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Challenges towards implementing total quality management in education

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According to Chanakya "Pralay aur Nirman ek Shikshak ki god mein palte hain." It implies that it is upon the teacher to mould a child into a creator or to make him a destroyer. This statement clearly shows the Herculian task a teacher has to do, the kind of responsibilities he has to hold for the society and myriads of expectations that lie on his shoulder. In the present world of globalization, technological and information revolution a teacher must update himself and revise his teaching methodologies to suit the needs of the present generation, at the same time he needs to fulfill the basic goal of education i.e. the overall development of the student as well as the society on the larger canvass.

Need for Quality in Education

Defining quality in education is a massive challenge since it deals with the most sensitive creation on earth –the human being. Education only charges the human propensities to evolve and unfold it till the last breath, a process that covers the human journey from 'womb to tomb'. Human beings continue to learn, and evolve; 'to be' (Mukhopadhyay 2006).Education is goal-oriented. Commitment to quality makes student proud to learn and work hard for improvement. Quality improvement is a never ending process. Education quality leads to a prospective future. Hence, insight on quality indices and virtual implementation need to be given top priority and due attention should be paid to the category in the wide range of educational strata e.g. school, university, educational management, and the staff.

TQM is a philosophy and system for continuously improving the services and/or products offered to customers. (Ron Fitzgerald, 2004) It can become globally non-competitive rather rapidly. This non-competitive approach can be avoided by training Human Resources the most important resource to become TQM practitioners.

Benefits of TQM

Total Quality Management as a necessary element always has a direct influence on the human improvement. The potential benefits of TQM are very clear:

- It can help an educational institution by providing better services to its primary customers- students and employers.
- The continuous monitoring and improvement of TQM is a basic way of

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fulfilling the accountability requirements common to educational reform.

- It improves the learning environment by initializing a no fear TQM system which focuses on continuous growth and improvement. Thus it makes learning fun for the students and keeps the teachers motivated towards their goal.
- It can be also led to high commitment and spirit in work environment.

The *European Union's report on the quality of school education* (1999) *identifies* 16 indicators which would constitute key elements of the 'Rolling agenda' of applying TQM in the field of education These indicators cover four broad areas: attainment levels; educational success and transition; monitoring of school education; and educational resources and structures.

These indicators have been enlisted below:

Indicators on attainment- It includes seven indicators of attainment which are critical for all European countries in the present and also for the future. It includes Mathematics, Reading, Science, Information and communication technologies (ICT), Foreign languages, Learning to learn and Civics.

Indicators on success and transition- The three indicators that fall under this category are closely inter-related and include Drop-out rates, Completion of upper secondary education and Participation in tertiary education.

Indicators on monitoring of education- Two indicators currently fall into this area. Both are concerned with stakeholder participation where heads of schools, teachers, students and parents are key stakeholders, consumers of information and active players in school improvement. It includes Evaluation and steering of school education and Parent participation.

Indicators on resources and structures- This category includes four indicators, each concerned with key aspects of infrastructure which underpin school performance and pupil success. The indicators are- Education and training of teachers, Participation in pre-primary education, Number of students per computer and Educational expenditure per student.

The European Council clearly identified the need to set quantifiable targets, indicators and benchmarks as a means of comparing best practice and as instruments for monitoring and reviewing the progress achieved. Some examples of practice go well beyond the parameters of the associated indicator but in so doing illustrate the potential of the data to make a difference both at policy level and in school or classroom practice.

Though laid to be followed by the countries of the European Union these indicators are even relevant for the educational system of India. In this paper the

researcher has tried to make a comparison between the recommendations of the European Union with that of Educational Scenario in India.

