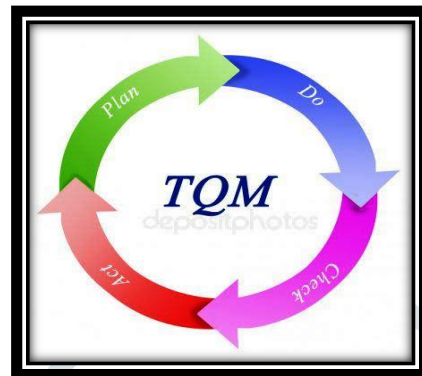# Perception of Teachers About the Implementation of Total Quality Management in Education Industries of Burdwan.

Abstract:

Total Quality Management is a continuous and systematic process of improvement which involves everyone and everything of an organization. Total Quality management emphasizes on total satisfaction among external as well as internal stake holders within a management environment. It is the quest for continuous improvement of all processes and systems. Total quality management is set up to built an organizational philosophy and management strategy to achieve its central focus. Teachers are the integral and one of the most important parts of the Education Industries. This study attempts to find out the perception of teachers about the implementation of Total quality Management in educational industries of Burdwan. About 140 teachers of three different disciplines Arts, Science, Commerce are taken as sample of study. To achieve authentic and valid result the researcher used " Mukhopadhyay's Institutional Profile Questionnaire (MIPQ)" as tool which is a widely acceptable and reliable tool and 5 point Likert type scale for perception measurement. There is significant difference in the perception of Arts, Science, Commerce teachers about the implementation of Total Quality Management in the educational Industries of Burdwan is a major finding of the study.

Key Words: Total Quality Management, Educational Industries, Teacher's perception, Continuous Improvement.

Introduction:

In the modern world every product, service whatever is consumed is measured on the basis of quality. Quality is ordinal measure of excellence or a state of being free from defects, deficiencies and significant variations. Quality is a product in order to satisfy specific consumer requirements. According to British Standards Institution (BSI) 1991, defines quality in functional terms as the totality of features and characteristic of a product or service that bear upon its ability to satisfy the stated or implied need. Quality has both absolute and relative implication. Quality is relative when similar product or service provided by several organizations is compared at given time and place. There are two parameters of quality relativism, measure up to the specification and meeting the consumer needs. The product specification is the minimum necessary condition where as the consumer satisfaction over need is the primary condition. So to meet both the parameters of quality relativism, there comes "quality control" and "quality assurance".

According to Johannsen (1968), it has been defined as "the procedure of establishing acceptable standards with defined limits of variation in quality of material, size, weight, finish or other characteristics from goods or services, and maintaining these standards". Hence the primary aspect of quality control is the identification and elimination of products that do not match the product specification. "Quality control in its broadest sense refers to a spectrum of managerial methods for attempting to maintain the quality of manufactured articles at a desired level" International Encyclopedia of The Social Science-1979. Again the form of ensuring quality of a product or service is called product assurance. Quality assurance mainly concentrates on assuring the primary feature of the good or service rather than on the detection and elimination of products that do not match the product definition. The most successful extension of the quality assurance is Total Quality Management (TQM).

TQM has its base in Total Quality Control which was originally coined by Feigenbaum in 1983. TQM emphasizes on managerial quality in input and process point and again in establishing quality culture among all stake holders. The TQM concept was also coined by Deming, Juran and Crosby. They specify a striking shift in emphasizing in quality management from product to people. The TQM pronounced from a shift from quantitative to qualitative term of reference for quality improvement. TQM designated emphasis is over Human Resource Development and capacity building. This capacity building is not only isolated in technical capacity but also managerial and participative capacity leading to empowerment. Hence we can enumerate that TQM is a fresh and dynamic process that do not accept any static definition. It fixes new height in quality and achieves them. According to Oakland, (1993), "distinctiveness of TQM lies in two major features – a commitment to continuous improvement of all members of the organization".

In synopsis TQM stimulate continues improvement in an organization. This TQM philosophy accentuates a systematic, integrated, consistent organization – wide perspective involving everyone and everything. The integral emphasis is total satisfaction among external as well as internal stake holders within a management environment. It is the quest for continuous improvement of all processes and systems. The TQM is set up to built organizational philosophy and management strategy to achieve its central focus.

