The Application Status of Total Quality Management with Continuous Improvement Approach

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Abstract
The aim of this study was to determine the implementation status of total quality management with continuous improvement approach in Education Department of the Dezful city. The statistical population consisted of all educational staff (105) of Dezful city in academic year of 2014-2015 and 86 employees were selected as the statistical sample by using relative stratified sampling method. The methodology of present study was descriptive with survey type. To collect the data, total quality management standard questionnaire of ISO 9000 (TQM) was used. To analyze the data the independent sample t-test” was used. The results showed that the observance rate of eight principles of ISO 9000 in the education department of the Dezful city was performed poorly and the application rate of this principles is less than 0.50. Total mean scores of eight principles of Total Quality Management in the Department of Education of Dezful city was 119.91 and this points in the spectrum showed that the organization has to start learning and quality program and productivity. At this level objectives should focus on the movement from the planning stages to the actual implementation of “TQM” in order to obtain practical experience.

Keywords: total quality management, continuous improvement approach, employees of Education Department of the Dezful city

Introduction
Today, only organizations have adequate competitive position that their activities mainly focus on satisfying the needs of customers with the lowest price and highest quality. Therefore, the successful and effective presence in regional and global competitive market along with the efficient use of all facilities and proper utilization of new resources to produce and deliver high-quality services with customer satisfaction is inevitable. Due to the increasing role of services organization in the economy areas and the importance of quality in competition areas, service organizations should consider service quality management with a strategic and dynamic approach and should have a clear understanding of service quality position (definition and attitudes), customer expectations, and general characteristics of quality. Customers are increasingly becoming more aware shoppers about quality. They want to know if the business of organization meets their needs? Quality Management System reflects the organization's commitment to the quality and customer satisfaction. The implementation of quality management system can help organization in customer satisfaction enhancement, achieving consistency, and improving internal processes as well as minimizing the risk of failure to meet customer expectations. Quality management system enables organization to control various internal processes and increases its efficiency and minimizes the risk of failure to meet the organization's commitment to customers and organization will have a proper infrastructure to create the gradual improvement in internal processes and will reinforce itself in achieving to the strategic objectives (Geraedts, 2001).

Total Quality Management (TQM) is a philosophy, theory and a new methodology in quality management and systems derived from it. In fact, the realization and implementation of Total Quality Management (TQM)
Quality Management is one of the results and achievements of the development and internationalization of quality management in recent years. Despite the universality of TQM issue in all fields, so far it is common only in companies and some service jobs. However, much information about the implementation of TQM in some fields such as education, research, consulting, etc. is not available, according to the comprehensiveness of concepts and ultimate goals of TQM in the need to achieve superior quality by utilizing the quality patterns applied in other contexts and combining them with effective measures to improve the training process acceptable results can be achieved in this area.

Total quality management is a method to manage an organization that is based on the quality and participation of all members of the organization which aims to achieve long-term success through customer satisfaction and supplying benefit of all stakeholders (Younesi, 2013).

Zanjirchi and Haji Moradi (2012) conducted a study entitled “audit of the quality of education in higher education institutions in the form of Total Quality Management model with fuzzy approach to provide a framework for assessing the quality of higher education institutions by utilizing the fuzzy approach and verbal expressions as the new audit concepts. The study results by using the Fuzzy TOPSIS method showed that the quality of education is good at the University of Yazd in relation to other aspects and strategy and policy has the lowest quality among the options.

Educational systems as the most significant manifestation of investment of human resources plays a major role in the prosperity of society. Waste of human capital and material can be prevented.

Today, these systems have allocated a significant share of the budget of each country to themselves and given its importance and role in economic, social, cultural and political dimensions of community, it is necessary to take basic precautions to improve the quality of educational systems and to prevent the loss of human and material capital. In this regard, this study sought to examine the application status of total quality management with continuous improvement approach of teaching staff of the Dezful city in 2014-2015.

**Statement of Problem**

Developments in the world of business in the early 1980s, empowered customers. The demand for products and services with high quality and reasonable prices accelerated. The globalization of trade has led the products and services with high quality and reasonable prices will be available worldwide and this forced organizations to improve goods and services which resulting in the development of technologies and methodologies such as TQM.

**Background of Study**

Kaynak (2003) knows Total Quality Management as what holistic philosophy of management defines which is striving for continuous improvement of the organization. Some researchers by offering the solution of enriched continuous improvement with participation of all people, consider total quality management as a set of concepts and management tools that aimed at involving directors, employees and workers in continuous improvement of performance (Boaden, 1997).