Indicators on attainment- Even the Indian Education system lays emphasis on the knowledge attainment in Mathematics, Languages, Natural Science and Social Science. The National Curriculum Framework, 2005 recommends significant changes in these subjects with the objective to reduce stress of the learners and make education more relevant and meaningful. In Language, it makes a renewed attempt to implement the three-language formula with emphasis on mother tongue as the medium of instruction. As India is a multi-lingual country the curriculum should promote multilingual proficiency in every child, including proficiency in English, which will become possible only if learning builds on sound language pedagogy of the mother tongue. It focuses on language as an integral part of every subject, since reading, writing, listening and speech contribute to a child's progress in all curricular areas and therefore constitute the basic of learning.

NCF 2005 highlights the value of interaction—with the environment, nature, things, and people— to enhance learning. It recommends a change from teacher-dominated mode of learning to the child centered approach of learning. It points out that interaction with peers; teachers and older and younger people can open up many rich learning possibilities. Learning tasks and experiences, therefore, need to be designed to ensure that children seek out knowledge from sites other than the textbooks—from their own experiences, from experiences at home, community, from the library. The approach to planning lessons must therefore move away from the 'Herbartian' lesson plan to preparing plans, activities that challenge children to think and try out what they are learning.

Although NCF 2005, does not recommend Information technology as a compulsory subject in Indian schools but it encourages innovation in ideas and practice through plurality of textbooks and use of technology and recommends partnerships between the school system and other civil society groups.

Indicators on success and transition- In the Indian context school drop outs is a common feature of school education and the government is trying to bring down this rate through policy interventions by bringing Right to Education Act in the year 2009.

Although the annual average dropout rate for the country has come down from 9.1% to 6.8% nearly one third of the states and union territories have seen an increase in the dropout rate in primary education despite an overall increase in enrolment two years after the implementation of Right to Education (RTE) Act. At the lower secondary level (grades nine and 10), enrolment rate is 52%, while at the senior secondary level (grades 11 and 12), it is 28%. While the enrollment rate in

pre-school is merely 18%, there is a 48% drop-out rate in elementary education.

Secondary education covers children 14–18 which covers 88.5 million children according to the Census, 2001. However, enrolment figures show that only 31 million of these children were attending schools in 2001–02, which means that two-third of the population remained out of school. World Bank statistics found that fewer than 40 percent of adolescents in India attend secondary schools. *The Economist* reports that half of 10-year-old rural children could not read at a basic level, over 60% were unable to do division, and half dropped out by the age 14.

The overall state of higher education is dismal in the country. In almost half the districts in the country, higher education enrollments are abysmally low, almost two-third of our universities and 90 per cent of our colleges are rated as below average on quality parameters. The access to higher education measured in term of gross enrolment ratio increased from 0.7% in 1950-51 to 1.4% in 1960–61. By 2006-07 the GER increased to about 11 percent. By the end of 11th plan i.e. by 2012, the objective is to increase it to 15%.

Indicators on monitoring of education- Evaluation and steering of school education and Parent participation

The National Council of Educational Research and Training (NCERT) is the apex body for curriculum related matters for school education in India. The NCERT provides support and technical assistance to a number of schools in India and oversees many aspects of enforcement of education policies. In India, the various curriculum bodies governing school education system are:

- The state government boards, in which the majority of Indian children are enrolled.
- The Central Board of Secondary Education (CBSE). CBSE conducts two examinations, namely, the All India Secondary School Examination, AISSE (Class/Grade 10) and the All India Senior School Certificate Examination, AISSCE (Class/Grade 12).
- The Council for the Indian School Certificate Examinations (CISCE). CISCE conducts three examinations, namely, the Indian Certificate of Secondary Education (ICSE - Class/ Grade 10); The Indian School Certificate (ISC - Class/ Grade 12) and the Certificate in Vocational Education (CVE - Class/Grade 12).
- The National Institute of Open Schooling (NIOS).
- International schools affiliated to the International accalaureate Programme and/or the Cambridge International Examinations.

- Islamic Madrasah whose boards are controlled by local state governments, or autonomous, or affiliated with Darul Uloom Deoband.
- Autonomous schools like Woodstock School, Auroville, Patha Bhavan and Ananda Marga Gurukula.