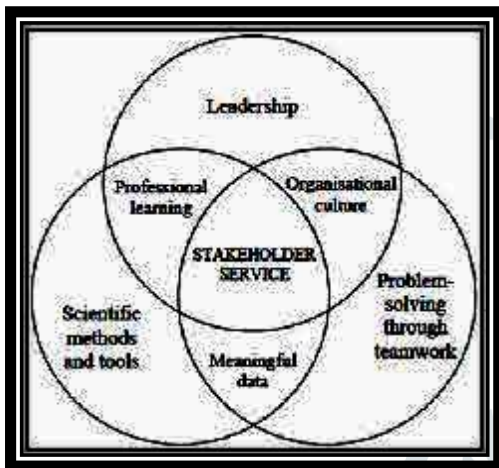**Total Quality Management in Education Industries:**

In educational industries innovation can be two ways, horizontal and vertical. Vertical approach is also known as 'deep approach'. Diversification and expansion of activities comes under horizontal approach. TQM also concentrate on the deep approach, i.e. on the qualitative transformation. To enhance the institutional culture is the central focus of TQM. For institution TQM intensify the basic service to an acceptable level. In education TQM venture towards total qualitative development of the students in four factors: physical, emotional, intellectual and spiritual, i.e. the behavioral enhancement. A good definition of TQM in the field of education is "quality at every step, by everyone and for everyone", i.e. teacher teaches with highest competence with satisfaction and consummate the need of the student and satisfy both the student along with parents. The main donor of education is society. Education cannot be concentrate only among students and their needs but it also apprehends the need of other components, like parents, community and government. Powar and Panda (1995) proclaimed "that an institution of high quality efficiently and effectively meets its stated purpose (s) or mission (s) developed taking into account the client's stated as well as implied needs". TQM is also a technique of performance measure. It measures of the level of satisfaction. According to Yudof and Buschvishniac (1996), TQM is the shift from external to internal performance measure. TQM delivers a reasonable and systematic technique for the continuous search for quality and excellence. TQM develops a readiness for a change, where institution tends to be more flexible and responsive. TQM has an effective influence in decision making by active participants irrespective of their levels in the hierarchy of the organization rather than concentrating at the top of the hierarchy and second on decision making based on facts.

Need and Significance of The Study:

Education is one of the fundamental rights that are wide accepted. TQM intensify the basic service to an acceptable level in educational industries. TQM enhances the continuous process of quality improvement. According to Sheer and Lozier (1991), Total Quality Management professes a systematic, not random, approach to educational operations.

Teacher's perception towards TQM in educational industries comprise an awareness of curricular aspects, learning, teaching, evaluating, motivating, research consultation, extension and diversification, infrastructure and resource development and governance. So it is important to get a solid perception of teachers as they are the integral parts of education industries. All the stake holders of educational industries are quite concerned about the quality, so this motivate the investigators to conduct the study, " **Perception of Teachers About The Implementation Of Total Quality Management In Education Industries of Burdwan".**

Objectives:

1) To measure the level of perception among Arts, Science and Commerce teachers of Burdwan town towards the implementation of Total Quality Management in educational institutions.

2) To measure the level of perception among the male and female teachers of Burdwan town towards the implementation of Total Quality Management in educational institutions.

3) To measure the level of perception among the male Arts and female Arts teachers of Burdwan town towards the implementation of Total Quality Management in educational institutions.

4) To measure the level of perception among the male Science and female Science teachers of Burdwan town towards the implementation of Total Quality Management in educational institutions.

5) To measure the level of perception among the male Commerce and female Commerce teachers of Burdwan town towards the implementation of Total Quality Management in educational institutions.

Hypothesis of The Study:

H_1: The level of perception about the implementation of TQM among Arts, Science and Commerce teachers in Burdwan are significantly different.

H_2 : There is no significant difference between the perception of male, female teachers in Burdwan toward implementation of TQM.

H_3: There is no significant difference between the perception of male Arts teachers and female Arts teachers.

H_4: There is no significant difference between the perception of male Science teachers and female Science teachers.

H_5: There is no significant difference between the perception of male Commerce teachers and female Commerce teachers.

