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Teacher Candidates' Views On Self And Peer Assessment As A Tool For Student Development

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Abstract: This phenomenological research explores the opinions of social studies teacher candidates about self and peer assessment. It is a descriptive study using qualitative data from a sample of 21 teacher candidates. Research data were collected using a semi-structured interview and the researcher's observation notes. The data were analysed using the descriptive content analysis method. The findings showed that self and peer assessment could serve as a powerful learning activity rather than simply an assessment tool. The results also indicated that self and peer assessment support the development of skills, such as self-regulation, critical thinking and decision-making. Teacher candidates reported that self and peer assessment had positive effects, such as recognizing their own shortcomings, learning by sampling from peers' work, constructive contribution to each other's work, comprehension of the skills and criteria that form the basis of assessment, being part of the assessment process, gaining assessment skills, recognizing individual differences and developing critical thinking skills. Self and peer assessment facilitate the development of a learning environment that is more cooperative, participative and appropriate to the educational needs of initial teacher education students in the 21st century.

Keywords: Self-Assessment, Peer Assessment, Teacher Education, Social Studies Teacher Candidates

Introduction

Assessment generally frames how the students in higher education learn because it is an indication of what the institution prioritizes when making decisions. Therefore, it has a strong backwash effect on all teaching and learning activities (Boud, 2007). Unfortunately, sometimes the assessment does not focus on the learning processes, in particular, how students will learn after the assessment (Boud & Falchikov, 2007). Assessment and learning must be regarded as the same activity, with assessment being an integral part of the learning process. When teachers share the assessment process with their students, when they stop controlling, share the power and lead the students in taking control to assess themselves, the professional judgement of both increases. Thus, assessment becomes an activity that is not done to students, but done with students (Brew, 1999 p. 169). Ideally, the educator and students collaboratively make decisions in determining the criteria to judge the quality of the students' works in the process of assessment that is focused on learning. In this assessment approach, educators are expected to share the responsibility of learning with the students and

help them in developing the intellectual skills necessary for them to make solid decisions in their academic and personal lives (Boud & Associates, 2010). Two effective teaching and learning processes that may help to develop this assessment that is focused on learning are self and peer assessment.

In recent years, there has been an increasing interest in the concept of self and peer assessment in higher education to learn more effectively (Wanner & Palmer, 2018). Self-assessment helps students set goals for themselves to learn, while peer assessment helps them in contributing constructively to cooperative efforts (Sluijsmans, Dochy, & Moerkerke, 1998). In other words, the core function of self and peer assessment is for students to learn to be judges of their own work, as well as that of others (Carless, 2015). Ballantyne, Hughes and Mylonas (2002) stated that assessing students own or peers' work helps them be more motivated personally, to understand and learn the overall subject content and to better understand the assessment process. In addition, self and peer assessment require students to take responsibility for observing and judging the issues that are related to their own or their peers' learning. Thus, students develop their lifelong assessment skills while assessing the work and thoughts of both themselves and others. In addition, students develop learning strategies based on their own assessment and take their first steps towards independent and self-governing learning (Janes 2007; Sambell, McDowell, & Montgomery, 2013).

Self-Assessment

Self-assessment is defined as a process where "*students are directed to assess their performance against pre-determined standard criteria…[and] involves the students in goal setting and more informal, dynamic self-regulation and self-reflection*" (Bourke & Mentis, 2011, p. 859). Self-assessment is not a new technique; it is a way to increase the role of students as active participants in their own learning process and, is often used as a formative assessment to promote reflection upon their own learning processes and results (Sluijsmans et al., 1998).