In addition, NUEPA (National University of Educational Planning and Administration) and NCTE (National Council for Teacher Education) are responsible for the management of the education system and teacher accreditation.

However the evaluation system differs all over the country due to lack of uniformity in the school education as they are governed by different institutions.

Parent's participation in school education is generally low in India especially in rural areas where most of the parents are uneducated or semi educated and do not possess required knowledge to guide their child.

Indicators on resources and structures- Educational expenditure per student.

The National Council of Teacher Education (NCTE), a statutory body of the Central Government, is responsible for planned and coordinated development of teacher education in the country as far as pre-service training is concerned. The NCTE lays down norms and standards for various teacher education courses, minimum qualifications for teacher educators, course and content and duration and minimum qualification for entry of student-teachers for the various courses. It also grants recognition to institutions (government, government-aided and self-financing) interested in undertaking such courses and has in-built mechanism to regulate and monitor their standards and quality. For in-service training, the country has a large network of government-owned teacher training institutions (TTIs), which provide in-service training to the school teachers. At the National Level, the National Council of Educational Research and Training (NCERT), along with its six Regional Institutes of Education (REIs) prepares a host of modules for various teacher training courses and also undertakes specific programmes for training of teachers and teacher educators. Institutional support is also provided by the National University on Education al Planning and Administration (NUEPA). Both NCERT and NUEPA are national level autonomous bodies. At the state level, the State Councils of Educational Research and Training (SCERTs), prepares modules for teacher training and conducts specialized courses for teacher educators and school teachers. The Colleges of Teacher Education (CTEs) and Institutes for Advanced Learning in Education (IASEs) provide in-service training to secondary and senior secondary school teachers and teacher educators. At the district level, in-service training is provided by the District Institutes of Education and Training (DIETs). The Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs) form the lowest rung of

institutions in the vertical hierarchy for providing in-service training to school teachers. Apart from these, in-service training is also imparted with active role of the civil society, unaided schools and other establishments.

In spite of all these institutions there is a dearth of good teachers in the country at all levels. Even the mandatory teacher student ratio is not fulfilled in the country. As against mandated teacher student ratio of 30:1, 43 per cent primary schools have over 40 children per one teacher. Even the in-service teachers do not perform their duties in a proper way and absenteeism amongst them is a common feature. Study revealed that 25% of public sector teachers were absent during the survey. Among teachers who were paid to teach, absence rates ranged from 15% in Maharashtra to 30% in Bihar. Only 1 in nearly 3000 public school head teachers had ever dismissed a teacher for repeated absence. A study on teachers by Kremer etc. found that 'only about half were teaching, during unannounced visits to a nationally representative sample of government primary schools in India.

In terms of infrastructure the condition of Government school is pathetic. In fact, the number of secondary schools is almost half the number of upper primary schools available in the country. There is a mounting need of 4.96 lakh classrooms in the country which have been sanctioned under Sarva Sikshya Abhiyan -- which is being aligned with RTE. A study of 188 government-run primary schools found that 59% of the schools had no drinking water and 89% had no toilets. 2003–04 data by National Institute of Educational Planning and Administration revealed that only 3.5% of primary schools in Bihar and Chhattisgarh had toilets for girls. In Madhya Pradesh, Maharashtra, Andhra Pradesh, Gujarat, Rajasthan and Himachal Pradesh, rates were 12–16%.

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), India has the lowest public expenditure on higher education per student in the world.

During the Financial Year 2011-12, the Central Government of India has allocated Rs 38,957 crores for the Department of School Education and Literacy which is the main department dealing with primary education in India. Within this allocation, major share of Rs 21,000 crores, is for the flagship program 'Sarva Siksha Abhiyan'. However, budgetary allocation of Rs 21,000 crores is considered very low in view of the officially appointed Anil Bordia Committee recommendation of Rs 35,659 for the year 2011-12. This higher allocation was required to implement the recent legislation 'Right of Children to Free and Compulsory Education Act, 2009.

