The Views of Teacher Candidates on Self and Peer Assessment of Performance Assignments and Using Rubric

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Abstract

In this study, the views of the teacher candidates on self and peer assessment of performance assignments and using rubric (scoring scale) in this process, are determined. The views of 158 students in total from Mathematics, Turkish and Science Teaching departments of Mehmet Akif Ersoy University in 2014-2015 Fall term, are taken. The views of the teacher candidates are taken with interview form consisted of open-ended questions; not structured. An example application related to rubric is done before scoring. During the scoring of performance assignments, teacher candidates graded works of their peers studying in different classes firstly without using rubric, then, they graded by using rubric. Afterwards, they graded their own performance assignments first without and then with a rubric. Therefore, for the same performance assignment, 4 separate scores were obtained, and these scores were reported to teacher candidates. At the end of the process, the opinions of the teacher candidates were taken. Qualitative data reached by means of the views of the teacher candidates on the process are analyzed in descriptive way. In respect of the findings, the students emphasized that self and peer assessment increased self-confidence of them participating in the assessment process. Besides, they pointed out that they compared their own work by seeing the work of their peers and realized its shortcomings. Analysing teacher candidates' opinions as per rubric, the teacher candidates stressed that they learned how scoring should be done, and what you need to pay attention in their careers. Also more reliable results are taken by use of rubric's providing the chance of multi-directional and objective assessment. Moreover it is seen that the students, who have had hesitations on scoring process at the beginning, present positive opinions at the end.

Keywords: self-assessment; peer assessment; performance assignment;rubric (scoring scale);

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1. Introduction

Today, there is a quick tendency from to the understanding of "Assessment of Learning" towards "Assessment for Learning" (Torrance, 2007). "Assessment for Learning" puts learning to the center of assessment and emphasizes the learning function of assessment (Keppell and Carless, 2006). According to Boud (1990), assessment process should be a learning tool (Koc, 2011).

"Assessment for Learning" requires a social interaction between the student (and among students) and the teacher, and makes use of a variety of assessment methods and techniques to get a comprehensive picture on how students learn (Berry, 2008).

One of the methods and techniques that involves even students in assessment process is self and peer assessment. According to Bound and Falchikov (1989), self-assessment is students' participation in the decision-giving process about their self-learning, especially regarding their own success and learning outcomes. Students who make self-assessment see how close they are to their purpose, and they plan what they might need to improve themselves (Nitko and Brookhart, 2011). According to Paris & Paris (2001), however, the self-assessment covers both evaluation and reflective thinking, and encourages students to become independent learning individuals. Researches (Panadeol & Tapia, 2013; Andrade & Valtcheva, 2009; Koutsoupidou, 2010; Cheung, 2009; Aydeniz & Gilchrist, 2013; Andrade and Du, 2007) indicate that self-assessment develops individuals' self-regulation skills, increases their motivation and self-awareness, improves reflective thinking skills and has a critical importance for learning.

Peer assessment is a technique of assessment in which learners evaluate their peers' works and performances by using appropriate criteria, and give feedback. Topping (2009) describes peer assessment as "an arrangement by learners regarding how they investigate and show quality, value and level of other learners' performances or works". In the process of peer assessment, students undertake the roles of both evaluator and evaluated one. In this case, comparing with the other studies, students learn examining a work and decide on the quality of the performance (Lee, 2015). Furthermore, comparing their studies with peers' studies, students become aware of their deficiencies in the process of receiving and giving feedback. In the study conducted by Koc (2011), classroom teachers candidates' views related to the implementation of the peer review process were obtained. This research has revealed that peer review increases the awareness of one's own strengths and weaknesses, offers the opportunity to compare (wealth of applications), provides the importance of feedback and evaluation skills, and develops empathic skills and critical thinking.