TQM is a historic unique approach to improve organizational effectiveness and many studies show the benefits of its proper implementation (Zaeri, 2002). In the past decades this philosophy is considered as a key factor to achieve commercial success, growth and better competitive position. After the successful implementation of total quality management in business processes and productive organizations, the researchers suggest applying total quality management in the educational process (Chaffee, 1991).
Motwani (1995) notes that educational institutions feel pressure to change well. In other words, educational institutions that procrastinate in the adoption of total quality management, at best state, just lose the chance of being the market leader and in bad state, they are at risk of exclusion from the competition market. Today, this model is widespread in prestigious educational institutions, for example, Jara and Meller (2010) point out that educational institutions in the UK use quality assurance processes to ensure the quality of their education. In recent years, many studies have been conducted on the relationship between TQM and performance. The first study which aimed at defining the constituent elements of actions of Total Quality Management was done by Saraph and colleagues (1998) and knew the main variables of total quality management model as three dimensions of customer focus, continuous improvement and teamwork. Kannan and Tan (2005) in a study which aimed at investigating the relationship between total quality management, timely production and supply chain management and its effect on the performance of the organization, after extensive study of literature review, defined the measures of total quality management as 14 elements. Jung and Wang (2006) defined the leadership, employees’ relations, supplier’s relations, customer and process management and product as dimensions of Total Quality Management. Corredor and Goni (2010) point out to the elements of leadership, customer focus, process management and employees’ involvement as the constituent elements of the concept of total quality management. According to Konecny and Thun (2011) elements of total quality management include multi-functional design of product, focusing on customers, participating in quality of suppliers, process control and human resource management.

There has been much discussion and debate regarding the applicability of total quality management in educational institutions. Some researchers believe that Total Quality Management is more applicable in administrative and support procedures in training organizations and its implementation is easier (Barnard, 1999). Certainly, the effective deployment of any new managerial method or strategy requires the preparation of many inter-organizational factors such as scientific-cultural preparation of management and staff to perform the intended pattern, commitment of staff to implement the new model and so on. For this reason, in Iran the scientific-cultural preparation of staff of organizations and more familiarity of them with the principles and concepts of total quality is essential. Understanding cultural preparedness of organizations in applying the principles of TQM in Iran requires sociology study that have unfortunately been far from view of previous researchers and it seems without review of cultural, environmental and legal bases, applying Total Quality Management is incorrect issue. Due to the fact that TQM is essentially a philosophy and thought and as a culture and dominant opinion influence the organizations and lead them, the main issue raised in this case and the present study sought it refers to the investigation of the implementation status of total quality management with continuous improvement approach of teaching staff of the Dezful city in 2014-2015.

Research questions

General question: How is the application status of Total Quality Management with continuous improvement approach in education department of Dezful city?

Sub-question 1: How is the application status of the leadership and management principle with continuous improvement approach in education department of Dezful city?

Sub-question 2: How is the application status of the strategic planning principle with continuous improvement approach in education department of Dezful city?

Sub-question 3: How is the application status of the customer-oriented principle with continuous improvement approach in education department of Dezful city?
**Sub-question 4:** How is the application status of the identification and training principle with continuous improvement approach in education department of Dezful city?

**Sub-question 5:** How is the application status of the empowerment principle with continuous improvement approach in education department of Dezful city?

**Sub-question 6:** How is the application status of the measurement and analysis principle with continuous improvement approach in education department of Dezful city?

**Sub-question 7:** How is the application status of the quality assurance principle with continuous improvement approach in education department of Dezful city?

**Sub-question 8:** How is the application status of the principle of quality improvement and efficiency implications with continuous improvement approach in education department of Dezful city?

**Methodology**

Since the present study investigated the application status of Total Quality Management with continuous improvement approach of staff of education department of Dezful city, the research method is descriptive and survey. The statistical population in this study consisted of all the employees of the education department of the Dezful city of who have served in 2014-2015. According to statistics from the Bureau of Statistics their number is 105 subjects with 13 women and 92 men.

**Research tools**

Data collection tool in this research was the questionnaire of total quality management standard of ISO 9000 (TQM).

**Questionnaire of Total Quality Management standard (TQM):** questionnaire of quality management standard of ISO 9000 consists of two parts: demographic and eight parts of standard (eight principles of TQM). The purpose of the questionnaire is to evaluate the total quality management in the organization. Each criterion has six option (a, b, c, d, e, and f). From 105 questionnaires distributed at education department, 86 questionnaires were returned and sampling was not done and census method was used and for scoring the test the Moqimi (2009) method was used in a way that if the points acquired from components of Total Quality Management to be between A) 160-200, it indicates that the organization with global measures and deep and long-term commitment and also active is in quality improvement and productivity.