Thus the challenges that India faces in implementing TQM in education are multifaceted. On the basis of the above 16 indicators the following five key

challenges can be identified for implementing TQM in education. These major challenges are:

- The knowledge challenge
- The challenge of decentralization
- The resource challenge
- The challenge of social inclusion
- The challenge of data and comparability.

The knowledge challenge

The challenge of the knowledge society brings us back to the essential purposes of school education, in relation to the world of work, social life and lifelong learning.

- The information explosion demands fundamental rethinking of traditional conceptions of knowledge, its 'transmission', and 'delivery' by teachers and 'acquisition' by students.
- It raises questions about the assessment and testing of knowledge and the more demanding resources of skills, attitudes and motivation to learn.
- It questions curriculum content and the prioritization and compartmentalization of 'subjects'. Reading, mathematics and science claim their place as indicators because they provide essential knowledge tools and provide the foundations for lifelong learning skills. Less easily measurable competencies in civics, foreign languages and ICT will be no less significant in the future.
- Least developed of all in terms of the indicator areas are learning to learn skills but, arguably, they may be the most critical and enduring of competencies in the society of the third millennium. All of these areas of knowledge and skills present major challenges for the teaching profession and to the content of teaching in initial and in-service training.

Indicators in these areas do not provide the answer but do raise critical questions about how and where teachers should be trained in the future and how continuing professional development can be ensured. Change requires rethinking, reappraisal; re-evaluation of accepted practices, challenging what has always been done and accepted. Change often requires both restructuring and re-culturing of organizations. It imposes new demands on hierarchies, status and relationships. It may unsettle teachers and puzzle parents who have cast schools in the mould of what they knew.

The challenge of decentralization

Decentralization involves giving more autonomy and responsibility to schools, bringing increasing demands for accountability at school and, in some cases, classroom level.

- In doing so it raises questions about comparability, equity, quality assurance and inspection. Empowering stakeholders at lower levels which means making them responsible for defining what they understand by quality in education and giving them 'ownership' of their part in the education system.
- The process of decentralization is often seen as both positive and inevitable, but with its own attendant problems. Since it is the responsibility of the State to provide quality education for all, there needs to be some guarantee that the system is, in fact, fulfilling these objectives.
- Decentralization by its very nature leads to greater differences in standards among schools. The policy challenge is to acknowledge those areas where these differences exist, and to ensure that these differences are turned to opportunities and that they do not hinder pupils in achieving their full potential.

It has been argued that centralized systems, which prescribe and control education inputs (curriculum, form content, etc.) need less monitoring and control than decentralized systems, which place less emphasis on the control of input and require greater emphasis on the control of output. A closer look at indicators on the steering and evaluation of systems does not entirely support such a contention but does reveal quite divergent systems enveloping apparently similar practices.

The resource challenge

For many people within the educational systems the solution to the pressures of change is more resources. Education is increasingly being viewed around the world as investment.

- While opening up choice to consumers in new educational markets, the economic imperative is for cost-effective alternatives to expensive institutional practices. Technology will become cheaper and widely accessible while professional manpower will become scarcer and costlier, in both a social and economic sense.
- The indicator on numbers of computers per pupil is already debated as schools experience rapid increases in provision. The real challenge lies in the most intelligent and cost-effective use and deployment of new technologies.

- There are twin trends which increase resource demands at both ends of the compulsory schooling. More and more people are using the education system for a longer and longer period of their lives, so increasing resource demands on education. Enrolment in further and higher education is increasing steadily.
- As the other end of the education system, pre-school education is becoming more and more common and, although its nature and timing is a debated issue, there is wide agreement that early childhood experiences have a determining influence on intelligence, on personal development and on subsequent social integration. However desirable and however much investment in early childhood represents long-term investment, these accelerating trends also bring pressure on resource provision and require creative policy thinking.
- As provision becomes less institutionalized, individuals will need to adapt by assembling their own qualifications, their own building blocks of knowledge, on the job, in more informal ways or in new contexts still to be identified.
- Learning throughout life is becoming the key to controlling one's future on both a professional and a personal level, making it possible to participate more actively in society. Again policy-makers will benefit from data which monitors important trends, but beyond the numbers and graphics lay issues about the nature and effectiveness of provision and the need for more and better data, sensitive enough to inform decision-making in these areas.