One of the tools used to ensure the validity and reliability of scores obtained from the self and peer assessment is the rubric. Based on a common definition, rubric is the documents in which expectations in the cause of a mission are listed and clearly stated, and each of the criteria is defined from the best to the worse (Andrade and Reddy, 2010). Studies carried out on the use of self and peer assessment (Panadero, Romero & Strijbos, 2013; Knight, 2006; Powell, 2001; Andrade & Du, 2005) show that rubric usage allows focusing on the basic elements of task performance, reduce anxiety caused by assessment and provide an objective evaluation.

The self and peer assessment have a critical importance especially in teacher training. This evaluation technique enables teachers to acquire the necessary knowledge and skills by applying the educational process. It has been observed that the self and peer assessment ensure high quality learning outcomes when used in teacher training, they improve teacher candidate's critical thinking skills, provide a focus on teaching practice, and allow teachers to acquire skills necessary for their professional life (Lynch, McNamara & Seery, 2012; Thomas, Martin & Pleasants, 2011; Koc, 2011; Sluijsmans & Prins, 2006).

It will be useful to apply self and peer assessment during teaching process by teachers to enable them in their professional life to involve students in the evaluation process. In spite of the

effectiveness of self-assessment and peer assessment and using rubric as observed in some researches, due to some uncertainty (feasibility, reliability and validity), it has not received the necessary interest and its use is limited in the higher education especially in the teacher education. Therefore, the opinions of the teachers in this process have an importance in terms of applicability of the process. In this study, it is aimed to collect teacher candidates' views on self and peer assessment of the performance assignment and the using rubric in this process. For this purpose, it has been sought to answer the following questions:

a) What are the positive views of teacher candidates on self and peer assessment of performance assignments?
b) What are the negative views of teacher candidates on self and peer assessment of performance assignments?
c) What are the positive views of teacher candidates on using rubric in the scoring process?
d) What are the negative views of teacher candidates on using rubric in the scoring process?

2. Method

In this study conducted in qualitative research pattern, case study method was used. Case study can be defined as analysis of a complex, special and interesting case within its own conditions (Sonmez and Alacapınar, 2013).

2.1. Participants

Study group of the research consists of a total of 158 students, including 30 students from Mathematics, 65 students from the Science Teaching and 63 students from Turkish Teaching Departments attending the Faculty of Education, Mehmet Akif Ersoy University in 2014-2015 fall semester. While selecting sample, convenience sampling method found in the qualitative research pattern was used.

2.2. Performance assignments and scoring process

In the study, teacher candidates were given performance tasks within scope of mid-term exams for the measurement and evaluation course. In their performance assignments, students were asked to express the provision of the concepts in their real lives with creative way of poetry, cartoons, puzzles, music, dance, song lyrics, drama, games, movies, stories, and tales. Before the scoring process, the students are taught how to do rubric (partially developed with students) with the duty of performance self, peer, general (non-rubric) and sample applications were made accordingly.

During the scoring of performance assignments, teacher candidates graded works of their peers studying in different classes firstly without using rubric, then, they graded the same assignments by using rubric. They graded their performance assignments first without and then with a rubric. Therefore, for the same performance assignments, 4 separate scores were obtained, and these scores were reported to teacher candidates. At the end of the process, the opinions of the teacher candidates were taken.

2.3. Data collection and analysis

The views of teacher candidates on the process were collected using the structured interview form. In the form, teacher candidates were asked to indicate their positive and negative thoughts associated with this procedure. The qualitative data obtained from the study were analyzed with descriptive

analysis. For this purpose, it has been interpreted by determining the most frequently repeated phrases upon establishing frequency and percentage tables for interview forms.

3. Results

Positive (148) and negative (41) opinions of 158 teacher candidates participated in the research are listed, the frequency and percentage table was established. The data obtained from the study were examined under two subheadings such as opinions towards self and peer assessment and rubric.