Self-assessment requires each student to think honestly and self-critically about their own work. As in the traditional assessment, the decisions can range from "pass-fail" decisions, to percentage marks or grades A to E, and so on. However, when the evidence to be evaluated is the student's own products, student self-assessment can be even more valuable. In such a case, it can be argued that the student at least knows how much their products meet the intended goals or criteria (Race, 2001). This "internal" point of view on personal learning and performance is completely different from the "external" point of view utilized in both teacher and peer assessments. During the self-assessment process, the student may be asked to take the following issues into consideration: How can I compare my products with the ones that are prepared by my peers? How well did I complete my own task? What should I do to improve my performance? Critical self-reflection can be achieved by preparing a report that answers these and other questions. The most important aspect of these reports is that they support the learning and personal development of students (Fallows & Chandramohan, 2001). Two of the strengths of this assessment are that it encourages students to reflect upon and enables them to develop their own learning plans. Student taking responsibility at every stage of the learning process also supports the development of skills in making a judgment about whether or not their work is within acceptable standards (Ozan, 2008). Thus, self-assessment is intimately bound with issues of power, control and authority and the extent to which these are transferred from academic staff to students (Brew, 1999). Contrary to the traditional forms of assessment, self-assessment is more appropriate for the

development of lifelong learning skills, such as critical thinking, self-regulation and taking responsibility for learning (Tan, 2007).

Peer Assessment

Peer assessment can be defined as a set of activities through which individuals make judgments about the quality of their peers' work and provide feedback to each other (Slujsmans et al., 1998; Van Den Berg, Admiraal, & Pilot, 2006; Reinholz, 2015). Studies on peer assessment have demonstrated that students actively participating in peer assessments can develop written work and assessment responses that are better structured, and these students can interact better (Van Den Berg et al., 2006; Topping, 2009). Moreover, when students assess both their products and their writing processes, they actually learn to communicate about their work with their peers. Peer assessment can be understood as a type of cooperative learning (Falchikov, 2001). However, peer assessment is more limited compared to cooperative or peer learning, where students produce a collective product, share knowledge, and learn from the collaboration. This means that students assess the works and efforts of each other using relevant criteria in crediting the work and the effort, but also for the purpose of their own development. Peer assessment in a formative sense indeed would appear helpful to students in developing their ability of self-assessment, self-government, higher-level thinking skills (Van Den Berg et al., 2006; Chetcuti & Cutajar, 2014) and metacognitive self-awareness (Topping, 2009).

Nicol, Thomson and Breslin (2014) reported that giving peer feedback is often more beneficial than receiving comments because it is more cognitively-engaging: involving higher-order processes, such as diagnosing problems and suggesting solutions. Peer assessment processes also help students to calibrate their own judgments and enhance their own self-evaluative capacities. In addition, peer assessment improves verbal communication skills, negotiation skills and diplomacy. Peer assessment enables students to learn how to give and accept criticism (Topping, 1998; Chetcuti & Cutajar, 2014). Peer assessment can also be used as a strategy to increase the diversity of learning experiences and to support the individual learning needs of students. Vickerman (2009) identified some of the potential advantages of peer assessment for students as self-government about the assessment process, providing a sense of belonging, increasing motivation, encouraging students to take responsibility for their own learning and development, regarding assessment as a part of learning, viewing errors as opportunities for the development of metacognition, and supporting deep rather than surface learning. Vickerman (2009) suggests there are possible gains in cost and time efficiency for teachers because peer assessment processes can assist in assessing large numbers of students. Vickerman also states that learning is developed through detailed, positive and timely feedback about the student's work.

In recent years, the use of self and peer assessment in higher education is perceived as a movement towards more transparency and openness (Falchikov, 2005). Self and peer assessments play an important role in teacher education because they support student teachers to acquire skills that are essential in their professional working life (Sluijsmans & Prins, 2006). One important objective of teacher training and education science is to teach teacher candidates how to assess (Yılmaz, 2017). Despite an increasing interest, self and peer-assessment still remain at the margins of assessment practices in higher education (Wanner & Palmer, 2018). It is still the norm that academic teachers 'retain all the ownership and power in the assessment process and make all the choices', thereby limiting the potential of learner development through assessment (Spiller 2012, p. 2; Yılmaz, 2017). Relatively little research appears to have been conducted to determine academics' beliefs about assessment at the

