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Research Article

"DEMING VALUES AND TEACHERS": SURVEY RESULTS PRESENTED AS A RESEARCH PAPER

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ABSTRACT

Objective: The study shows the opinion on the applicability of Deming's 14-point principles of quality management among teachers in general.

Methods: The study is conducted in the form of an opinion survey among selected sample respondent teachers. A sample size of 100 was chosen, and random sampling technique was applied to choose the sample. 5-point Likert scaling technique was applied for collecting opinion. Percentage analysis was done to the observed data.

Result: Majority teachers agreed to the applicability of Deming philosophy and a simple majority even strongly agreed to it. Some were not sure about the matter, and a very small minority disagreed to the applicability of Deming philosophy.

Conclusion: In this competitive world, people give more importance to ensure quality in every sector. The education sector is also treated as a globally competing marketplace in the present scenario. It is, therefore, indispensable to meet global standards to survive with the competitors. The analysis revealed an optimistic result, and it could be fixed that the topic has a scope for further learning.

Keywords: Deming philosophy, Education, Quality, System of profound knowledge, Global standards, Competitive world, Mouth wide publicity, Teacher-manager dual role.

INTRODUCTION

In the present scenario, quality is a buzz word which has to be given priority by the nation while taking decisions in every field. The education sector is the main sector which gives and demands quality in every aspect. Parents seek for quality education nowadays and are ready to afford it even if it is costly. People rush to those institutions which supply qualitative knowledge, and for this, they are even ready to break their geographical boundaries. They are prepared to send their children even to poles apart in search of qualitative degrees.

Mouth wide publicity plays a major role in the educational market. An opinion from alumnae of a particular institution will be taken as a decisive factor by the people for choosing an institution for their offspring's learning. So, in this competitive world, one main strategic advertising tool that the educational institutions can easily use is this mouth wide publicity. However, this tool cannot be hired at any cost other than that of offering quality education. As a result, every educational institution is giving more importance to impart quality education. For that, they are ready to introduce new teaching techniques, enrich the knowledge of their teaching faculty through faculty development programs, arranging platforms for these faculties to hold open discussions on novel ideas to enhance quality in education, encourage student and faculty exchange programs with institutions of high quality and even with foreign universities/institutions, arrange world class infrastructural facilities in accordance with the fees being charged for imparting quality education, etc. Every person who is ready to send his/her child for their schooling, as well as higher studies, is that much alert and conscious that they even do a cost-benefit analysis and proper consultation with experts before taking judgment on spending money for their kid's future.

For improving the quality of the institution, academicians need to improve their teaching methods. They need to brush up their knowledge on a timely basis; they have to adopt new philosophies, new curriculum, update the contents, and delivering techniques, revise at constant intervals to meet global standards and to develop a competitive position

for their institution in this strategic environment. They should be aware of the external environment to which they have to supply promising candidates and constantly try to initiate novel ideas. They have to keep an eye on the competitor's moves. To facilitate the teachers to play the managerial role successfully, the 14-point philosophy put forth by Deming, father of quality management will of course lend a hand. This philosophy will create constancy of purpose for ongoing improvement of product and service. His philosophy helps to transform a company's quality culture. Those theories were introduced mainly for achieving the goal of customer satisfaction and that too in industries. However, these philosophies have application in all fields; even education sector is not an exception. The teachers in these institutions now a day are playing managerial roles as well. This facilitates the researcher's curiosity in applying management principles among the teacher community.

Relevance of the study

Today most of the students have the opportunity to study overseas because marketing strategies of all educational institutions in the present global strategic environment aim to target even at international students. When earlier the educational institutions had to face only local competitors, now they have to face global competitors. Each institution must develop its unique selling proposition (USP) to position their product globally and this USP in turn act as the competitive edge for these institutions. For educational institutions, quality is the USP that they can stress on while imparting education. Parents now a day are ready to obtain the best for their children, at any cost, even if it is a world class product; no exception is there with regard to offering them quality education. There have been changes happening in the purpose of getting educated. The conventional approach to education is from a social welfare perspective [1], in which education is directly linked to human well-being and social development. However, in today's knowledge, economy education is at the core of economic prosperity. Each state is having its own perspectives about their own knowledge economies with well-laid structures and plans to compete in global market. Well-qualified and dynamic teachers are very much essential prerequisites in a knowledge-based economy. To help the teacher folk in acting as quality managers, Deming philosophy play a great role. This study aims to collect a first-hand opinion of teachers on the concept of Deming philosophy and its application while executing their teacher-manager dual role in their institution. This study is conducted as a pilot study to uncover opportunities for advanced researches.

