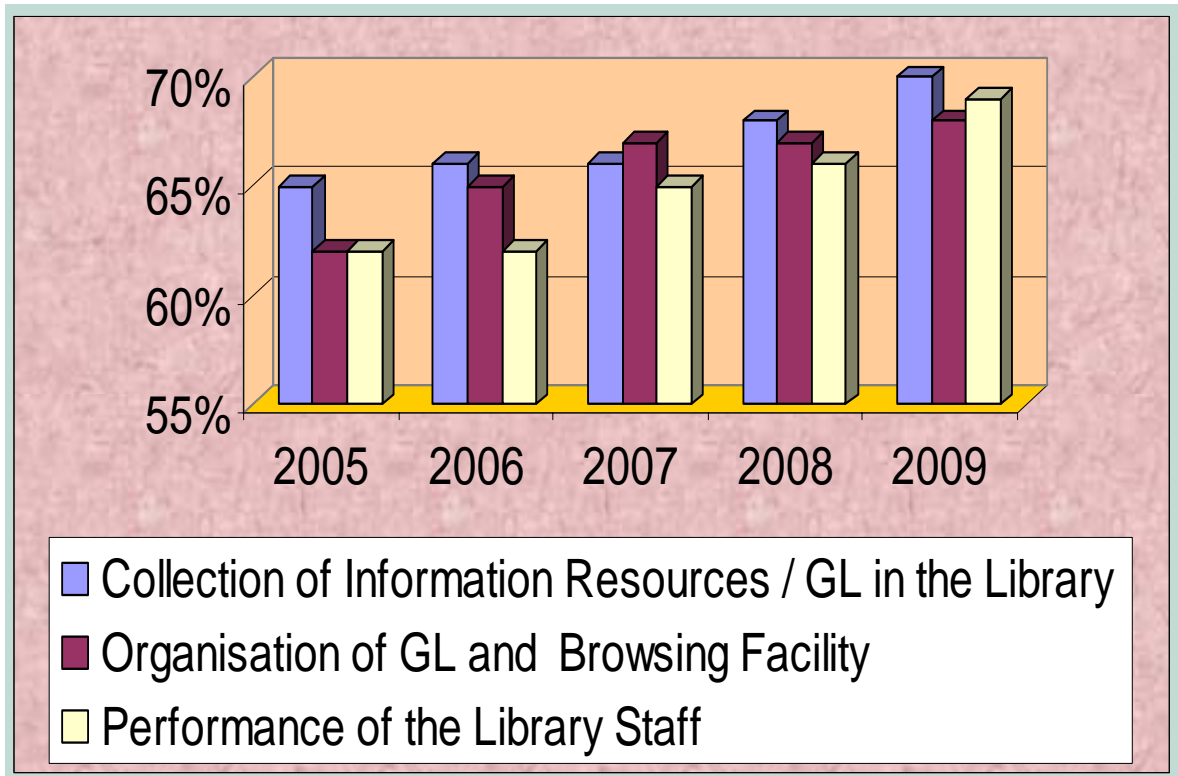
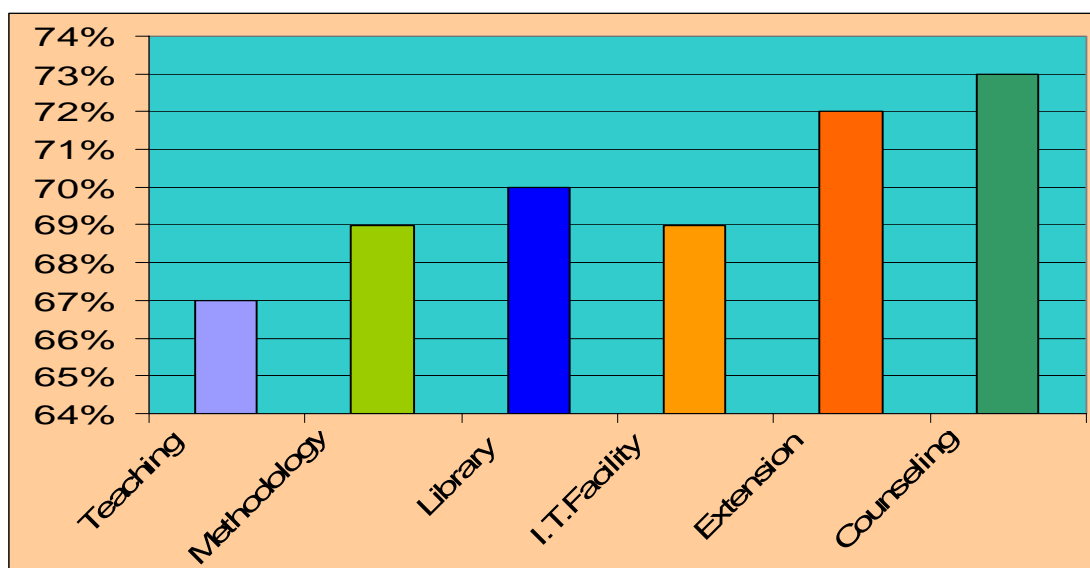


Table projects the continual improvement in library management and readers services. The diagram with the statistics helps the institution to track the record of continual improvement. This vindicates how the ISO standard 9001- 2008 is useful in extending quality services and further helps in improving the performance of the library on continual basis. The below chart depicts performance of various criteria.

CRITERIA-WISE PERFORMANCE OF CIST CIST(2009)



The following records are placed as a proof for having rendered quality teaching and training.