higher education programs in Turkey (Akpınar & Kranda, 2016; Yılmaz, 2017). When the literature related to self and peer assessment is reviewed, it is evident that the studies generally focussed on (1) the assessment of individual assignments according to group assignments; (2) the validity and reliability of such assessments; or (3) the comparison of students' self and peer assessment and teacher scores. However, there are few studies in the literature evaluating students' experiences of self and peer assessment from their own points of view (Falchikov, 1995; Hanrahan & Isaacs, 2001; Akpinar & Kranda 2016; Ndoye, 2017; Wanner & Palmer, 2018). Therefore, the perceptions of teacher candidates about the benefits and limitations of self and peer assessment were sought to be revealed. Such a study could identify the required areas in pre-service teacher education needed to develop assessment skills teaching. For this purpose, the research questions in this study were as follows:
1.	What are the opinions of social studies teacher candidates about the benefits of self and peer assessment?
2.	What are the opinions of social studies teacher candidates about the limitations of self and peer assessment?

Methodology

This research is a descriptive study conducted based on qualitative data and designed according to phenomenology, which is one of the qualitative research designs. A phenomenological study describes the common meaning of several people's experiences of a phenomenon or concept (Yildirim & Simsek, 2013, p. 80). Phenomenologists focus on defining the common characteristics of all participants who experience a phenomenon. Thus, qualitative researchers first define the phenomenon, then collect data from individuals who have experience with the phenomenon and provide a holistic description of the essence of the experiences of all individuals. This description consists of "what" they experience and "how" they experience it (Creswell, 2013, p. 77). In these studies, the data sources are individuals or groups that the research focuses on, who experienced the phenomenon and can show or express the phenomenon (Yildirim & Simsek, 2013, p. 80).

The sample group consisted of 21 teacher candidates who were randomly selected from 87, 4th grade social studies teacher candidates who took the Special Teaching Methods II course at a state university. In phenomenological studies, data collection is usually conducted through multiple in-depth interviews with participants (Creswell, 2013). Thus, it was decided to select every fourth teacher candidate from the class list in order be able to provide as many points of view of participants as possible to the phenomenon. Teacher candidates participated in formative self and peer assessment practices for the first time during the course work.

Portfolios were used during the course to assess the students' performance in the process and to help them gain experience in the implementation of self and peer assessment by being actively involved in both the learning and the assessment processes. At the beginning of the course, teacher candidates were explained in detail why the application of the portfolio assessment was important in teacher education and how to apply it, and they were asked whether they would like to participate in this study. Teacher candidates voluntarily participated in the portfolio assessment process and consented to using portfolio scores as a final exam.

Teacher candidates' portfolios include a varied collection of their work determined by the content and goals of the course. Students themselves decided which products and how many of them would be placed in the portfolio. While developing works to be included in the portfolios, students received oral and written feedback (without a grade) from their peers

every three weeks. Students had a chance to rearrange their works according to the feedback before the final submission at the end of the term.

To move toward more transparency and openness, a rubric was prepared with the student teachers. At the beginning of the term, teacher candidates were given articles about rubric development and were asked to form their own evaluation criteria accordingly, which would enable them to judge the quality of the products in their portfolios. In the following week, the whole class collectively decided on the final version of the rubric scale to be considered in the assessment. In addition to students' products, the portfolio included self-assessment (written as self-assessment reports and self-marking their performances according to agreed criteria), peer assessments and a rubric assessment scale. Self-assessment reports involved reflecting on their progress and evaluating their learning outcomes.

During the last week of the term, the class was divided into heterogeneous groups consisting of six teacher candidate, with each candidate presenting their own portfolio to the group. Then, the portfolios were evaluated anonymously by each group member by applying the rubric prepared together. The mean was calculated by adding the self-assessment to the portfolio score. During this assessment process, the lecturer visited the groups and observed the assessments. In this study, self and peer assessments were implemented primarily as means to help students become actively involved in both the learning and the assessment processes, in addition to assigning them a grade. In other words, self and peer assessment was used for both formative and summative purposes.