Research Methodology:

Researchers have followed Normative Sample Survey Method for this study. By judgmental sampling 140 teachers of Arts, Science and Commerce are taken as sample from different sinstitutions of Burdwan.

Data Collection Tools:

The researchers have adopted the Mukhopadhyay's Institutional Profile Questionnaire (MIPQ) for Attitude of Teachers Towards Total Quality Management (TQM) as tool which is valid, reliable and widely accepted. This tool helps us to testify and frame the objectives and formulate the hypotheses of the present study.

Process of scoring:

The tool consists of 110 items with five point Likert type scale to measure the level of perception. The indicators of the tool are Very True (VT), Largely True (LT), Partly True (PT), Not Sure (NS) and False (F). The allotted score are 5,4,3,2.1 respectively. The maximum obtainable score is 550. The researcher consider the score below 300is low, the score between 300 and 380 are considered average, the score between 380 and 460 are considered as high and above 460 are very high.

Hypothesis Testing:

H$_1$: The level of perception about the implementation of TQM among Arts, Science and Commerce teachers in Burdwan are significantly different.

Table -1

ANOVA showing the F-value for the level of perception about the implementation of TQM based on the mean marks over individual discipline.

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F-ratio	Statistical Inference
Between Groups	488.68	2	244.34	0.75	Significant
Within Groups	980.54	3	326.85		
Total	1469.28	5	571.19		

Inference:

The above table shows that the calculated value of F-ratio is less than the table value at 5% level of significance. Therefore the null hypothesis is accepted. Hence we can conclude that the level of perception the level of perception about the implementation of TQM among Arts, Science and Commerce teachers are significantly different.

H$_2$: There is no significant difference between the perception of male, female teachers in Burdwan toward implementation of TQM.

Table-2

Z-test for the mean score of the level of perception based on gender.

Gender	N	Mean	Std. Deviation	Z-value	P-value	Statistical Inference
Male	70	401.46	53.63	2.9002	0.0037	Significant
Female	70	427	50.53			

Graphical Representation:
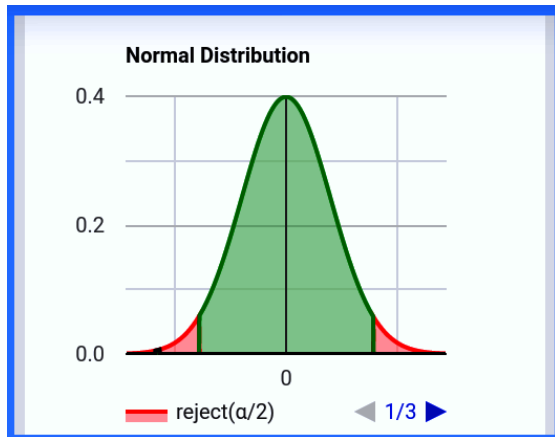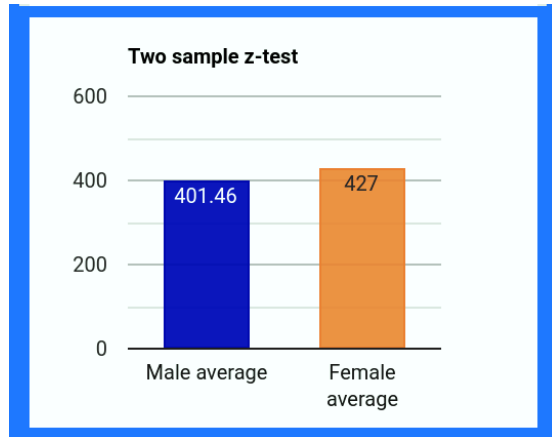
Fig: 1   **Fig:2**

Inference:

The above table shows that the Z-Value 2.9002 is greater than the table value at 5% level of significance i.e.1.96. Therefore the null hypothesis is rejected. Hence we can conclude that there is significant difference between the perceptions of male, female teachers in Burdwan toward implementation of TQM.

H₃: There is no significant difference between the perception of male Arts teachers and female Arts teachers.

Table: 3

T-test for the mean score of the perception of male and female Arts teachers.

