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President's Message | Santosh Khadagade



There has been a lot of buzz around Quality 4.0 and what would be the role of Quality Profession. The dust has settled and there is some clarity emerging now. Quality 4.0 is basically a pursuit for excellence as the disruptive digital technologies are there to pervade the industry. Inspection, Quality Control, Process Design and People

Engagement will continue to be relevant. What quality professionals have to do is to make use of the AI and ML to collect right data (complete, timely, accurate, and relevant), find out the root causes fast for effective corrective actions and get new insights into products/services, processes and organisations.

Also, the surveys across the major countries have revealed that the pandemic has impacted our way of working permanently. Remote work, use of new technologies, new skills and reduced work force are some of the key impacts.

The revised diploma programs: PGD-TQM and D-TQM have been launched and the admissions have been kept open. Candidates will have flexibility to join the programs any time and would be able to select the examinations as per their readiness.

Remainder of the year 2021-22 is going to be full of events with AGM and Annual Day in October, President's BEQET Award for Educational Institutions during Nov – Jan, and Shree D. L. Shah Memorial Lecture in Feb.

Like every year, Membership committee will print Calendar for the year 2022 and deliver it to all the active members. Publication Committee is bringing out a 5S Pocket Book which will be provided free of cost to active members. Additional copies can be ordered at a nominal price.

All training and advisory services are being delivered through digital platforms. Client Visits are kept at the minimum in view of the pandemic. NCQM has now developed a customised training system, in which the client's training requirements and participant understanding are assessed through a pre-test. A Post test assesses the effectiveness of the training. Interested members are requested to place enquiries with ast@ncqm.com.

We wish to thank all the members for their continued association and support. For any queries, feedback or requirements, please feel free to contact me @ president@ncqm.com.

ANNOUNCEMENT



Registrations to NCQM's new PGD-TQM and D-TQM courses have been announced.

Please register now and secure a Quality Diploma!!!

For more details, please turn to page 8.

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Member Achievement

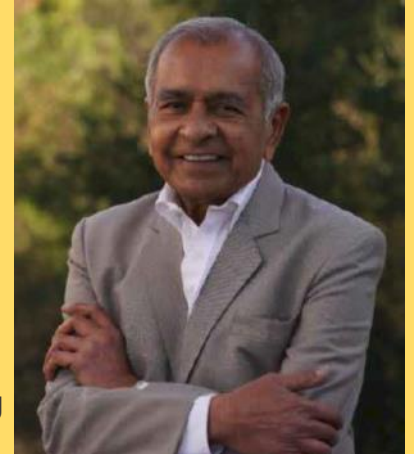


Navin S. Dedhia honoured as Quality Magazine's 2021 Quality Professional of the Year



Congratulations to Navin S. Dedhia for being named Quality Magazine's 2021 Quality Professional of the Year! This honor is bestowed annually to an individual who has made significant contributions to further the quality industry. The award criteria specifically address leadership, applications, and service.

Mr. Dedhia has been a leader at work and through his volunteer service. Over a 35-year career at IBM and then with Hitachi Global Storage Technologies, he held several leadership positions responsible most notably for improving customer satisfaction, internal audits, defect reduction, and training. Mr. Dedhia led a team at the IBM San Jose plant that reduced spare parts defects, resulting in an annual savings of \$3.4 million. He also increased the customer satisfaction level by analysing and driving corrective/preventive actions and thereby increasing on-time ship performance of the disk drive storage systems from 74% to 94% and on-time customer delivery performance from 65% to 93%.



He has further demonstrated leadership through his more than 40 years of service to ASQ, quality professions, and several organizations. Mr. Dedhia served on ASQ's Board of Directors and for 18 years as the Chair of ASQ's International Chapter. He also has chaired the Inspection Division, the Silicon Valley Section, the ASQ E Jack Lancaster Medal Committee, and the ASQ Certified Quality Inspector Examination Committee, in addition to serving on and leading numerous other ASQ committees. What is unique about Mr. Dedhia as a quality leader is his international service. He has made an impact on five continents! Besides chairing ASQ's International Chapter, he was chair of the International Committee of the National Centre for Quality Management (Mumbai, India) and served on the editorial review board for Total Quality Management/Business Excellence Journal (UK).

