



7th World Conference on Educational Sciences, (WCES-2015), 05-07 February 2015, Novotel Athens Convention Center, Athens, Greece

Evaluation Of School Experience Lesson Performances Of Teacher Candidates: Study For Reliability Among Evaluators

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Abstract

School experience lesson takes place in the beginning of pre-service teacher education process. The aim of the lesson is to inform teacher candidates about the profession for which they are candidate. At the end of school experience lesson, teacher candidates submit their application school files to application lecturers. This study aims to score the lesson forms which are rated for each student by more than one evaluator and to find a reliability coefficient between evaluators. It is a research in scanning model. Suitable sampling method was used while determining research group. Research group consists of 32 teacher candidates and 8 evaluator (lecturer) who were having education in university in 2013-2014 academic year. As data collection tool, school experience I form, which was created by council of higher education, was used. In the analysis of the data, descriptive statistics were determined in order to calculate Cohen Kappa and set interior correlation coefficient used in reliability coefficient in continuous data. First compliance between 2 evaluators was calculated by Cohen Kappa and then compliance among 8 evaluators (scorers) by set interior correlation coefficient. Cohen Kappa reliability coefficient, interior set reliability coefficient among multiple evaluators was found to be at medium level. At the end of the research it was observed that evaluation performed with multiple evaluators in scoring depending on observation and performance were found to be more reliable. It is suggested for similar researches that decision shall be taken by calculating the reliability coefficients among multiple scorers.

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Peer-review under responsibility of Academic World Education and Research Center.

Keywords: School experience lesson, reliability coefficient, multiple evaluators.

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1. Introduction

School experience lesson takes place in the beginning of pre-service teacher education process. The aim of the lesson is to inform teacher candidates about the profession for which they are candidate (Yesil ve Caliskan, 2006). School experience, consists of planned observation and activities aiming to introduce many duties comprising the teacher-ship profession to teacher candidates and introduce school life and education to teacher candidate (Koc,Sabri and et,1998). School experience lesson is an important lesson that contributes to development of teacher-ship properties of teacher candidates including their general and special field necessities required by the profession, to help them become well-equipped. The activities and duties performed by teacher candidates in application schools in the context of this lesson, allows them to observe experienced teachers on duty, to study in individual and small groups and to gain teacher-ship experience in a short period (Ergunes, 2005).According to Sands et al (1997), the aim of school experience application is to create the professional sufficiency in teacher candidates so that they will make teacher-ship at the level that they were educated, to observe teachers and students to develop skills and to obtain general info about school.

At the end of school experience lesson, teacher candidates submit their application school files to application lecturers. All activity reports and all other necessary info can be found in the file (YOK,1998). For the school experience lesson, the end of the term grades of teacher candidates are determined after evaluating that teacher candidates completed their activities as decided in the beginning of the term and by taking the quality of the report prepared by the teacher candidates related with those activities, all other written materials that are requested by lecturers from teacher candidates, all other activities performed in school and school experience form into consideration. In the teacher candidate school experience form evaluation, lesson grades are determined by the rating of the application teacher in the faculty. This fact reveals that the reliability of the evaluation should be questioned. The reliability of the rating made by evaluators consisting of faculty and application teacher for the whole of lesson activities of students is an important problem. Reliability can be defined as the repeatability of measurement operation in a measurement process or the consistency in repetitions. In other words the reliability of measurement depends on the fact that same response is obtained from the same subject with observer/measurement tool (Alpar, 2001). When measurements are continuous thr harmony between observers is evaluated by intraclass correlation coefficient or harmony relation coefficient (Shrout , Fleiss and Lin,1979). This study aims to score the lesson forms which are rated for each student by more than one evaluator and to find a reliability coefficient between evaluators.

2. Method

This study was designed based on a screening model. The study aims to describe an existing situation in the same way that it is observed (Karasar, 2012).

2.1. Participants

Suitable sampling method was used while determining research group. Research group consists of 32 teacher candidates and 8 evaluator (lecturer) who were having education in university in 2013-2014 academic year.