B) between 120 - 159, the point on the spectrum shows that the organization has a logic philosophy with optimal organizing to improve efficiency and quality that has begun to flourish.

C) between 80-119, the point on this spectrum indicates that the organization has started to learn and program quality and efficiency. At this level, the goals should focus on the movement from the planning stages to actual implementation in order to gain practical experience.

D) between 40-79. This point on the spectrum shows the vague recognition of quality improvement and efficiency in the organization and also there is not any program to teach or conduct such activities. Point at this level creates a dangerous attitude about organization

E) between 1-39, This point on the spectrum demonstrates that the organization recently has no information about quality improvement and efficiency and improvement and development programs. This level indicates that the organization will be excluded with this status, unless the organization has had an absolute monopoly and to be very much invincible in the field of basic and valuable goods and services (Moghimi, 2009).

Validity of the questionnaire is verified by experts. Validity of the questionnaire was determined in study of Vaziripour Kashmiri, Tafaroshi, Yousefi (2009) with a Cronbach's alpha method is equal to 0.962. The reliability of the questionnaire by Cronbach's alpha method is 0.84.
Analysis of the data was performed in descriptive and inferential way. In the descriptive method, raw information and data was classified by using certain methods and will be shown in statistical tables and charts. In inferential part, independent sample t-test was used. To do this spss software version 19 was used.

Data analysis results

As mentioned, in order to investigate the relationship between the research variables, t test can be used to analyze the average in univariate research with one group and two groups and multivariate with two groups. The importance of this test (distribution) is that it enables researchers to obtain information about the society with smaller samples (at least 2 persons). In Table (1), test values for general questions and 8 sub-questions are presented. The independent sample t-test was applied in inferential analysis to examine the application status of the leadership and management principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table. Therefore, it could be stated that the average of respondents’ views on the application status of the principle of leadership and management has been statistically significant.

The independent sample t-test was used in inferential analysis to assess the application status of the principles of strategic planning with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table. Thus, the average of respondents’ opinions about the application status of the principle of strategic planning has been statistically significant.

In inferential analysis to evaluate the application status of the customer-oriented principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model, the independent sample t-test was applied. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table, therefore, the average of respondents' opinions about the implementation status of the customer-oriented principle has been statistically meaningful.

To examine the application status of the identification and training principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model, the independent sample t-test was used in inferential analysis. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table, thus, the average of respondents' opinions about the implementation status of the identification and training principle has been statistically meaningful.

In inferential analysis, the independent sample t-test was used to examine the application status of the empowerment principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model. The calculated “t” is not significant, therefore, the average of respondents' opinions about the implementation status of the empowerment principle has not been statistically meaningful.

For assessing the application status of the measurement and analysis principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model, the independent sample t-test was used in inferential analysis. The calculated «t» is not significant, therefore, it can be stated that the average of respondents' views on the implementation status of the measurement and analysis principle has not been statistically significant.
In inferential analysis, to evaluate the application status of the quality insurance principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model, the independent sample t-test was used. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table, therefore, the average of respondents' opinions about the implementation status of the quality insurance principle has been statistically meaningful.

In order to evaluate the application status of the principle of quality improvement and efficiency implications with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model, in inferential analysis, the independent sample t-test” was applied. The calculated “t” is not significant, therefore, the average of respondents' views on the implementation status of the principle of quality improvement and efficiency implications has not been statistically significant.

<table>
<thead>
<tr>
<th>Variable index</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>leadership and management principle</td>
<td>26.98</td>
<td>10.343</td>
<td>15.221</td>
<td>85</td>
<td>0.000</td>
</tr>
<tr>
<td>Strategic Planning principle</td>
<td>11.2</td>
<td>7.048</td>
<td>4.636</td>
<td>85</td>
<td>0.000</td>
</tr>
<tr>
<td>Customer oriented principle</td>
<td>14.9</td>
<td>4.483</td>
<td>-22.466</td>
<td>85</td>
<td>0.000</td>
</tr>
<tr>
<td>Education principle</td>
<td>9</td>
<td>5.821</td>
<td>2.390</td>
<td>85</td>
<td>0.000</td>
</tr>
<tr>
<td>Empowerment principle</td>
<td>7.36</td>
<td>5.280</td>
<td>-0.245</td>
<td>85</td>
<td>0.000</td>
</tr>
<tr>
<td>Analysis principle</td>
<td>7.60</td>
<td>4.842</td>
<td>0.0200</td>
<td>85</td>
<td>0.000</td>
</tr>
<tr>
<td>Insurance quality principle</td>
<td>17.58</td>
<td>9.055</td>
<td>2.644</td>
<td>85</td>
<td>0.000</td>
</tr>
<tr>
<td>Quality improvement principle</td>
<td>25.47</td>
<td>17.331</td>
<td>0.249</td>
<td>85</td>
<td>0.000</td>
</tr>
</tbody>
</table>