For ASQ, Dedhia was originator of the Quality World Newsletter, and during his tenure as chair of the International chapter, membership grew from 1200 members in 58 countries to more than 7000 members in 108 countries from 1982 to 2002. He also mentored many members to become Senior members and Fellow members within the Society, and guided qualified members to get recognized from ASQ's award and recognition program. Mr. Dedhia has published two books and more than 50 technical papers. He has written over 100 articles, made more than 75 presentations, and taught numerous quality-related courses. He has graciously shared his knowledge and experience for the betterment of the quality profession.

(Source: ASQ Inspection Division Newsletter, May 2021)

A Skill Development Initiative in Higher Education Institute

Abstract

India is on the cusp of a demographic opportunity. It is today one of the youngest nations in the world with more than 62 percent of the population in the working age group (15 – 59 years) and then 54 percent of the total population below the age group of 25 years. In fact in the next 20 years the labour force in the industrialized world will decline by 4 percent while in India it will increase by 32 percent. This poses both a challenge and an opportunity to India. To reap this demographic dividend which is expected to last for next 25 years, India needs to equip its work force with employable skills and knowledge so that the youth can participate productively to make India a developed economy.

This study answers these questions, where are we on skills? What opportunities can be given by educational institutes to learners for skill development? And what is the way forward? The paper makes a number of recommendations for developing opportunities for employability skills development in universities in general.

Keywords: Employment, Skills, Curriculum development, Quality circle, Quality tools.

Introduction

India has a huge labour force, second only to China. Labour availability is expected to grow further as India is forecast to be the youngest country in the world with a median age of 29 by 2020. In the next 20 years, the labour force in the industrialized world is expected to decline by 4 per cent, while in India it will increase by 32 per cent. This implies that India has a huge potential benefit in terms of labour availability and cost which the country needs to encash. However, little has been done so far to tap this structural advantage, which, if not addressed urgently, could cause socio-economic issues. And is the youth which will enter the job market in the near future equipped with requisite skills. The huge unemployment among youth due to lack of skills and poverty is a long term challenge for India. Skill building is a powerful tool to empower individuals and improve their social acceptance. It must be complemented by economic growth and employment opportunities to meet the rising aspirations of youth. The alarming situation is that only around 10 per cent of India's workforce is trained which includes 3 per cent formally trained and 7 per cent informally trained.

BEQET 2017

**1st Prize
Winning Project**

INSTITUTION

Shri M. D. Shah Mahila
College of Arts & Commerce,
Mumbai

TEAM LEADER

Dr. Deepa Sharma

TEAM MEMBERS

- Dr. Deepa Sharma
- Ms. Geeta Patil
- Ms. Shubha Acharya
- Ms. Vidyalaksmi Desai
- Dr. Ranjana Mishra, and
- Dr. Urmila Gor
-

*(This article is reprinted from
NCQM Quarterly Jan-Mar 2018)*



Quality : The only Strategy

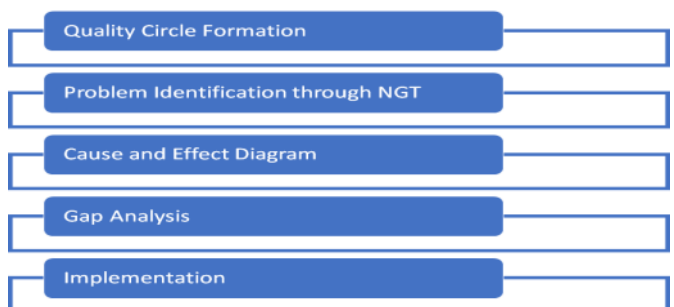
This compares poorly with a more than 50 per cent formally trained workforce in developed countries. According to the India Skills Report 2016, only 37 per cent of the Employability Skill Test takers (below 30 years) were found employable.