Table 1. Teacher Candidates' Opinions onSelf-Peer Assessments of Performance Assignments and Using Rubrics

Positive (148)	f	%
A) Opinions on Self and Peer Assessment		
Comparisons with their own work by seeing the work of their peers, learning its shortcomings	24	12.70
Increased self-confidence of students participating in the assessment process	21	11.11
Providing multiple scoring opportunities with multiple scorer	14	7.41
Being away from the traditional assessment methods	13	6.88
Being knowledgeable about how implementing this techniques in their teaching profession	12	6.35
Learning by applying the self and peer assessment	9	4.76
Both instructive and entertaining evaluation process	4	2.12
B) Opinions on Using Rubric		
Learn how scoring should be done, and what you need to pay attention of their career 40		21.16
Obtain more reliable results by providing the possibility of objective evaluation	38	20.11
Understanding the importance of using the rubric evaluation	16	8.47
Providing versatile evaluation facilities	15	7.94
Preparing and learning to use the rubric	12	6.35
Providing convenience in scoring process	5	2.65
Ensuring that students take their job seriously doing homework more carefully	4	2.12
Negative (41)		
A) Opinions on Self and Peer Assessment		
The possibility not to act fairly in peer assessment, bias	31	16.40
The probability of scoring with reading the general assessment of the peer	12	6.35
Time-consuming process	10	5.29
The possibility of not being reliable self-assessment	9	4.76
The visual evaluation by peers of homework, not contextual assignment	6	3.17
B) Opinions on Using Rubric		
Difficulty of comparing according to the criteria	12	6.35
Being not consistent of scores because of subjectivity	5	2.65

1. What are the positive views of teacher candidates on self and peer assessment of performance assignments?

According to the findings, when opinions on the self and peer assessment are examined, 12.70% of teacher candidates emphasized that they compared their own work by seeing the work of their peers and realized its shortcomings. One of the teacher candidates stated:

"*At first I thought that my work is satisfactory but, when I saw my friends' works, now I think mine is poorly*" (Teaching Turkish Language / 30.11.2014).

11.11% of teacher candidates stressed that self-confidence of students increased participating the assessment process. One of the teacher candidates stated:

"*It was nice to give us the opportunity to assess*" (Teaching Mathematics / 15.11.2014).
"*We enjoyed taking part in the assessment process and it was a good experience for us*" (Teaching Science / 21.11.2014).

1. What are the negative views of teacher candidates on self and peer assessment of performance assignments?

Teacher candidates mentioned also disadvantages of the application. According to the findings, 16.40% of teacher candidates stated the possibility of behaving unfair during the peer assessment. Some of the students evaluating the performance of their peers stated that the points they give might change according to the person they know or the student's gender. This problem can be solved giving longer-term training for self and peer assessment, making more applications or scoring performance tasks anonymously. One of the candidates of teachers stated:

"*...However, providing all peers to be fair cannot be achieved*" (Teaching Science / 21.04.2014).

Another negative opinion is that peers in the general assessment have the possibility of scoring (6.35%) without reading the full review. In this regard, some teacher candidates stated that they did not fully investigated their tasks and they evaluated their tasks much more visually rather than evaluating contextually. One of the candidates of teachers stated:

"*...Some evaluations were made without fully examined*" (Teaching Mathematics / 15.11.2014).
"*...On the other hand, the scores given by peers can be missing. Incorrect assessment can be made*" (Teaching Turkish Language / 30.11.2014).

3. What are the positive views of teacher candidates on using rubric in the scoring process?

21.16% of teacher candidates stated that they have learned how to do scoring, paying attention to what they have learned while scoring in their professional life with this application. Being included in the evaluation process, it can be said that teacher candidates learned by applying these techniques rather than theoretical knowledge and thus, they became more aware of the advantages. One of the candidates stated:

"*I learned how the evaluation and scoring process to be done and what criteria I have to take consideration while scoring. For the first time I felt myself as teacher. I'm going to do this practice when I become a teacher*" (Teaching Science/ 21.11.2014).