General question: How is the application status of total quality management with continuous improvement approach in education department of Dezful city?

Table 2: The percentage of agreement of respondents with observance of eight principles of ISO 9000 in the Education department of Dezful city

<table>
<thead>
<tr>
<th>Principles of TQM</th>
<th>Mean of Principles of TQM in education department of Dezful city (n=86)</th>
</tr>
</thead>
<tbody>
<tr>
<td>leadership and management principle</td>
<td>34.9</td>
</tr>
<tr>
<td>Strategic Planning principle</td>
<td>39.5</td>
</tr>
<tr>
<td>Customer oriented principle</td>
<td>45.4</td>
</tr>
<tr>
<td>Education principle</td>
<td>48.9</td>
</tr>
<tr>
<td>Empowerment principle</td>
<td>31.4</td>
</tr>
<tr>
<td>Analysis principle</td>
<td>35.9</td>
</tr>
<tr>
<td>Insurance quality principle</td>
<td>36%</td>
</tr>
<tr>
<td>Quality improvement principle</td>
<td>32.6</td>
</tr>
</tbody>
</table>

Results based on this table show that the observance rate of eight principles of ISO 9000 in the education department of the city of Dezful is performed poorly and the application rate of this principle is less than 0.50.

Total mean scores of eight principles of Total Quality Management in the Department of Education of Dezful City is 119.91 and according to the scoring instructions, this point on the spectrum shows that the organization has to start learning and program of quality and efficiency. At this level, objectives should focus on the movement from the planning stages to the actual implementation of the “TQM” in order to gain practical experience.

Openly accessible at http://www.european-science.com
Table 3: The mean scores of the respondents based on eight principles of ISO 9000 in education department of Dezful city

<table>
<thead>
<tr>
<th>Principles of TQM</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>leadership and management principle</td>
<td>26.98</td>
</tr>
<tr>
<td>Strategic Planning principle</td>
<td>11.02</td>
</tr>
<tr>
<td>Customer oriented principle</td>
<td>14.9</td>
</tr>
<tr>
<td>Education principle</td>
<td>9</td>
</tr>
<tr>
<td>Empowerment principle</td>
<td>7.36</td>
</tr>
<tr>
<td>Analysis principle</td>
<td>7.60</td>
</tr>
<tr>
<td>Insurance quality principle</td>
<td>17.58</td>
</tr>
<tr>
<td>Quality improvement principle</td>
<td>25.47</td>
</tr>
<tr>
<td>Total</td>
<td>119.91</td>
</tr>
</tbody>
</table>

Discussion and Conclusion

In this study, the application status of total quality management with continuous improvement approach in Education Department of Dezful city was examined by 8 sub-questions and one general question through Independent sample t-test and based on the results of any questions, suggestions are presented below.

The results of descriptive analysis (general question) to examine the implementation status of total quality management with continuous improvement approach in Education Department of Dezful city showed that the observance rate of 8 principles of ISO 9000 in the education department of the Dezful city performs poorly and the application rate of these principles is less than 0.50. Total mean scores of eight principles of Total Quality Management in the Department of Education of Dezful city is 119.91 and this point in the spectrum according to the instruction of scoring indicates that the organization has to start learning and quality program and efficiency. At this level objectives should emphasize on the movement from the planning stages to the actual implementation of the “TQM” in order to obtain practical experience. In other words it can be said that education in the city of Dezful in terms of attainment of the principles of total quality management is at a lower level than the average and has distance to achieve this ideal situation. This result is not in line with findings of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and is consistent with the findings of Rouhani and colleagues (2013); Taherkhani and Fathizadeh (2012). In other words, it can be claimed that the Education Department of Dezful city in terms of enjoyment of the principles of total quality management is at a lower level than the average and has distance to achieve a satisfactory status.