In India there are many universities from which a number of graduates pass out every year in varied streams of education. All students pursuing their education hope to get a good job in the flourishing economy. Most of the students opt for secure salaried jobs while few consider entrepreneurship. In spite of this there is a large group of individuals who find themselves out of the race because they lack job skills. The reason could be the non-existent practical exposure to vocational skills. Skill is an integral part of Education. And with the fact that job creations are becoming challenging and the country has to grow economically, it is important that the skills are embedded right at young age along with formal education. To bridge this gap efforts have been taken at Shri M D Shah Mahila College of Arts & Commerce, Malad (West). A systematic attempt was made to integrate regular Education with Vocational training. Women's education and empowerment being the primary goal of the institution, the focus was on enhancing vocational skills in girl students. Women often have different training needs than men, since they are more likely to work as contributing family workers, home-based micro entrepreneurs in addition to handling their domestic work and care responsibilities. Skills development is a key to improving household productivity, employability and income-earning opportunities for women and also for enhancing sustainable development and livelihoods. This paper is a study aiming to consider the place of employability in higher education institutes, with a focus on, various skill development programmes and outlines an initiative to promote employability skills development at college level. It also deals with vocational training for skills development.

Objectives

- To organize and conduct training for skill development and entrepreneurship development.
- To evolve strategies and methodologies for different target groups
- To identify training needs of students and offer training programs
- To identify, design and conduct training programs for students

A Special feature of this study is the use of Quality Circle as a methodology. The project was developed using an action research methodology using Quality circle and certain other quality tools. A Quality Circle is a small group of 6 to 12 employees doing similar work who voluntarily meet together on a regular basis to identify improvements in their respective areas using proven techniques for analyzing and solving work related problems coming in the way of achieving and sustaining excellence of self and the organization. It is the way of capturing the creative and innovative power that lies within the workforce. The Quality Circle philosophy calls for a progressive attitude of the management and their willingness to make adjustments, if necessary, in their style and culture. Methodology adopted has been shown below.

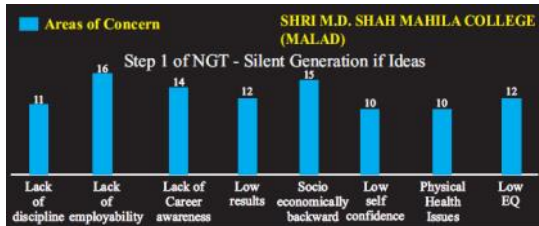


Procedure

The problem was defined precisely by using NGT (Nominal Group Technique) and QC members were invited to provide their valuable suggestion or problems.

Data compilation was done by taking evaluation of each answer provided and gathering them into a database, and analyzing the results for further suggestions, improvements, and/or recommendations. The graphical representation of problem areas is depicted in Fig. 2.

Fig. 2 - NGT Silent Generation of ideas



The quantified data projected that QC members attributed three problem areas, namely Lack of employability, lack of career awareness and socio-economically backward factors. These areas were further analysed and each of the areas was credited a rating as seen in Fig. 3 below.

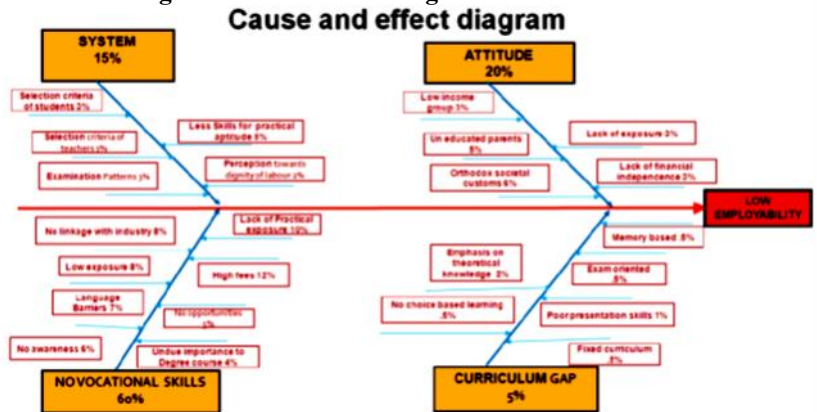
According to Fig. 3, it was noticed that Low Employability among students was the major deterrent which needed attention. QC members located the cause of the problem area through the Ishikawa diagram and further validated the root causes in percentile scores.