Objectives of the study

- To study in general about the 14-point Deming philosophy
- To study about the opinion of teachers in general about the applicability of this Deming philosophy in their field of operation.

METHODS

The study was conducted mainly using primary data collected through telephonic interviews and via e-mails with sample respondents chosen at random. The respondents chosen were teachers in Kerala irrespective of whether they were school teachers or college teachers. The sample size was restricted to 100 as it was a pilot study. The analysis was done with the help of percentage tool.

Time period of the study

The study has been conducted during January-May 2016.

Limitations of the study

This study suffers certain limitations as follows:

- Conducted as a pilot study with few respondents, only with a large sample size can the results be concluded as 100% accurate!
- The respondents are teachers in general irrespective of the stream to which they belong. The stream to which they are connected may persuade them to give specific response
- Deming philosophies can be studied in depth with the help of various quality management tools which is not done in this current study leaving scope for further researches
- There are theories of quality management which also must be analyzed concurrently to get more desirable and perfect results
- Since the study is done with the response of human beings, chances of bias and individual opinion differences are possible.

Literature review

In the educational framework [2], appreciation for a system refers to screening the education system as a whole, rather than treating teachers, students, curriculum, facilities, and other parts of the system as separate pieces. Deming developed his system of profound knowledge and philosophies from his vast experience as a statistician, teacher, physicist, etc. Education has forever and a day been confronting the challenge in guaranteeing that the quality of teaching and learning takes place effectively [3]. One possible path for improving the quality of education lies in the application of a quality management approach as has been used in industries, to the teaching and learning the process. In any study on quality management in education sector [4], the classroom and the institution offering education must be treated as an organization, the teachers or instructors are treated as leaders leading the learning process and assumptions must be made that the management of the institution as well as the teachers is interested to learn more about quality management techniques, quality approaches, quality gurus, etc. W Edwards Deming placed great importance and responsibility on management [5], at the individual and company level, believing management to be responsible for 94% of quality problems. His 14 points-plan is a complete philosophy of management that can be applied to small or large organizations in the public, private, or service sectors and also to organizations which do variety of businesses.

Factors considered for analysis

Deming's 14-point philosophies were considered as the base for the survey. The survey was carried out with the help of a 5-point Likert scaling technique (A scaling technique used for measuring attitude/opinion. The scale applied here is a 5-point scale, strongly agree, agree, not sure, disagree, and strongly disagree). The following are the points in Deming philosophy which were covered for the survey:

 Create constancy of purpose for continual improvement of products/ services

- 2. Adopt new philosophy
- 3. Eliminate the need for mass inspection
- 4. End the practice of awarding business solely on the basis of price tag
- 5. Improve constantly
- 6. Training on the job
- 7. Leadership not supervision
- 8. Eliminate fear
- 9. Break down internal barriers
- 10. Eliminate slogans (exhortations)
- 11. Eliminate numerical targets
- 12. Remove barriers to worker satisfaction
- 13. Encourage self-improvement
- 14. Everybody is responsible for the continual improvement in quality and productivity particularly top management.

All the points were elaborated from teacher's viewpoints, and their opinions on that regard were gathered. The elaborations were as follows:

- Develop mission statements for oneself which is derived from the institution's mission statement and vision, which, in turn, is derived from global standards.
- 2. Adopt new philosophies, new curriculum, course contents, delivering techniques, and revise at constant intervals to meet global standards to develop a competitive position for the institution in the strategic environment.
- 3. Believe in infusing quality education to the child and developing their knowledge in each subject domain rather than believing/relying too much on final inspections (in the form of term examinations) to decide the worth of a student.
- 4. Aim at the long-term end rather than short-term costly actions, dream toward the output (an efficient, socially responsive, committed child) that you would give to the stakeholders (the parents, society, economy, the nation, and the universe at large) in the long run rather than about the immediate products like a hike in pass percentage, a hike in marks/grades obtained and the like.
- 5. Constantly improve the process that you are engaged in, notice changes happening in the external environment to which you have to supply promising candidates, and constantly strive to introduce innovative/even better ideas in this endeavor, observe the competitors' moves aim at global standards though you may not be that capable now appreciate "we" concept among teachers and students rather than "we and they" concept.
- 6. Prepare yourself to undergo periodic trainings/refreshment courses/ faculty development ventures to uplift yourself according to the days' requirements and learn on a systematic basis about management principles that you would have to apply while effectively playing your versatile role in your organization.
- 7. Develop the leader in you rather than waiting to be led realize that self-led persons are much motivated rather than those who are being led-develop the leader in each and every student folk you deal with understand that when self-led, one is more likely to identify problems oneself and take steps to solve than waiting for someone else to take the lead role and identify the issues.
- 8. Take initiatives to drive out the fear in you, the fear of failure in meeting up to the standards set by authorities, the fear of pass percentages in the subject handled, the fear of taking a new step forward while teaching/executing your versatile role, and the fear of losing increments in case of some issues, whatever be the reason for the fear in you ultimately would be passed on to the students. So, strive to drive out the fear in your minds and in the minds of your students.
- 9. Encourage co-operation and not competition, break down the barriers, feel free to communicate with colleagues in other subject domains as well as to those in other institutions, share ideas, take competition in a sportive spirit, encourage committees (within students/among students and teachers/among teachers of other institutions) that move for a common, positive goal and those who work as visionaries.
- 10. State goals and slogans, but duly support the student folk and oneself to attain them by providing them with proper instructions, arranging