2.2. Procedure

As data collection tool, school experience I form, which was created by council of higher education, was used. In Table 1, school experience lesson evaluation form was given. This form was rated by 8 evaluators for 32 teacher candidates.

Table 1. School experience lesson evaluation form

The study to be made	1.Keeping file, writing report	2.Working In cooperation	3.Obeying rules, paying attention to suggestions and warnings	4.Reflecting the foreseen skills
	20	20	20	40
1.Intro and term plan	x		x	x
2.One day of teacher and student in school	x	x	x	x
3.Planning and applying the lesson	x	x		x
4.Stages of lesson and activities used in lesson	x			x
5.Observation of teaching-learning techniques.	x	x		x
6.Observing question asking		x	x	x
7.Tools and written sources in school	x	x		x
8.Management of lesson and class control	x	x	x	
9.Evaluation of student studies	x		x	
10.Organization structure of school, duties of school managers	x		x	x
11.School-community relation	x	x		x
12.Introduction and observation of learnings out of program	x	x	x	x
13.Social activities and educational clubs in schools	x		x	x
14.Evaluation of info-documents reflecting school experience	x	x	x	x
15.Submission and presentation of prepared reports	x	x	x	x

Each activity was rated over 100 points . Sum of points was divided to 15 weeks to obtain lesson grade of students.

3. Statistical Analysis

In the analysis of the data, descriptive statistics were determined in order to calculate Cohen Kappa and set interior correlation coefficient used in reliability coefficient in continuous data. First compliance between 2 evaluators was calculated by Cohen Kappa and then compliance among 8 evaluators (scorers) by set interior correlation coefficient. Kappa coefficient value was between -1 and + 1. Zero represents coincidental harmonization, negative values represent a worse harmonization than coincidence and +1 represents perfect harmonization. On two class data, harmony between observers is examined with Cohen's kappa (k) coefficient in stead of simple harmony. According to simple harmony the advantage of this coefficient is that it corrects the part of harmony which is expected to appear by chance. With the help of table 1, Cohen's kappa coefficient k is given in equation 1. In case the observed harmony is equal or greater than chance dependent harmony, $\kappa \geq 0$ and if it is smaller, $\kappa < 0,75$ it is perfect. Cohen Kappa reliability coefficient, interior set reliability coefficient among multiple evaluators was found to be at medium level. It is concluded from kappa statistics results that the harmony between observers is below medium, in other words there is no significant difference between observer points.

Table 2. Cohen Kappa reliability coefficient

		Value	Asymp. Std. Error ^a	Approx. Sig.
Measure of Agreement	Kappa	,54	,111	,039
N of Valid Cases		32		

In 2x2 tables regarding the evaluation of harmony between observers, when binary harmony between observers was examined Cohen Kappa reliability coefficient was found to be 0.54. This value shows that the harmony between observers according to Kappa statistics coefficient is below medium, in other words there is no significant difference between observer points.

Table 3. Case Processing Summary

		N	%
Cases	Valid	32	100,0
	Excluded	0	,0
	Total	32	100,0

Table 4. Intraclass correlation coefficient

	Intraclass Correlation ^b	95% Confidence Interval	
		Lower Bound	Sig
Single Measures	,13	-,29	,042
Average Measures	,66	-,69	,042

When number of observers was increased to 8, the intra-set correlation coefficient was found to be ($r=0.66$).

4. Results and Discussion

At the end of the research it was observed that evaluation performed with multiple evaluators in scoring depending on observation and performance were found to be more reliable. It is suggested for similar researches that decision shall be taken by calculating the reliability coefficients among multiple scorers. In studies related with research projects and performance evaluation and in achievement of internal validity of experimental studies calculation and interpretation of coefficient between multiple observers is important for the study to give more reliable results and accordingly produce suggestions. At the end of this study it was determined that intra-class correlation coefficient significantly differ from the coefficient of binary harmony.

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