PROOF OF QUALITY SERVICES (Quality Records / Best Practices)

- 1) Orientation Programme – Attendance signed by the students
- 2) Certification of lesson plan
- 3) Circulation and reference statistics
- 4) Distribution of courseware / library guide
- 5) Conduct of extension programmes
- 6) Inter-library lending statistics
- 7) Feedback analysis report
- 8) Circulation of new arrival lists
- 9) Sources recommended and actual procurement
- 10) Library websites projecting holdings & services
- 11) Handling customer grievances

PERFORMANCE AUDIT: The management should plan and execute assessment / audit to verify whether the activities comply with planned arrangements to determine

the effectiveness of the quality system. The quality assessors or the performance auditors are concerned with verification of conformances. In the course of seeking conformances, they may come across non-conformances, between what you say and what you do.. Noticing the non-conformities, institution has to initiate corrective measures and preventive measures against the defects, verify the result and close the issue of non-conformances.

In fact, it is the management which is going to define policy and objectives, including the duties and responsibilities. It is the management on the other side which is going to give assurance to its customers. ISO auditors are rather concerned with verification and cross checking for "non-conformances", between what the management has said or assured, and what it has practiced. Auditing is not a fault finding mission, it is a fact-finding exercise focuses on;

- System deficiencies
- Human slip-ups (unidentified errors)

Non-conformances are classified, into three categories. Critical, Major and Minor. There will be observations in addition to these three which can be set right in a day or two. Those lapses which may cause injury, and where there is risk to the life of an individual staff or customer, they are noted as critical non-conformances. Those non-conformances that affect objectives to a greater extent are classified as major ones Ex: Lapse in coverage of the less on plans , lack of internet facility. The minor ones are usually lack of systematic arrangement of volumes in the library , lapse in conducting sufficient classes of orientation lectures for students, lack of reading facilities in the libraries. The observations will be with reference to wrong filing of records, delay in the tractability of records, lack of cleanliness and so forth, which can be corrected immediately. The management has to initiate corrective and preventive measures to rectify the deficiencies indicated by the auditors from time to time.

CONCLUSION

By opting for ISO certification, the management and the students are assured of the quality of education and training as planned and documented. Therefore, ISO is the one of the best means to control and improve the performance in libraries, where IT based training plays a major role. The process gives opportunity for everyone to involve fully, develop leadership qualities, and contribute creatively. Everyone in the organization will get recognition for his creativity, competency and contribution. By these ways and means, more than anything, there is going to be "work culture" in the organization and appreciation for the quality education and training from the student community. By adopting for ISO procedures or in the process of ISO movement, the LIS schools become more and more 1. Student oriented, 2. Technology oriented and 3. Revenue oriented. Further, QMS

- Provides written procedures that define authority responsibility and interfaces
- ISO provides documented system which controls the activity / education / service, systematically.
- Developing systematic steps for maintenance of gadgets and operations
- Ensures all non-conformities (errors, deficiencies, objections, and complaints) through constant feedback
- Opportunity for the evaluation of the customer satisfaction.
- Opportunity for the monitoring of continual improvement in the system's overall performance.
- Promotes efficiency, competency and cost effectiveness.

In the process of following the quality procedures as indicated in the quality manual, the customer / student becomes the hub of all planning and programming of activities of the organization. The customers are treated as the main focus in the organization. The procedure also supports the management because there is definite

way of fixing the individual responsibility and time target to accomplish the expected task. The quality procedures guide the administrators that ensures continual improvement in performance and thereby meet the expectations of customers. The regular or the periodical quality audit in the system helps to overcome human slip-ups and system deficiencies through corrective and preventive measures. Above all, the library resources, including grey resources are exploited to the maximum extent through constant quality auditing procedures.

ISO helps the libraries to easily identify and clearly study the system weaknesses and inefficiency of the staff. The aim of extending quality service and achieving customer delight brings revenue to the library and work culture in the organization and finally creates public image which brings appreciation for the staff, who also feel ultimately delighted. The fixing of duties and responsibilities eliminates anxiety from the individual librarian/faculty or management whether or not the part work will be attended to in time or not. Above all, there will be continuous feed-back from the students which helps the management to set the things in right order applying corrective and preventive actions.

BIBLIOGRAPHY AND WEBLIOGRAPHY

1. Beyond ISO 9000 & TQM, Mona Associates, 2002.
2. Bhat, N. S. : Auditing the Quality System. Special Lecture, KSSIDC, Mysore, 2001.
3. Chandrashekara, M and Ramasesh, C.P: Application of standards for quality education and training in LIS. A-LIEP Conference, Japan, 2009.
4. Daleda, Suresh : ISO 9000 Manual for Total Quality Management, 1999.
5. .Implementation and upgradation guide to ISO 9001-2000, Mona Associates, 2003

6. Ingle, Sud. : Quality Circles : Master Guide, 2000.
7. ISO 9001 : 2000 : Quality Management Systems Requirements, 2001
8. ISO 9004 : QMS – Guidelines for Performance Improvements, 2001.
9. ISO Products and Services – <http://www.iso-9000-2000.com>
10. ISO Information Center /ISO Tools – <http://www.isopro.co-uk>
11. ISO News Letter – <http://www.iso-9000-2000.com>
12. ISO 9000 – RAQ Ball Tek Ltd – Informative Site – <http://www.balltek.com>
13. QPR Process Guide – <http://www.qpronine.com/iso9001>
14. Jayanna, M. Information Technology components in LIS curriculum in universities in India, Mysore, University of Mysore (Doctoral Theses), 2009.
15. Quality Assurance Improvement, Training – <http://www.balltek.com>
16. Radice, Ronald : ISO 9001 Interpreted for Software Organizations, 2001.