In addition, teacher candidates emphasized that the applied process ensured objective assessment opportunity and more reliable results were obtained (20.11%). One of the teacher candidates stated this issue as follows:

"*I think we made a reliable assessment. Fewer errors in this objective assessment..."* (Teaching Turkish Language / 30.11.2014).

4. What are the negative views of teacher candidates on using rubric in the scoring process?
Teacher candidates mentioned some disadvantages of the rubric. 6.35% of them stated that it was difficult to compare according to the criteria. This problem can be solved using analytical scoring scale (rubric). One of the teacher candidates stated this issue as follows:

"*It was confusing, because there were very different ideas and it was difficult to compare inasmuch as the criteria. So the rubric should be more detailed*" (Teaching Mathematics / 15.11.2014).

4. Conclusion and discussion

In this study, the views of the teacher candidates on self and peer assessment of performance assignments and using rubric in this process are determined. As a result of this study, analysing teacher candidates' opinions subjected to self and peer assessment, the teacher candidates stressed that they compared their own work by seeing the work of their peers and realized its shortcomings. This finding shows similarity with the findings of a study about peer assessment that Koc (2011) conducted. Besides, teacher candidates stressed that self-confidence of students increased participating the assessment process. They also highlighted that they had multiple scoring opportunities and with this application they stated being away from the traditional assessment methods. They had positive views about the process in general. These findings are consistent with similar studies conducted in the literature on self and peer assessment (Uysal, 2008; Wen and Tsai, 2006; Daniels and Magarey, 2000; cited in Lee, 2008; Cheng and Warren, 1997; Bozkurt and Demir, 2013; Lynch, McNamara and Seery, 2012; Thomas, Martin and Pleasants, 2011; Willey and Gardner, 2009). Additionally Hanrahan and Isaacs (2010) in their study, obtained students' opinions on self and peer assessment. As a result of this research, they also revealed that students learned to empathize, provide feedback and their motivation increased.

When we look at the teacher candidates' negative views, it shows us that there is a possibility of making unfair treatment and there may be the peer scoring situation without examining peers entirely. Some of them also mentioned that it was a time-consuming process in self and peer assessment. The findings supported by similar studies in the field literature (Kaufman, 2010; Hanrahan and Isaacs, 2010; Rees, 2002; cited in Lee, 2008; Cheng and Warren, 1997).

When teacher candidates' opinions on using rubric in the process examined, it is stated that they have learned how it should be done with the participation of scoring points and what should paid attention be to when scoring. They also indicated that this process would guide them in their professional life. The findings show consistency with the findings of a study that Keefer (2010) conducted. According to the other results, they stressed that they might achieve more reliable results by providing the possibility of objective evaluation of the process. This finding is also consistent with similar studies conducted in the literature (Knight, 2006; Andrade & Du, 2005; Powell, 2001). Besides, with this application and evaluation, they stated that they understood the importance of using rubric and they had versatile evaluation facilities. Bolton (2006) in his study, obtained that with using rubric, the students realized their works' deficiencies. When we look at the negative views about the using rubric, they stated that it was difficult to compare according to the criteria. So they reported that it is necessary that more detailed rubric (analytical) should be used.

Consequently, in the research, teacher candidates posed positive views on self and peer assessment and using rubric in scoring process. They think that this process is efficient in terms of both learning and entertainment, and it also increased their motivation towards the course.

In future studies, group assessment technique can also be added to self and peer assessment. Moreover, in addition to individual students' opinions the focus group interviews can also be done. A more in-depth knowledge of the process data can be attained by content analysis. In addition, this application was carried out only for the measurement and evaluation course. In the other courses, it can be investigated whether the similar results are obtained or not. As a result, higher education, especially in teacher training to spread the use of self-peer assessment and rubric, making more research in practice so that some uncertainty must be overcome and widespread use of them in our country should be provided.

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