The results of descriptive analysis (sub-questions 1) to evaluate the application status of total quality management with continuous improvement approach in Education Department of Dezful city demonstrated that the principle of leadership and management is observed with 34.9 rate in Education Department of Dezful city. The results indicate that this principle is poorly done in the Department of Education in the Dezful city and the application rate of the principle is less than 0.50 (34.9). The univariate «t-test” was used in inferential analysis to evaluate the application status of the principles of leadership and management with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table. Therefore, it could be stated that the average of respondents' views on the application status of the principle of leadership and management has been statistically significant. In other words, the education of the Dezful city in terms of attainment of the leadership and management principle is at a lower level than the average and to achieve a satisfactory situation has distance. This finding is not consistent
with research results of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and Nouhpishe (2005) and is consistent with the findings of Rouhani and colleagues (2013); Taherkhani and Fathizadeh (2012) and Sayadi Toranlou et al (2008).

• The descriptive analysis results (sub-questions 2) to investigate the application status of strategic planning with continuous improvement approach in Education Department of Dezful city showed that the strategic planning principle is observed about 39.5 in Education Department of Dezful city. The results demonstrate that this principle is poorly performed in the Department of Education in the Dezful city and the application rate of the principle is less than 0.50 (39.5). The Independent sample t-test was applied in inferential analysis to examine the application status of the principles of strategic planning with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table. Thus, the average of respondents' opinions about the application status of the principle of strategic planning has been statistically significant. In other words, it can be stated that the education of the Dezful city in terms of enjoyment of the strategic planning principle is placed at a lower level than the average with a distance to achieve a satisfactory status. This finding is not consistent with research results of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and Nouhpishe (2005) and is in line with the findings of Rouhani and colleagues (2013), Taherkhani and Fathizadeh (2012), Sayadi Toranlou et al (2008), Khalouei (2007), and Raeisi, Nasirpour and Hesam (2009).

• In order to investigate the application status of the principle of customer-oriented with continuous improvement approach in Education Department of Dezful city the descriptive analysis results (sub-questions 3) showed that the customer-oriented principle is respected with 45.4 rate in Education Department of Dezful city. The results indicate that this principle is poorly done in the Department of Education of the Dezful city and the implementation rate of the principle is less than 0.50 (45.4). In inferential analysis to examine the application status of the customer-oriented principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model, the independent sample t-test” was applied. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table, therefore, the average of respondents' opinions about the implementation status of the customer-oriented principle has been statistically meaningful. In other words, it can be said that the education of the Dezful city in terms of enjoyment of the customer-oriented principle is placed at a lower level than the average with a distance to reach a desirable status. This study result is not in line with research results of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and Nouhpishe (2005) and is in line with the findings of Rouhani and colleagues (2013), Taherkhani and Fathizadeh (2012), Sayadi Toranlou et al (2008), Khalouei (2007), and Raeisi, Nasirpour and Hesam (2009).

• To evaluate the application status of the principle of identification and training with continuous improvement approach in Education Department of Dezful city, the descriptive analysis results of sub-questions 4 indicated that the identification and training principle is observed with 0.9 rate in Education Department of Dezful city. The results indicate that the principle is poorly done in the Department of Education of the Dezful city and the implementation rate of the principle is less than 0.50 (48.9). To examine the application status of the identification and training principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model, the independent sample t-test was applied in inferential analysis. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table, thus, the average of respondents' opinions about the implementation status of the identification and training principle has been statistically significant.
training principle has been statistically meaningful. In other words, it can be said that the education of the Dezful city in terms of enjoyment of the identification and training principle is placed at a lower level than the average with a distance to reach a desirable status. This study result is consistent with research results of Rouhani and colleagues (2013), Taherkhani and Fathizadeh (2012), Sayadi Toranlou et al (2008), Khalouei (2007), and Raeisi, Nasirpour and Hesam (2009) and is not in line with the findings of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and Nouhpishe (2005).

• In order to evaluate the application status of the principle of empowerment with continuous improvement approach in Education Department of Dezful city, the results of descriptive analysis (sub-questions 5) showed that the empowerment principle is observed with 31.4 rate in Education Department of Dezful city. The study results indicate that the principle is poorly done in the Department of Education of the Dezful city and the implementation rate of the principle is less than 0.50 (31.4). In inferential analysis, the independent sample t-test was used to assess the application status of the empowerment principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model. The calculated “t” is not significant, thus, the average of respondents' opinions about the implementation status of the empowerment principle has not been statistically meaningful. In other words, it can be said that the education of the Dezful city in terms of enjoyment of the empowerment principle is placed at a lower level than the average with a distance to reach a desirable status. This study result is consistent with research results of Rouhani and colleagues (2013), Taherkhani and Fathizadeh (2012), Sayadi Toranlou et al (2008), Khalouei (2007), and Raeisi, Nasirpour and Hesam (2009) and is not in line with the findings of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and Nouhpishe (2005).