Table 1: Percentage analysis of opinion survey on Deming philosophy

Deming philosophy: Point analyzed	Strongly agree (%)	Agree (%)	Not sure (%)	Disagree (%)	Strongly disagree (%)
1	45	52	2	1	-
2	38	59	3		-
3	39	51	8	2	-
4	35	56	7	2	-
5	38	51	9	2	-
6	48	45	5	2	-
7	35	55	8	2	-
8	41	49	8	2	-
9	36	52	8	4	-
10	30	60	10	-	-
11	37	51	8	4	-
12	37	51	6	6	-
13	32	52	11	5	2
_14	32	44	17	5	-

Source: Questionnaire

for study teams, giving personal attention whenever and wherever needed, give due moral support, and motivate the deserved.

- 11. Eliminate the over dependence on the number of tests being taken, rather focus on techniques that help in judging students' knowledge, encourage group discussions, promote debates, promote small and simple researchers among students, encourage their entrepreneurial and managerial traits, encourage the doctors in them, give venues for the engineers/architects in them; in short, encourage practices that would develop their very inner potentials rather than depending too much on memory tests (exams covering mere text book/note book matters).
- 12. Boost the pride of yourself and that of your students, participate in decision-making (if the management allows), be a part of the team that initiates major changes in the field, and encourage student participation (existing as well as alumnae) while planning for curriculum revisions revising teaching methodology and the like.
- 13. Make an involvement in the organization wide movements that encourages activities which would built up quality at workplace, quality in academic as well as non-academic ventures, and the like - enrich your knowledge about the various principles of total quality management - impart and intake those philosophies that many experts in quality management have put forth, and realize it as the days' requirement.
- 14. There must be constant discussions and surveys upon the above-mentioned points in your institution as well as in all those academic institutions in the present strategic environment just like a production organization would do concerning its products' quality-total quality management and discussion forums on building up quality must be matters of thought for all the teachers while playing their versatile role effectively.

RESULT

The Table 1 shows a positive representation that majority of the respondents were either applying/are concerned in applying the Deming's 14-point principles to play their teacher-manager dual role competently. It can be seen that only a negligible percentage of respondents was not sure about the principles and who disagreed and strongly disagreed to the application of Deming principles. This clearly indicates an optimistic sign for the researchers to conduct further studies on the similar aspect but in an in-depth way taking a large respondent group.

CONCLUSION

As the number of institutions offering education is ever increasing, there is a hard-hitting competition among them to maintain themselves in the marketplace. Even educational institutions are considered now a day's as players of the market, the market being the educational market. Those who are able to frame their own USP are able to hold

their positions firm in today's global market. Among educational institutions, the USP that they can develop is in the form of quality education where each and every teacher has a very extensive role to play. They are the ones who set things moving in the educational institutions, and they are the ones who mold today's student generation for a better tomorrow. If the individual teachers are well aware of their oblique duty in maintaining the quality standards while offering support to their institutions (whose main aim is to develop their own competitive edge to manage their position in the strategic world of today), they will be able to help their institution a lot in this regard. This study considered the attitude of teachers, in both school level and higher level, on the applicability of Deming philosophy in their area of imparting quality education. W. Edward Deming, being the father of quality management, his ideas are very well applicable in every field, proves this study as well. Either knowing about or unknowing Deming philosophy, the teachers have opined that they are keen in applying the 14-point Deming philosophy in their respective fields. The application becomes more effective when it is done with complete knowledge, thus leaving scope for further researches. This study can be considered as a pilot study for testing the feasibility of further studies on the topic. An exhaustive research on this topic from various other dimensions is feasible; confirms the outcome of this survey.

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