Fig 3-NGT Key Problem Analysis

Causes	QC1	QC2	QC3	QC4	QC5	QC6
1. Economically Backward						
1.1 Single Bread earners	6	6	5	4	6	6
1.2 Large families	7	3	5	5	6	5
1.3 Illiteracy	5	6	6	4	4	5
1.4 Engaged in bricollege jobs	5	8	5	3	5	6
1.5 Inflation	5	3	3	3	0	3
Sub Total	28	26	24	19	21	23
2. Lack of career awareness						
2.1 Decrease in Reading Habits	6	10	10	8	10	9
2.2 First generation learners	5	8	7	8	10	5
Misconceptions about career						
2.3 Career Counselling	6	7	3	6	9	6
2.4 Career Counselling	5	6	5	5	5	8
Sub Total	22	31	24	27	34	28
3. Lack of employability						
3.1 Curriculum Gap	8	10	10	8	8	10
3.2 Language Barriers	8	4	8	7	6	6
3.3 Lack of vocational skills	10	7	8	10	10	10
3.4 Lack of confidence	6	6	6	10	10	10
3.5 Attitudinal issues	10	6	10	10	7	7
3.6 Poor presentation skills	8	10	10	9	4	6
Sub Total	50	43	52	54	45	49
Total	100	100	100	100	100	100

The Cause and Effect Diagram revealed that lack of vocational skills was the major concern area which required increased attention and intervention.

Fig 4. Cause & Effect Diagram with NGT scores



After a survey regarding Need analysis, the QC came out with a 3 Model Solution whereby skills could be imparted in three different levels - Minimal skills, Professional skills and Entrepreneurial skills.

3 Model solution

Models	Solutions
Minimal Skills	JSS Skill Academy
Professional Skills	ADD on and COP Courses
Entrepreneurial Skills	M I Patel Courses
	M D S Life Skill Education

705 students enrolled in various courses along with the regular Degree course. Experts from the industry and in-house teachers shared their expertise with students.

A systematic programme of theory and practical classes enabled students to gain knowledge and hands-on experience. Aimed at self-reliance, opportunities were created for students to act as business managers and learn budget planning, control and profit management.

Bridging the Gap through Minimal courses, Professional Courses & M I Patel Vocational Training Institute

Minimal courses	Professional courses	M.I Patel Vocational training Institute
<ul style="list-style-type: none"> • Beauty culture • Event Management • Basic IT • Calligraphy • Tattoo Making • Nail Art • Jewellery designing 	<ul style="list-style-type: none"> • Beauty culture • Event Management • Basic IT • Calligraphy • Tattoo Making • Nail Art • Jewellery designing 	<ul style="list-style-type: none"> • Interior designing • Fashion designing • Travel and Tourism • Beauty culture • Hindustani vocal • Software development • Photoshop

The skill development programme led to formation of academic-industry linkages and natural fallout of this association was regular Campus interview sessions and Career fairs. IT companies and Travel agencies absorbed majority of these students as the skills possessed by the students suited the needs of the industry. Some students also embarked on individual entrepreneurship setups.

With the success and positive feedback from students, the management initiated JanSeva Samiti Skill Academy with a regularized programme and essential infrastructure. It resulted in value addition in students' personality in areas of self esteem, interpersonal relationship and emotional security. There developed a sense of social acceptance and urge to contribute to society.

Conclusion

The project analysis resonates the idea that skill and knowledge are the driving forces of economic growth and social development of any country. They have become even more important given the increasing pace of globalization and technological changes which provide both opportunities and challenges. As India moves progressively towards becoming a 'knowledge economy' it becomes increasingly important that educational institutes should focus on skill development programmes, advancement of skills and these skills have to be relevant to the emerging economic development.



Quality : The only Strategy

BEQET 2021



TIME SCHEDULE

Workshops	- Nov 6&13, 2021
Application Deadline	- NOV 30, 2021
Project Submission	- Dec 31, 2021
Competition	- Jan 15, 2022
Award Presentation	- Feb 12, 2022

OBJECTIVE / PURPOSE

To encourage Educational Institutions in successfully promoting Quality practices in their operations, and there by significantly enhancing satisfaction of their customers, both internal and external.