Gender	N	Mean	Std. Deviation	T-value	P-Value	Statistical Inference
Male (Arts)	30	394.37	58.50	2.71	0.00880	Significant
Female (Arts)	30	432.63	50.44			

Graphical Representation:
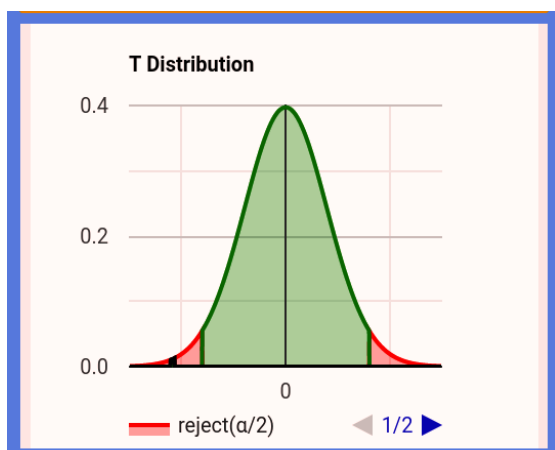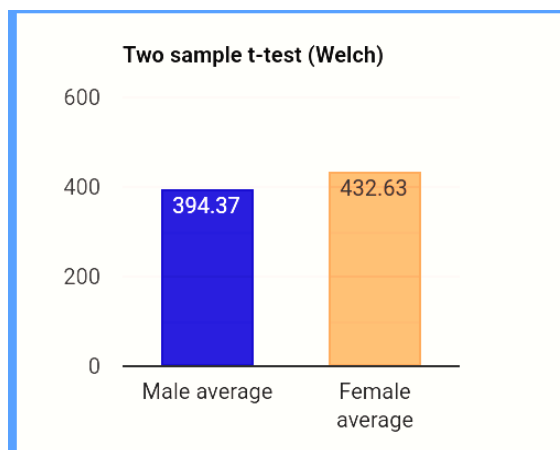
Fig: 3   **Fig:4**

Inference:

The above table shows that the T-Value 2.71 is greater than the table value at 5% level of significance i.e.2.045. Therefore null hypothesis is rejected. Hence we can conclude that there is significant difference between the perceptions of male Arts and female Arts teachers in Burdwan toward implementation of TQM.

H₄: There is no significant difference between the perception of male Science teachers and female Science teachers.

Table: 4

T-test for the mean score of the perception of male and female Science teachers.

Gender	N	Mean	Std. Deviation	T-Value	P-Value	Statistical Inference
Male (Science)	25	412.46	48.15	1.488	0.143007	Not Significant
Female (Science)	25	433.53	51.33			

Graphical Representation:

