
Rika Rachmawati
Faculty Of Business And Management, Widyatama University, Bandung, Indonesia
Email: rika.rachmawati@widyatama.ac.id

ABSTRACT

This paper is focused on an effort of identifying the development of implementation of Quality Assurance. In order to meet and to enhance the customer satisfaction in a college, it is needed the enhancement of product fulfilling customer’s requirements and the prevailed standards or regulations. A college as educational facilitator must be able to deliver academician alumni having expertise and skills.

A college must be able to enhance the educational quality by assuring its product: competence. Hence, Widyatama University has applied ISO 9001: 2008 as quality management in implementing and monitoring the process of university’s activities both academically and non-academically.

This research aims at academic activities, primarily in each study program. Principally, quality control in each study program as parameter for delivering the alumni of competent and competing-ready students for fulfilling the demands of both industrial world and other working world existing in a society. The objective of this research is to identify the differences of lecturer’s competence before and after applying ISO 9001: 2008 in Widyatama University.

The method used is secondary data as empirical evidence to identify the differences of lecturer’s competence.

Keywords: Quality Assurance/Quality, Competence, ISO

I. INTRODUCTION

College is one of highest educational ladders after the students have taken on the educational levels of primary school through upper secondary school. The role of college, in preparing the youth generation welcoming the future brilliantly and having achievement, is certainly not easy. It is needed the presence of a strong commitment from educators or instructors in the college to possess a resolve for making the alumni of college users to be intelligent by providing for themselves through competence.

Educational quality becomes a sharp highlight, where the quality must be measurable, so that a quality enhancement can be carried out continuously. Widyatama University has a quality management system ISO 9001: 2008, being a perfection of previous ISO 9001: 2000. As for the requirements in the quality management system in which an organization: a) needs to show its ability to consistently deliver a product fulfilling the customer requirements and the prevailed legislations and regulations, b) aims at enhancing the customer satisfaction through the application of system effectively, including a process of the continuous enhancement of system and its compatibility assurance in the customer requirements and the prevailed legislations and regulations. The objective of implementing the application of quality management system ISO 9001: 2008 is to show the ability of Widyatama University in consistently delivering a product of educational service, that is competence being in the alumni themselves, fulfilling its customer’s need and the requirements of valid law, as well as providing a satisfaction to the customers: the students as educated participants through the application of efficient and effective service system, the continuous process enhancement in all related parts in Widyatama University.

A competent lecturer can afford to deliver the competent products or students too, having competitiveness and competitive-superiority in the middle of society. By the application of quality management system ISO 9001: 2008 it can be expectedly enhance the lecturer’s competence, because with 9001: 2008 it has been contained a clause about human resource, in which what intended human resource is all of those involved in the process of college activities, in the academic the central point is in the lecturer. The lecturer’s competence is obtained through training and skill reflected from the level of the development of journal writing publication that has been accredited both nationally and internationally, also from the active contributions in the both national and international seminars. This research wishes to identify the differences of lecturer’s competence before applying ISO 9001: 2008 and after applying ISO 9001: 2008. Where ISO 9001: 2000 has been obtained in 2003, and it has been updated by releasing ISO 9001: 2008 in 2009.

Based on the background mentioned above the writer was interested in conducting a research with empirical evidence, the Formulation of Problems proposed:

One of clauses regulating and explaining the human resource was in clause 6.2. Human Resource. General, the personnel who conducts a work influencing compatibility in the requirements of product must has a competence for the bases of education, training, skill, and experience according to ability, training and awareness. The organization has to: a) determine the competence needed for the personnel doing a work influencing the compatibility to the requirements of product, b) if possible, to provide a training or to do other actions for achieving the competence required, c) to evaluate the effectiveness of the actions conducted, d) to make sure that its personnel is aware of the relatedness and importance of their activities and how about their contributions to the attainment of quality target, e) to maintain the record according to the relationship of education, training, skill and experience.