The challenge of social inclusion

NCF 2005 lays emphasis on its commitment to instill the democratic values of equality, justice and freedom. It states that gender, caste, class, religion and minority status or disability should not constrain participation in the experiences provided in school. It points out that the diagnostic criteria of 'learning disabilities' is not well established. It is, therefore, entirely possible that learning disabilities may arise from inadequate and insufficient instruction. It also recommends a paradigm shift to study social sciences from the perspective of marginalized groups. It recommends that gender justice and sensitivity to tribal and dalit issues and minority sensibilities should inform all sectors of social science.

The challenge of data and comparability

The 16 indicators presented in the report of European Union provide a timely reminder that countries can no longer look inwards, but that they must look

outwards to see how they are performing in comparison to their neighbours. NCF 2005 also lays emphasis on knowledge beyond textbooks and encourages the use of media and information technology in all subjects as far as possible. In the present day of knowledge explosion no educational system should confine its syllabi to textbooks but they should be regarded as only a basic tool to supplement information.

- The challenge of comparability is to create an open and positive climate for dialogue. Comparison which is perceived as unfair becomes detrimental to the positive and constructive use of benchmark data. The obvious place to start is with standards attained by children at school — their outcomes on leaving school, their acquisition of basic skills at key stages of development.
- Data on pupil attainment at given ages is, however, of limited use to policy-making without knowledge of the conditions in which attainment is raised and of limited value without an understanding of factors which contribute to good teaching and effective learning. This raises the question of the availability of comparative data.

Conclusion:

TQM is emerging as an important tool for the management of quality in the services sector in India. But the major challenges of implementing it in India are as follows:

- In a large country like India implication of a uniform educational policy all over the country is the greatest challenge for maintaining TQM standards.
- The country has a vast diversity of cultural traditions which are region specific. Historical and cultural differences affect the value systems. Regional goals and priorities differ and will continue to differ but much may still be learned from innovative practice and new and different approaches to old problems.
- In the educational sector, there has been a proliferation of institutions both within and outside the public sector. This has led to the dilution of quality.
- It is becoming increasingly difficult to identify institutions of the right quality. Some good institutions under government sector that used to impart quality education are on the decline. It is necessary to invoke the concept of managing quality in a comprehensive and dynamic sense in those institutions so that decline in the parameters of quality is checked and upward growth of institution takes place.

- For policy-makers, the challenge will be to stay in touch with, and ahead of, regional and trans-state movements which will change the face of India and impact on national systems of education.

It is for this reason that TQM is an important concept in education management. It is better for all the teachers of the institutions to be exposed to more quality in education which in turn would influence the perception of teaching. Teachers should be encouraged towards positive aspect of TQM and to take active participation to render quality education. The examples of promising practice show, these challenges are being met only at a limited stage. Initiatives are underway to up-skill teachers, to exploit new technologies, to break new ground in learning to learn competencies. Meeting the knowledge challenge means learning from the good and implementing the best.