• The results of descriptive analysis (sub-questions 6) in order to assess the application status of the principle of measurement and analysis with continuous improvement approach in Education Department of Dezful city showed that the measurement and analysis principle is observed with 35.9 rate (A+B) in Education Department of Dezful city. The study results show that the principle is poorly performed in the Department of Education of the Dezful city and the implementation rate of the principle is less than 0.50 (35.9). In inferential analysis, the independent sample t-test was used to assess the application status of the measurement and analysis principle with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model. The calculated “t” is not significant, therefore, it can be said that the average of respondents' views on the implementation status of the measurement and analysis principle has not been statistically significant. That is the education of the Dezful city in terms of enjoyment of the measurement and analysis principle is at a lower level than the average with a distance to achieve a desirable status. This study result is consistent with research results of Rouhani and colleagues (2013), Taherkhani and Fathizadeh (2012), Sayadi Toranlou et al (2008), Khalouei (2007), and Raeisi, Nasirpour and Hesam (2009) and is not in line with the findings of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and Nouhpishe (2005).

• For evaluating the application status of the principle of quality insurance with continuous improvement approach in Education Department of Dezful city, the results of descriptive analysis (sub-questions 7) showed that the quality insurance principle is observed with 36% in Education Department of Dezful city. The study results show the poor performance of the principle in the Department of Education of the Dezful city and the implementation rate of the principle is less than 50%. In inferential analysis, to evaluate the application status of the quality insurance principle with continuous improvement approach in the education department of the Dezful city based on Total
Quality Management Model, the independent sample t-test was used. The calculated “t” at a significance level (sig>0.01) has been larger than the critical value of table, therefore, the average of respondents' opinions about the implementation status of the quality insurance principle has been statistically meaningful. In fact, it can be said that the education of the Dezful city in terms of enjoyment of the quality insurance principle is placed at a lower level than the average with a distance to reach a desirable status. This study result is consistent with research results of Rouhani and colleagues (2013), Taherkhani and Fathizadeh (2012), Sayadi Toranjou et al (2008), Khalouei (2007), and Raeisi, Nasirpour and Hesam (2009) and is not in line with the findings of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and Nouhpishe (2005).

• The results of descriptive analysis (sub-questions 8) to assess the application status of quality improvement and efficiency implications with continuous improvement approach in Education Department of Dezful city demonstrated that the principle of quality improvement and efficiency implications is observed with 32.6 rate in Education Department of Dezful city. The results of study indicate the poor performance of this principle in the Department of Education in the Dezful city and the application rate of the principle is less than 0.50 (32.6). In inferential analysis, the independent sample t-test was applied to assess the application status of the principle of quality improvement and efficiency implications with continuous improvement approach in the education department of the Dezful city based on Total Quality Management Model. The calculated “t” is not significant, therefore, it can be stated that the average of respondents' views on the implementation status of the principle of quality improvement and efficiency implications has not been statistically significant. Actually, the education of the Dezful city in terms of enjoyment of the principle of quality improvement and efficiency implications is placed at a lower level than the average with a distance to reach a desirable status. This study result is consistent with research results of Rouhani and colleagues (2013), Taherkhani and Fathizadeh (2012), Sayadi Toranjou et al (2008), Khalouei (2007), and Raeisi, Nasirpour and Hesam (2009) and is not in line with the findings of Daniyali Deh Houz, Mardani and Ansari (2011), Hamidi and Tabibi (2004), Karami Matin et al (2013) and Nouhpishe (2005).

The results obtained in this study indicate the low observance rate of the principles of Total Quality Management in Education Department of Dezful city and clarify how much significant gap exists between the desired and ideal situation and the status quo. Therefore, to get out of this situation and reach to the ideal situation, custodians should focus on objectives by moving from the planning stages to the actual implementation of the “TQM” in order to gain practical experience and to determine what problems exist on the practical implementation of these objectives and how they can be resolved due to the expected targets of organization in a way that they lead to the prosperity of organization and reaching to the ideal status that are expected by Total Quality Management and its components from successful implementation of TQM in the organization.

References


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