A professional lecturer is a competent lecturer to do his or her task professionally; a lecturer having pedagogic competence, professional, personality and social spirit required in the practices of education, research, and dedication to the society. Academic qualification and working performance are the level of competence mastering as evaluated by others and oneself, and a statement of contribution from oneself, in togetherness, will determine the lecturer’s professionalism. (Academic Text, High Education 2008)

The lecturer’s academic qualification and various aspects of working performance, as set in the SK Menkowasbangpan Number 38 of 1999, is one of elements determining the teaching lecturer’s authority. The competence of, specially the lecturer that is meant as a set of knowledge, skill, and behavior that must be possessed, comprehended fully, mastered and realized by a lecturer in doing his or her professional tasks. The competence includes pedagogic competence, personality competence, social competence, and professional competence. (Academic Text, High Education 2008).

### Hypothesis

- **H₀**: there is no difference of the application of ISO 9001: 2008 to the lecturer’s competence.
- **H₁**: there is a difference of the application of ISO 9001: 2008 to the lecturer’s competence.

### III RESEARCH METHODS

This research uses secondary data in explaining the empirical evidence on the differences of lecturer’s competence before and after applying ISO 9001: 2008, i.e. to identify the differences between the level of lecturer’s competence before applying ISO 9001: 2008 and after applying ISO 9001: 2008. The secondary data have been obtained from the report of scientific publication, in the form of journals and seminars both nationally and internationally. The data used in this research were the data for 11 years: divided into 6 years (2003 – 2008) before applying ISO 9001: 2008 and 5 years (2009 – 2013) after applying ISO 9001: 2008. Since this research compared the lecturer’s competence before and after applying ISO 9001: 2008.

### 3.1 Procedure of Data Collecting

In this research, the writer used secondary data: the data obtained from Quality Assuring Center (Pusat Penjaminan Mutu = PMW) and information containing the result of publication from the Lecturer of Widyatama University, being available in the developmental plan unit (RENBANG) and at the library, as well as formal website of Widyatama University. As well as various other resources such as journals, books, and various literatures associated with the problems to be studied.

### 3.2 Research Sample

This research took a case study of Widyatama University. Implementation of ISO for 11 years.

### IV. RESULTS AND DISCUSSION

The comparative test of Lecturer’s competence Before and After ISO (National Seminar) Normality Test

From the calculation we have obtained the value of Asymp.Sig. (2-tailed) by 0.916 for the data of lecturer’s competence Before ISO and by 0.714 for the data of lecturer’s competence After ISO. Because of the two values are larger than that of alpha (Asymp.Sig. > 0.05), so that it could be concluded that the data of lecturer’s competence Before and After ISO (National Seminar) have has a normal distribution.

From the result of normality test above it could be seen that there was no violation on the assumption of parametric testing. Therefore, the testing would be conducted using a parametric method, in this instance using a non-paired sample t-test (independent t-test).

### Homogeneity Test

From the calculation we obtained the value of p-value is by 0.000. If compared with alpha 5% then this value is smaller (0.000 < 0.05). Because of the value of p-value obtained is smaller than that of alpha 5% then it can be seen that the data of lecturer’s competence Before and After ISO (National Seminar) have the heterogeneity of variances, so that for the significant test in the independent t-test it is used the value of p-value in the row of equal variances not assumed. Non-paired sample t-test (Independent t-test)

### Hypothetical testing:

- **H₀**: Lecturer’s competence Before and After ISO (National Seminar) tends to be same (not significant different);
- **H₁**: Lecturer’s competence Before and After ISO (National Seminar) tends to be not same (significant different).
- **α**: 5%

### Test criteria:

- Reject H₀ if p-value < α
- Accept H₀ if p-value > α
With an aid of application of Program SPSS version 13.00 we obtained output of the result of calculation as follows:

**Table 1**
The comparative test of Lecturer’s competence Before and After ISO (National Seminar)

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
<td>Mean Difference</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Kompetensi Dosen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>4.37</td>
<td>0.007</td>
<td>0.468</td>
<td>0.036</td>
<td>9.433</td>
<td>9.875</td>
</tr>
<tr>
<td>Equal variances not ass.</td>
<td>-0.248</td>
<td>0.083</td>
<td>0.083</td>
<td>0.433</td>
<td>7.545</td>
<td>8.720</td>
</tr>
</tbody>
</table>

From the table above it shows that the value of p-value obtained is by 0.083. If compared with alpha, the value is larger (0.083 > 0.05) stating that \( H_0 \) is accepted. This shows that Lecturer’s competence Before and After ISO (National Seminar) tends to be same (not significant different).

