

## Comparison of the Performance Trained Teachers in ICDL Training Courses with Untrained Teachers in High schools of Tehran

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**Abstract.** The purpose of this study was comparing performance of the teachers trained in ICDL training courses with untrained teachers in high schools of Tehran. The statistical society including all high schools teachers of Tehran at 2010-2011 was 29080. Sample size based on Kerjisi and Morgan Table was 379 from teachers in Tehran was selected using Multi-stage sampling. Data were collected using researcher-made questionnaire. Its Reliability based on Chronbach's Alpha coefficient is 0/92. results indicated that there is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in use of equipment and educational software ( $T=3.08$  and  $P=0.002$ ).

**Keywords:** Teacher training, ICDL training, Educational technology

### 1. Introduction

Needs of society to students with more educated and more skilled to raise efficiency and ability to compete with other countries, makes Community decision-makers looking for more qualified teacher, So in this way, to achieve their goals. This demand is achievable by Teacher Education. Then short-term in-service training must continually, based on the needs of today and developments in scientific and technical world. ACDL training since 2004 has been seriously considered by government. Obviously, the effectiveness of these programs and identifies barriers to its implementation, can be an effective role in improving and sustaining.

#### 1.1. Problem Statement

Today, successful organizations insist on quantitative goals, capacity creation and higher professional skills for human resources in all levels [1,2,3]. Inevitably, the survival and destiny of organization is endangered if training for employees is neglected [4]. Thus, since it is essential that all employees of any organization get familiar with computer science and information technology, Ministry of Education took measures to provide ICDL training opportunity for teachers so that they can elevate their performances [5]. However, in spite of prediction and implementation of essential training in field of information technology in Ministry of education, still there is a doubt about the impact of offered trainings [6,7]. Therefore, it is indicated that some investigations must be performed to assess job performance of teachers who have received sufficient training in information and communication technology in order to evaluate the efficiency of the implemented trainings.

### 2. Literature Review

Taheri showed that ICDL short term in-service trainings impact on how the trained teachers teach [8]. Also studies show that the average score for the students whose teacher has passed in-service ICDL course is

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15-18 and the average score of the students whose teacher has not passed in-service ICDL course is 10-15[9,10,11]. Amiri showed that teacher in-service training impacts on other aspects such as student intelligence, motivation for achievement and self honor and income and education levels of parents and their vision impact on educational achievement of students[12]. Poorvatan's study "Exploring the impact of ICDL in-service training program in Ministry of Education on knowledge level and performance of employees and self leadership and performance improvement" has been established[13].

According to recent Research employees just use 20% of their ability on their work while if the staff be trained, 80 to 90% of their ability and skills will be used & employed[14].

A 3-year study in Singapore shows that 17% of commercial and industrial companies have broke down while this proportion is just 10% of companies with trained staff have broke down[15].

Facts show that in the recent years, the managers and staff needs of professional and technical fields will increase[16].

As human societies grow from traditional to industrialization and from industrialization to post-industrialization needs to learn how to apply IT and specialist indicated that "Education is Management"; the basis of management will be weak without staff training[17].

### **3. Research hypotheses:**

- There is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in use of equipment and educational software.
- There is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in the job information.
- There is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in planning and preparation for teaching.
- There is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in human relationships with students.
- There is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in teaching method.
- There is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers There is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in career responsibilities.
- There is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in rate of achievement test of student.

### **4. Research method**

Purpose of this study is comparison of job performance between Trained Teachers in ICDL Training Courses with Untrained Teachers in ICDL Training Courses . , So according to the research topic and research hypotheses and To investigate the characteristics of a statistical society in normal situations - without manipulating variables - the method can be used Survey study.

Statistical society of the research consists of all Teachers in Girls High schools of Tehran at 2010-2011, 29080, that 379 in the form of Multi-stage sampling are randomly selected by Kerjisi and Morgan Table. Also, to gain information has been used researcher-made questionnaire consists of 40 questions that have been set on Likert-5 Scale and Algebraic Value of the respondents determine the performance of the teachers. Its Reliability based on Chronbach's Alpha coefficient is 0/92. It has been randomly executed Chronbach Alpha coefficient to 30 persons for permanent calculation. Data analysis method was implemented based on the variables of each of the hypotheses and by T-Test in two-independent group and Umann witney.