THE AWARDS

The Awards include an Award Trophy to the winning institution and a Certificate to leader of the team. The Runners – up institutions are awarded with Certificates of Merit, with a Certificate to leader of the team. Other team members of the winning as well as runner up teams can get the certificate on request at a nominal cost.

ELIGIBILITY CRITERIA

- An Institutional / Corporate Member of NCQM.
- Colleges and Management Institutes affiliated to any University in Maharashtra or in any other state.
- All Colleges and Institutions affiliated to NCQM Institutional Members.

ENTRY INTO COMPETITION

- Each College or Institution or Management Institute can nominate upto three (3) teams.
- Only those teams whose projects have been completed during the past two years, and the benefits are being maintained are considered for these awards.
- Each nomination is required to be made on the standard Application Form and submitted to NCQM, along with entrance fee.

So Start Preparing and look out for the Application Booklet that will be sent out shortly!!!

ANNOUNCEMENT

Quality Tool Discussion

TAKT TIME

Process Cycle Time is time taken to make a unit from start to end. A stop watch can be used to measure the cycle time. For example, machining of a unit of a flange takes 10 minutes to complete, so **CYCLE TIME** is 10 minutes.

Now in real situations, we get time to make a unit based on customer demand. For example, if a customer has ordered 150 Flanges and has given us only 3 days to deliver, we have $(3 \times 8 \times 60) = 1440$ minutes time with us. Considering 85% production time, we have 1152 minutes. Therefore customer has given us per unit time $(1152/150) = 7.68$ minutes against our cycle time of manufacturing which is 10 minutes. This time is called **TAKT TIME**.

In this situation, we are not going to meet the customers timeline of 3 days. Following options can be considered:

1. Accept order only as per the capacity if customer agrees, i.e. $1152/10 = 115$ Units
2. Manufacture 115 units and outsource the balance 35 units
3. Increase the shift time by $(35 \text{ Units} \times 10 \text{ Minutes Cycle Time} / 3 \text{ Days}) = 116.67$ minutes or 2 Hours per Day by paying overtime to employees

Cycle Time = Time taken to manufacture a unit from Start to End : Can be calculated using Stop Watch

Takt Time = $\frac{\text{Available time}}{\text{Customer Demand}}$ (Required Cycle Time to meet demand) : Can't be calculated using Stop Watch

Readers are requested to write their comments to ast@ncqm.com on the above explanation of Takt Time and also, share their experiences on use of Takt Time. We plan to cover one such tool in each issue of the Newsletter. Readers can send their contributions to the Editor for publishing.



Post Graduate Diploma In Total Quality Management / Diploma in Total Quality Management

PGDTQM / DTQM

:: One year ::

※ Two batches admitted each year in January and July ※

Distance Learning Program with online sessions to guide and address difficulties of students



NCQM offers integrated programmes that let you acquire a Diploma in TQM (D-TQM) and a Post Graduate Diploma in TQM (PGD-TQM) in one year. Candidates can opt for D-TQM (6 months to one year) and upgrade to PGD-TQM (6 months) or opt directly for PGD-TQM (one year to one and half year)

Diploma in TQM

- Total Quality Management (TQM)
- Statistical Process Control Techniques with Applications
- Quality and other Management Systems
- Additional Quality Improvement Techniques for Organizational Excellence

Post Graduate Diploma in TQM- Additional Modules

- Advanced TQM Tools and Techniques
- Total Quality Management Applications

DOWNLOAD PROGRAM BROCHURE



*Admissions are open
for July 2021 Batch*

Please read the program details, fee structure and payment information before starting to Register
Keep your fee payment details: NEFT/IMPS/RTGS Tx No. ready

REGISTER 

EDWARD DE BONO

The Man Who Taught Us How to Think

Dr Edward de Bono, the man who taught the world how to think, has died aged 88. Although he is no more with us, he has left behind a legacy that will continue to drive progress in thinking as a science. Dr De Bono is the inventor of the term “**Lateral Thinking**”.