**The comparative test of Lecturer’s competence Before and After ISO (International Seminar) Normality Test**

From the calculation above we obtained the value of Asymp.Sig. (2-tailed) is by 0.919 for the data of lecturer’s competence Before ISO and by 0.989 for the data of lecturer’s competence After ISO. Because of the two values are larger than that of alpha (Asymp.Sig. > 0.05), so that it could be concluded that the data of lecturer’s competence Before and After ISO (International Seminar) have a normal distribution.

From the result of normality test above it could be seen that there is no violation on the assumption of parametric testing. Therefore, the testing will be done using the parametric method, in this instance using non-paired sample t-test (independent t-test).

**Homogeneity Test**

From the calculation we obtained the value of p-value by 0.007, if compared with alpha 5% then this value smaller (0.007 < 0.05). Because of the value of p-value obtained smaller than alpha 5% then it can be seen that the data of lecturer’s competence Before and After ISO (International Seminar) have the heterogeneity of variances, so that for the significant test in independent t-test used the value of p-value in the row of equal variances not assumed.

**Non-paired sample t-test (Independent t-test)**

Non-paired sample t-test (Independent t-test) is one of hypothetical testing methods where the data used are free (non-paired).

**Hypothetical testing:**

\( H_0 \) : Lecturer’s competence Before and After ISO (International Seminar) tends to be same (not significant different);

\( H_1 \) : Lecturer’s competence Before and After ISO (International Seminar) tends to be not same (significant different).

\( \alpha \) : 5%

**Test criteria:**

- Reject \( H_0 \) if p-value < \( \alpha \)
- Accept \( H_0 \) if p-value > \( \alpha \)

With an aid of application of Program SPSS version 13.00 we obtained output of the result of calculation as follows:

**Table 2**
The comparative test of Lecturer’s competence Before and After ISO (International Seminar)

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
<td>Mean Difference</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Kompetensi Dosen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>4.129</td>
<td>0.005</td>
<td>1.995</td>
<td>0.000</td>
<td>5.67</td>
<td>5.995</td>
</tr>
<tr>
<td>Equal variances not ass.</td>
<td>0.397</td>
<td>0.129</td>
<td>0.005</td>
<td>0.567</td>
<td>6.906</td>
<td>7.895</td>
</tr>
</tbody>
</table>

From the table above it shows that the value of p-value obtained is by 0.005. If compared with alpha, the value is smaller (0.005 < 0.05) stating that \( H_0 \) is rejected. This shows that Lecturer’s competence Before and After ISO (International Seminar) tends to be not same (significant different).

**The comparative test of Lecturer’s competence Before and After ISO (National Journal) Normality Test**

From the calculation we obtained the value of Asymp.Sig. (2-tailed) by 0.994 for the data of lecturer’s competence Before ISO and by 0.997 for the data of lecturer’s competence After ISO. Because of the two values are larger than that of alpha (Asymp.Sig. > 0.05), so that it could be concluded that the data of lecturer’s competence Before and After ISO (National Journal) have a normal distribution.

From the result of normality test above it could be seen that there is no violation on the assumption of parametric testing. Therefore, the testing will be done using the parametric method, in this instance using non-paired sample t-test (independent t-test).

**Homogeneity Test**

From the calculation we obtained the value of p-value by 0.158, if compared with alpha 5% then this value is larger (0.158 > 0.05). Because of the value of p-value obtained is larger than that of alpha 5% then it can be seen that the data of lecturer’s competence Before and After ISO (National Journal) have homogeneity of variances, so that for the significant test in independent t-test used the value of p-value in the row of equal variances assumed.

