Steps to Improve Quality in Education and Training using e-media

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With the introduction of high-speed, compact, multimedia computers, user-friendly software, local computer network through internet, have changed many traditional management techniques of "world-class management techniques" like Benchmarking, BPR, ERP, Supply Chain, value chain, corporate governance, Kaizen, TQM, learning organization etc.

The business Environment (Technical, Economical, Political and Social) and the world-class management techniques are changing so fast that the education institutions have to educate the students in latest Technology (practically on-line) for achieving performance excellence in global competition by the students in the organisations, where they will be working.

I did my PhD in Industrial engineering and Management at Indian Institute of Science (I.I.Sc), Bengaluru focusing in OD area. keeping my research as a back drop. I brought out steps to improve quality in education and training:

Education Institutions have to pay high attention to improve quality of education and training by taking the following steps as explained in table 1.

To improve quality of Education "ICT to improve Quality in education" has been evolved and is explained in table – 1

<table>
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<tr>
<th>Stage at which application of ICT in education</th>
<th>success % involvement</th>
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<td>Inspection Stage</td>
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After the education is completed according to the curriculum: measure knowledge/skills learnt by students through final examinations conducted by University.

Quality Control Stage

50 University Examinations Teacher(s) university

As the education is being carried out: during imparting knowledge/ skills to the students, measure the knowledge/skills learnt by the students through sessional work, project work, mid-term exams/tests, seminars, project work/vocational training at industry before students appearing final examinations conducted by the university.

9. Practical Training and intermittent tests Educate students as per standard curriculum using standard teaching methods/text books.

Make students to do sessional work, take up project work/vocational training at industry, appear midterm exams/tests, present papers in seminars etc. before appearing final examinations Teacher(s) HODs
QA Stage

Well in advance of starting the education: ensure adequate infrastructure like class rooms, laboratories, library, games / sports faculties, hostels, canteen etc. are available.

Ensure adequate qualified teaching / non-teaching staff are available.

Design/ re-design appropriate curriculum and beyond university curriculum, involving Industry institutions. Continuous training.

70 Infrastructure, teaching Staff and curriculum Ensure updated infrastructure facilities like class rooms, laboratories, library, hostels Canteen, paly ground etc.

Ensure adequate Qualified teaching / Non-teaching staff.

Up-date curriculum, Teacher (s) HODs Head / Management of institution heads of industries University / Govt. authorities. Personality development of students.

ISO 9000 Stage: 75 As at QA stage AICTE/NBA University.

QC Stage: Participation of all concerned Students, HODs, Head of Institution, heads Of industries, University/Govt. authorities, board of studies (BOS) in designing curriculum including teaching hours, laboratory hours, summer placement/ vocational training hours, project report hours, industrial tour, personality development etc. and measurement of student’s Performance through various strategies.

85 Participation of all concerned including Board of studies in designing the curriculum, practical work and personality development of Students. Students Teachers, HODs, Head/Management of Institution Heads of Industry University / Govt. authorities.

Engage Stage

Achieve performance excellence by students in the organizations, where they are working, by implementing the knowledge / skills learnt by them by their innovative, committed work on jobs to achieve vision and mission of organizations, where they are working.

100 Total development Including personality Besides the curriculum, train and develop personality of students through:

a) Industrial train.

b) Project work by industry

c) Summer placement/vocational training at industry

d) Communication skills team work etc.

Besides University Examination, obtain feedback from Heads of Industry, where the studies are employed.

All stake holders Students teachers, HODs, Head of institution Management of Institution, University/ Govt. authorities

Heads of Industry, Parents. etc.
Learn and Practice Things. Right First Time, Every Time and All Times

ICT application has five characteristics that may be called the five pillars of quality. These pillars are based on institution’s values such as commitment to satisfaction of industry, where students are employed and commitment to create an environment in which students can achieve their best ability.

Customer focus (Meeting requirements) i.e. educate and give practical training in specific skills to students to achieve vision and mission of the organizations through innovative and committed hard work so that organization, where they are working, achieve performance excellence.

Total involvement (taking responsibility) i.e. to improve quality of education, participation of stakeholders like students, teachers HODs, Head of institutions, Head of Industries, University/Govt. authorities, parents is necessary in designing curriculum, practical training and personality development, teaching methodology, teaching tools, measurement of student’s performance at various stages through sessional work, midterm exams/tests, project reports, seminars, summer placements, vocational training at industry, final examination and on the job performance etc.

Measurement (monitoring quality of education) i.e. effectiveness of learning is measured during education through sessional work, midterm exams/tests, project work/vocational training at industry before final university examinations, through personality development and on the job performance, where the students are employed (by getting feedback from industry).

Systemic support (leading and reinforcing), i.e. all systems in the institution including planning & measurement of teaching and practical training, support the quality of education.

Continuous improvement (preventing and innovation) i.e. continuous improvement in curriculum, practical training, personality development, teaching methodology, teaching tools, updating skills of teaching staff and measurement of student’s performance at various stages.

Conclusion

By practicing the above five thrust areas institutions could improve quality of education through ICT application.

Institutions should have adequate autonomy to continuously upgrade curriculum, practical training, personality development, teaching methodology, teaching tools, updating skills of teachers, measurement of performance of students at various stages etc.

The students should be trained in personality development, communication skills, vision, mission, innovation, competition and commitment so that they can integrate their innovative actions towards performance excellence by the organization, where they are working.

The teachers should use multimedia computer, power point software, LCD etc. as training tools.

Institution should provide Internet extensively to browse world knowledge and on-line knowledge/skills by students and teaching staff.