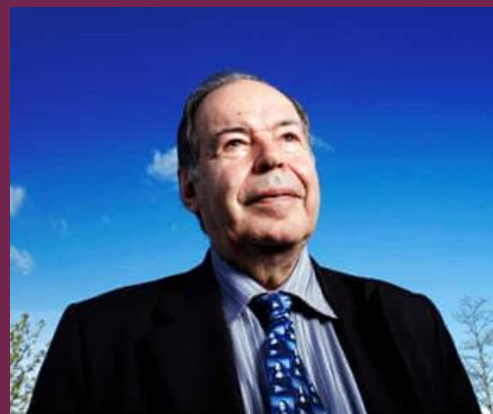
Through his 60-plus books as well as seminars, training courses and a BBC television series, De Bono sought to teach us the process of creative thinking. Creating thinking he said was important to find elegant solutions to complex problems.

“What happened was, 2,400 years ago, the Greek Gang of Three, by whom I mean Aristotle, Plato and Socrates, started to think based on analysis, judgment and knowledge,” he said. “At the same time, church people, who ran the schools and universities, wanted logic to prove the heretics wrong. As a result, design and perceptual thinking was never developed.”

Dr De Bono’s revolution began in 1967 with his book ***The Use of Lateral Thinking***. With this Dr De Bono created a disruption the process of thinking. Until then thinking was just a logical process with laid down norms of analysis and judgement. In addition, this process was duplicated for so long that creative ideas were limited to very few.

Dr De Bono believed that with his process of lateral thinking, the masses could become creative thinkers. Einstein and Darwin, according to Dr De Bono, were lateral thinkers. “Studies have shown that 90% of error in thinking is due to error in perception. If you can change your perception, you can change your emotion and this can lead to new ideas. **Logic will never change emotion or perception.**” De Bono believed humour was one of the most significant characteristics of the human mind, precisely for its basis in shifting perceptions.

Dr De Bono was very concerned about the way schools taught us how to think. “**Schools waste two-thirds of the talent in society. The universities sterilise the rest,**” he said.



Photograph: Christopher Thomond/
The Guardian

Dr Edward De Bono

Author, Doctor and Inventor of
the term “Lateral Thinking”

Born: 19/05/1933

Died: 09/06/2021

Popular Books

- Lateral Thinking
- The Mechanism of Mind
- Six Thinking Hats
- How to Have A Beautiful Mind
- The De Bono Codebook

Planet DE73 was named
Edebono in his honour.

He believed that rigid thinking and an obsession with testing led to many children leaving school “believing they are stupid. They are not stupid at all, many are good thinkers who have never had the chance to show it. But that lack of confidence will pervade the rest of their lives.”

Rather than teaching children to absorb information and repeat it, he argued, schools should equip them to think creatively. He once did a study in which he asked children to design a sleep machine, an elephant-weighting machine, a system for constructing a house and a system for building a rocket. His 1972 book *Children Solve Problems* described the results.

The other popular tool that we are all familiar with is Dr De Bono’s Six Thinking Hats. Six Thinking Hats is comprehensive decision making tool. The Hats helps us break the

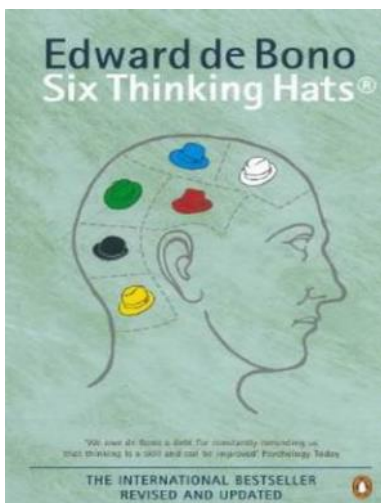


Image courtesy—Goodreads

involving a team ensures that the decision is sound.

Dr De Bono was born in Saint Julian’s Bay, Malta. His father, Joseph de Bono, was a physician, and his mother, Josephine (nee O’Byrne), was an Irish journalist. Educated at St. Edward’s College, Malta, he then gained

a medical degree from the University of Malta. Following this, he proceeded as a Rhodes Scholar to Christ Church, Oxford, where he gained an MA in psychology and physiology. He then gained a PhD degree in medicine from Trinity College, Cambridge, an honorary DDes (Doctor of Design) from the Royal Melbourne Institute of Technology and an honorary LLD from the University of Dundee. Planet DE73 was named Edebono in his honour. He received Malta’s National Order of Merit in 1995.