Fig: 5

Fig: 6

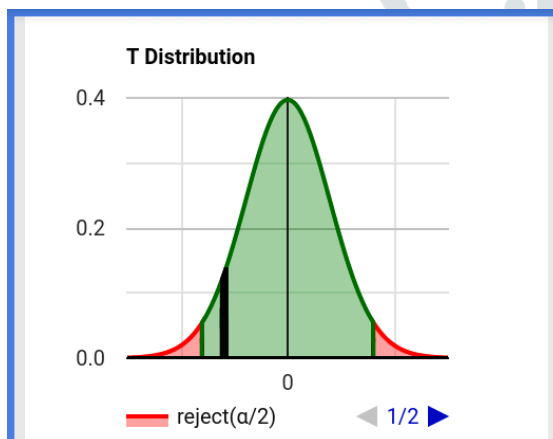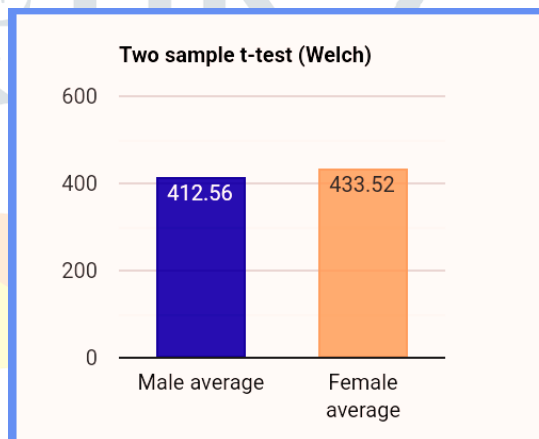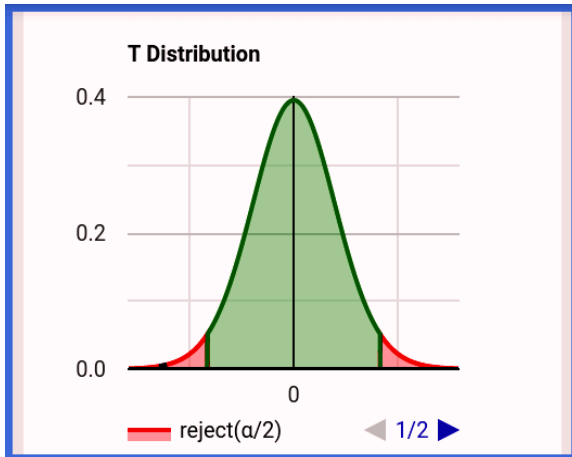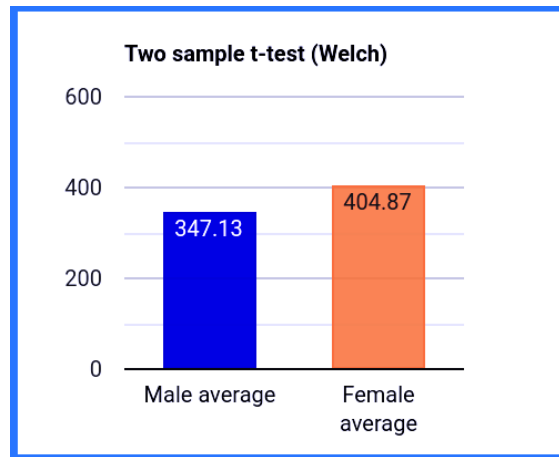**Inference:**

The above table shows that the T-Value 1.488 is less than the table value at 5% level of significance i.e.2.064. Therefore null hypothesis is accepted. Hence we can conclude that there is no significant difference between the perceptions of male Science and female Science teachers in Burdwan toward implementation of TQM.

H₅: There is no significant difference between the perception of male Commerce teachers and female Commerce teachers.

Table: 5

T-test for the mean score of the perception of male and female Commerce teachers.

Gender	N	Mean	Std. Deviation	T-Value	P-Value	Statistical Inference
Male (Commerce)	15	347.13	48.88	3.2	0.00442	Significant
Female (Commerce)	15	404.87	49.16			

Graphical Representation:

Fig: 7   **Fig: 8**

Inference:

The above table shows that the T-Value 3.2 is greater than the table value at 5% level of significance i.e. 2.195. Therefore null hypothesis is rejected. Hence we can conclude that there is significant difference between the perceptions of male Commerce and female Commerce teachers in Burdwan toward implementation of TQM.

Findings of the Study:

1) The level of perception about the implementation of TQM among Arts, Science and Commerce teachers of Burdwan are significantly different.

2) There is significant difference between the perceptions of male, female teachers in Burdwan toward implementation of TQM.

3) There is significant difference between the perceptions of male Arts and female Arts teachers in Burdwan toward implementation of TQM.

4) There is no significant difference between the perceptions of male Science and female Science teachers in Burdwan toward implementation of TQM.

5) There is significant difference between the perceptions of male Commerce and female Commerce teachers in Burdwan toward implementation of TQM.

Discussion:

From the findings of the study we can depict that emphasis should be give more on the qualitative improvement of educational industries. Improvements in classroom transaction, curriculum development are important along with physical, emotional, intellectual and spiritual enhancement. TQM cannot be concentrated only among students but also among all the stake holders associated with it. Hence it can be suggested that:

a) Commitment towards continuous involvement and systematic improvement of all the stake holders of educational industries can lead TQM among educational industries to the highest level.

b) Engagement of all the integral part of the educational industries should be on the basis of efficiency and knowledge and not with biasness, so that to ensure TQM.

c) Infrastructure and resources should be much more available to teachers and students so that to squeezed out the effective result.

There is enough scope for other researcher to proceed further with this study as TQM is dynamic and continuous process.

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