References :

- Ali, N. A. & Zairi, M. (2005), *Service Quality in Higher Education.* Bradford University School of Management, Bradford.
- Bensimon, E. & Neumann, A. (1993), *Redesigning Collegiate Leadership.* Johns Hopkins, Baltimore, MD.
- Bonstingl, J. J. (1992), *Schools of Quality. An Introduction to Total Quality Management in Education.* Association for Supervision and Curriculum Development, Alexandeia.
- Brigham, S. E. (1993), Lessons we can learn from industry. *Change* 25, 3, 42-7.
- Caplan, F. (1990), *The Quality System: A Sourcebook for Managers and Engineers.* Chilton Book, Radnor, PA.
- Corrigan, J. (1995), The art of TQM. *Quality Progress* 28, 61-64.
- Crawford, L. E. D. & Shutler, P. (1999), Total Quality Management in education: problems and issues for the classroom teacher. *The International Journal of Educational Management* 13, 2, 67-72.
- Crosby, P. B. (1984), *Quality without Tears.* New American Library, New York.
- Crosby, P. B. (1979), *Quality Is Free.* McGraw-Hill, New York.
- Deming, W. E. (1986), *Out of Crisis.* Cambridge University Press, Cambridge.
- Feigenbaum, A. V. (1983), *Total Quality Control.* McGraw Hill, New York.

- Fincher, C. (1994), Quality and diversity the mystique of process. In Fincher, C. (Ed.) *Defining and Assessing Quality,* 84-94. Institute of Higher Education, University of Georgia, Athens.
- Friedman, A. A. (2004), Beyond mediocrity transformational leadership within a transactional framework: *International Journal of Leadership in Education* 7, 3, 203-24.
- Green, D. (1994), What is quality in higher education? Concepts, policy and practice. In Green, D. (Ed.) *What Is Quality in Higher Education?* 3-30. Open University Press and Society for Research into Higher Education, Buckingham.
- Harvey, L. (1995), Editorial: The quality agenda. *Quality in Higher Education* 1, 1, 5-12.
- Harvey, L. & Green, D. (1993), Defining quality. *Assessment and Evaluation in Higher Education* 18, 1, 9-34.
- Holt, M. (2000), The concept of quality in education. In Hoy, C., Bayne-Jardine, C. and Wood, M. *Improving Quality in Education.* Falmer Press, London.
- Johnson, R.S. (1993), *TQM: Management Processes for Quality Operations.* ASQC, Quality Press, Milwaukee, WI.
- Juran, J. M. & Gryna, F. M. (1980), *Quality Planning and Analysis.* McGraw-Hill, New York.
- Kezar, A. J. (1998), Exploring new avenues for leading community colleges: the paradox of consultative models. *Community College Review* 25, 4, 75-87.
- Kaufman, R. (1992), The challenge of Total Quality Management in education. *International Journal of Education Reform* 1, 2, 149-65
- Lagrosen, S., Hashemi, R. S. & Leitner, M. (2004), Examination of the dimensions of quality in higher education. *Quality Assurance in Education* 12, 2, 61-9.
- Mukhopadahyay, M. (2006), *Total Quality Management in Education.* Sage, New Delhi.
- Neves, J. S. & Nakhai, B. (1993), The Baldrige award framework for teaching total quality management. *Journal of Education for Business* 69, 2, 121-5.

- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985), A conceptual model of service quality and its implications for future research. *Journal of Marketing* 4, 4, 114-19.
- Shields, P. M. (1999), Zen and the art of higher education maintenance: bridging classic and romantic notions of quality. *Journal of Higher Education Policy and Management* 21, 2, 165-72.
- Susan, W. E. (1995), Total quality: a mechanism for institutional change and curriculum reform. In Roberts, H.V. (Ed.) *Academic Initiatives in Total Quality for Higher Education,* 135-58. ASQC, Quality Press, Milwaukee, WI.
- Thakkar, J., Deshmukh, S. G. & Shastree, A. (2006), Total quality management (TQM) in self-financed technical institutions: a quality function deployment (QFD) and force field analysis approach. *Quality Assurance in Education* 14, 1, 54-74.
- Temponi, C. (2005), Continuous improvement framework: implications for academia. *Quality Assurance in Education* 13, 1, 17-36.
- Westerman, S. (1994), How total quality management initiatives can inspire leadership. In McDade, S., & Lewis, P. (Eds.) *Developing Administrative Excellence: Creating a Culture of Leadership.* Jossey Bass, San Francisco, CA.