De Bono taught at the universities of Oxford, Cambridge (where he helped to establish the university’s medical school), London and Harvard. He was a professor at the University of Malta, the University of Pretoria, the University of Central England (now called Birmingham City University) and Dublin City University. Dr De Bono held the Da Vinci Professor of Thinking chair at the University of Advancing Technology in Tempe, Arizona, US.

In 1991, he established Advanced Practical Thinking Training (now de Bono Thinking Systems) to teach corporations how to apply his ideas. It proved a remarkable success. By 1996, APTT was on the Inc 500 list of fastest growing American companies. In 1999, he and his brother, Peter, set up the online Effective Thinking Course.

References

- *Ed De Bono Obituary by Stuart Jeffries in The Guardian 2021*
- *Edward De Bono Wikipedia*

TRAINING CALENDAR: Oct-Nov 2021

Schedule & Fee Per Candidate*	Program Title	Objective	Contents	Who Should Attend
Oct. 29-30 2021 Rs. 4000/- Plus GST	Certified Internal Auditor for IMS (9001/14001/45001)	<ul style="list-style-type: none"> Undertake Effective planning & performing effective audit of Integrated Management Systems Gain Sound knowledge and skills on auditing against these standards and communicating the findings effectively. 	<ul style="list-style-type: none"> IMS Standards, Principles, PDCA Cycle, Process Approach & Risk Based Thinking IMS Requirements & Major changes Highlights on ISO 19011:2018 Audit Planning, Audit Execution Auditing Skills / Techniques, Reporting of Non Conformities and observations, Follow up and Closure Experience sharing by Lead Auditors 	<ul style="list-style-type: none"> Internal Auditors for IMS Functional Managers/ Executives/ Supervisors Potential External Auditors Trainers and consultants
Nov. 6th and 13th 2021 (Two Batches) Rs. 1500/- plus GST	BEQET Workshop for Staff of Educational Institutions	<ul style="list-style-type: none"> Identify problems at work place that service quality Master structured approach to problem solving Gain expertise on Root Cause Analysis tools and techniques 	<ul style="list-style-type: none"> Overview of BEQET Criteria Problem definition & approach to Problem Solving. Importance of data. Basic Quality tools: Histogram, Pareto Chart, Brain Storming, CE Diagram and Control Charts RCA & RRCA Techniques Experience sharing by past winners 	<ul style="list-style-type: none"> Teaching and Non-Teaching Staff
Nov. 19, 2021 Rs. 2000/- Plus GST	Certificate Course : "5S"- Effective Management of Workplace	<ul style="list-style-type: none"> Understanding of the Principles of 5S Workplace Management Implement 5S at work place Audit for effectiveness of 5S 	<ul style="list-style-type: none"> Understanding of "5S" principles- of Seiri (整理), Seiton (整頓), Seisō (清掃), Seiketsu (清潔), and Shitsuke (躰) Visual control for better management of problems 5S Audits Case studies from industry 	<ul style="list-style-type: none"> Managers, Executives and Supervisors 5S Implementation Teams
Nov. 26-27, 2021 Rs. 4000/- Plus GST	ISO 45001:2018 OH&SMS Basic Requirements Certificate Training	<ul style="list-style-type: none"> To provide in-depth insight to understand the requirements of ISO 45001:2018 Enable you to understand, implement, maintain and improve the more challenging technical aspects of an OH&SMS 	<ul style="list-style-type: none"> Evolution of ISO 45001 Standard, Principles, PDCA Cycle, Process Approach & Risk Based Thinking Requirements & Major changes in OH&SMS Standard Requirements of the standard with special emphasis on the technical aspects under Clause 6 and Clause 8. Experience sharing by practicing managers 	<p>Managers/ Executives/ Supervisors from :</p> <ul style="list-style-type: none"> HSE & Quality Dept. Other Functional depts... Internal Auditors for ISO 45001

* ** Certificate Courses have examination at the end

* 10% Member discount applicable, Additional Group discount of 10% for 3 or more participants.

* Payment can be made through Cheque/DD in favour of **National Centre for Quality Management** or Net banking (NEFT, RTGS, and IMPS)- please send email request or call for Bank Account details.