### **5. Results**

#### **5.1. Descriptive Analysis**

According to the observed data in Table No1 and Table No2:

- The mean and standard deviation of the teachers performance in use of equipment and educational software for Trained Teachers is 38.8 and 10.5, and for untrained Teachers is 34.5 and 10.9.

- The mean and standard deviation of the teachers performance in teaching method for Trained Teachers is 8.8 and 2.7, and for untrained Teachers is 7.3 and 2.6.
- the mean and Total of ratings of the teachers performance in rate of achievement test of student for Trained Teachers is 199.3 and 61396.0, and for untrained Teachers is 149.4 and 1061.0.

## 5.2. Inferential Analysis

Hypothesis: there is significance different between Trained Teachers in ICDL Training Courses with Untrained Teachers in use of equipment and educational software (T=3.08 and P=0.002), in teaching method (T=4.2 and P=0.001), in rate of achievement test of student (Umannwitney=8667.0 and P=0.001). Because P is less than the maximum acceptable value for confirming hypotheses (P=0, 05) so they are confirmed and the Noll hypothesis is rejected. On the other hand there is no significance different between two groups of Teachers in the job information, planning and preparation for teaching , human relationships with students, and in career responsibilities.

Table No. 1: T-Test results from the difference between trained and untrained teachers in the use of equipment and educational software

| Hypothesis                                                 | Group              | Number | Mean | Standard Deviation | T     | P     |
|------------------------------------------------------------|--------------------|--------|------|--------------------|-------|-------|
| 1. Difference in use of equipment and educational software | Trained Teachers   | 308    | 38.8 | 10.5               | 3.08  | 0.002 |
|                                                            | Untrained Teachers | 71     | 34.5 | 10.9               |       |       |
| 2. Difference in the job information                       | Trained Teachers   | 308    | 8.8  | 2.8                | 0.860 | 0.390 |
|                                                            | Untrained Teachers | 71     | 8.5  | 3.0                |       |       |
| 3. Difference in planning and preparation for teaching     | Trained Teachers   | 308    | 8.1  | 3.0                | 0.942 | 0.347 |
|                                                            | Untrained Teachers | 71     | 7.8  | 2.9                |       |       |
| 4. Difference in human relationships with students         | Trained Teachers   | 308    | 7.3  | 2.6                | 1.2   | 0.202 |
|                                                            | Untrained Teachers | 71     | 6.8  | 3.1                |       |       |
| 5. Difference in teaching method                           | Trained Teachers   | 308    | 8.8  | 2.7                | 4.2   | 0.001 |
|                                                            | Untrained Teachers | 71     | 7.3  | 2.6                |       |       |
| 6. Difference in career responsibilities.                  | Trained Teachers   | 308    | 8.8  | 2.6                | 0.591 | 0.55  |
|                                                            | Untrained Teachers | 71     | 8.6  | 2.3                |       |       |

Table No. 2: Umann witney results from the difference between trained and untrained teachers in the use of equipment and educational software

| Hypothesis                                           | Group              | Number | Mean  | Total of ratings | Umann-witney | P     |
|------------------------------------------------------|--------------------|--------|-------|------------------|--------------|-------|
| 7. Difference in rate of achievement test of student | Trained Teachers   | 308    | 199.3 | 61396.0          | 8667/0       | 0.001 |
|                                                      | Untrained Teachers | 71     | 149.4 | 1061.0           |              |       |

## 6. Conclusion

The effect of ACDL training on teacher performance is positive. The training software and tools application rate by teachers is affected by how they are able to use these tools consciously and since diverse motivations, needs and interests of students as well as various learning styles are focused through training , teacher performance is improved and therefore, it leads to higher achievement for the students. These results

are compatible with other studies such as Taheri(1998), Brockmann(2008), Hamtini(2008) Maleki(1992), Amiri(1996), and Kriksciuniene, Sarkiunaite, Sakalauskas, (2006). Emphasis on individualizing in teaching and facilitate new educational opportunities for student make more time for teachers to regardless of their tips instead of transferring subject to students. Also makes it easy to independent work, team work and collaborative activities for teachers. Furthermore, reducing the amount of speech in the classroom, facilitating new opportunities for new learning experiences, attention to individual differences of learners, saving time to guidance learners will be increase quality of learning.

## 7. Recommendations for educational policy makers:

Holding Educational workshops with the purpose of educational software by teachers. Provide adequate space and facilities for the use of educational software in schools. Educational software for schools to equipping each discipline.

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