**Non-paired sample t-test (Independent t-test)**
Non-paired sample t-test (Independent t-test) is one of hypothetical testing methods where the data used are free (non-paired).

**Hypothetical testing:**

\( H_0 \) : Lecturer’s competence Before and After ISO (National Journal) tends to be same (not significant different);

\( H_1 \) : Lecturer’s competence Before and After ISO (National Journal) tends to be not same (significant different).

\( \alpha \) : 5%

**Test criteria:**

Reject \( H_0 \) if \( p\)-value < \( \alpha \)

Accept \( H_0 \) if \( p\)-value > \( \alpha \)

With an aid of application of Program SPSS version 13.00 we obtained output of the result of calculation as follows:

**Table 3**

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>Competence Before ISO</td>
<td>368</td>
<td>570</td>
</tr>
<tr>
<td>Competence After ISO</td>
<td>534</td>
<td>456</td>
</tr>
</tbody>
</table>

From the table above it shows that the value of \( p\)-value obtained is by 0.582. If compared with \( \alpha \), the value is larger (0.582 > 0.05) stating that \( H_0 \) is accepted. This shows that Lecturer’s competence Before and After ISO (National Journal) tends to be same (not significant different).

The comparative test of Lecturer’s competence Before and After ISO (International Journal) Normality test

From the calculation we obtained the value of Asymp. Sig. (2-tailed) is by 0.272 for the data of lecturer’s competence Before ISO and by 0.990 for the data of lecturer’s competence After ISO. Because of the two values are larger than that of \( \alpha \) (Asymp. Sig. > 0.05), so that it could be concluded that the data of lecturer’s competence Before and After ISO (International Journal) have a normal distribution.

From the result of normality test above it could be seen that there is no violation on the assumption of parametric testing. Therefore, the testing will be done using the parametric method, in this instance using non-paired sample t-test (independent t-test).

**Homogeneity Test**

From the calculation we obtained the value of \( p\)-value is by 0.005, if compared with alpha 5% then this value smaller (0.005 < 0.05). Because of the value of \( p\)-value obtained smaller than alpha 5% then it can be seen that the data of lecturer’s competence Before and After ISO (International Journal) have the heterogeneity of variances, so that for the significant test in independent t-test used the value of \( p\)-value in the row of equal variances not assumed.

Non-paired sample t-test (Independent t-test)

Non-paired sample t-test (Independent t-test) is one of hypothetical testing methods where the data used are free (non-paired).

**Hypothetical testing:**

\( H_0 \) : Lecturer’s competence Before and After ISO (International Journal) tends to be same (not significant different);

\( H_1 \) : Lecturer’s competence Before and After ISO (International Journal) tends to be not same (significant different).

\( \alpha \) : 5%

**Test criteria:**

Reject \( H_0 \) if \( p\)-value < \( \alpha \)

Accept \( H_0 \) if \( p\)-value > \( \alpha \)

With an aid of application of Program SPSS version 13.00 we obtained output of the result of calculation as follows:

**Table 4**

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>Competence Before ISO</td>
<td>415</td>
<td>272</td>
</tr>
<tr>
<td>Competence After ISO</td>
<td>881</td>
<td>215</td>
</tr>
</tbody>
</table>

From the table above it shows that the value of \( p\)-value obtained is by 0.016. If compared with \( \alpha \), the value is smaller (0.016 < 0.05) stating that \( H_0 \) is rejected. This shows that Lecturer’s competence Before and After ISO (International Journal) tends to be not same (significant different).

V. CONCLUSIONS

From the results of analysis and data processing conducted previously, then it can be concluded as follows:

1. Lecturer’s competence Before and After ISO (National Seminar) tends to be same (not significant different).
2. Lecturer’s competence Before and After ISO (International Seminar) tends to be not same (significant different).
3. Lecturer’s competence Before and After ISO (National Journal) tends to be same (not significant different).
4. Lecturer’s competence Before and After ISO (International Journal) tends to be not same (significant different).

REFERENCES