Data Collection Tool and Data Analysis

A semi-structured interview form developed by the researcher from observation notes, was used as a data collection tool. The research data were collected with individual semi-structured interviews of between 30 and 40 minutes duration with 21 students in the final week of the course. The interviews were recorded. Raw data were transcribed and analyzed using a descriptive content analysis method. The data obtained were first conceptualized, and then organized according to concepts, themes and codes identified by the researcher. Afterwards, thematic coding linked codes associated with each other (Yildirim & Simsek, 2013). Meaningful themes were created at the end of the analysis with sample participant opinions presented under relevant headings.

Validity and Reliability

The reliability of this study was checked by the researcher and one of her colleagues, who was an expert in the field on creating the themes one by one and then reaching an agreement determining the subjects. To determine the reliability between two experts, the formula (Reliability = consensus/consensus + dissensus x 100) suggested by Miles and Huberman (1994) was used. The adjustment among the researchers was found to be 87%. Miles and Huberman (1994) regarded 70% as an acceptable level of agreement for qualitative data. As the reliability calculations were over 70%, the result obtained was considered reliable for this research.

Findings
The Opinions of Teacher Candidates about the Benefits of Self-Assessment

Six salient themes were demonstrated as a result of the analysis of the opinions of teacher candidates about the benefits of self-assessment. Excerpts from teacher candidates' (T.C.) statements and themes are provided in Table 1.

Themes	Samples of Student Statements
Develops self-criticism skills	*"The person self-criticizes, evaluates and scores their own work. I believe it is a useful activity. It is efficient for the individual to know themselves and to consider his/her efforts." T.C. 11* *"It was the first time that I made self-assessment. At first, it was very challenging. My little mistakes seemed bigger than they were. It enabled me to identify gaps. It allowed me to look into my assignment more objectively." T.C. 5*
Provides self-awareness	*"The individual gains the ability to self-criticize. They realize their creativity in their work and at the same time realize their own deficiencies." T.C. 20* *"The individual knows themselves better. They realize which subjects they are better at. They realize their talents. They can develop themselves. This allows them to complete their deficiencies." T.C. 7*
Enhances motivation and learning	*"In general, after the activities, projects and so on that are done in the classroom are scored, not much thought is given or assignment is not required to be redone from the beginning. With self-assessment, "awareness" is raised and we are motivated with our own criticism to do better by thinking why shouldn't it be better." T.C. 3*
Increases self-esteem and self-confidence	*"Students' self-assessment of their own situations and scoring themselves increases students' self-confidence and self-esteem." T.C. 2*
Enables the repetition of subject	*"It provides subject repetition because we revise our activities we conducted, and our knowledge is refreshed." T.C. 6*
Allows the student to practice the assessment	*"Preparing and using the rubric in the assessment was very useful." I learned how assessment is made." T.C. 13*

Table 1: The Opinions of Teacher Candidates about the Benefits of Self-Assessment

The findings of this study demonstrate that self-assessment supports active learning because the assessment is no longer a mysterious process conducted by an external factor; instead, developing a skill that they can apply for themselves. The participants also stated that this process increased their self-awareness, self-criticism skills, self-esteem and self-confidence and their motivation towards learning. Self-assessment facilitated the repetition of the subject and enabled the student to practice the assessment.

The Opinions of Teacher Candidates about the Benefits of Peer Assessment

Six themes were demonstrated as a result of the analysis of the opinions of teacher candidates about the benefits of peer assessment. Excerpts from teacher candidates' (T.C.) statements and themes are provided in Table 2.

Themes	Samples of Student Statements
Developing metacognitive awareness	*"Students have the opportunity to observe the works of each other. As they have the opportunity to compare their own work and that of others, they can easily identify their shortcomings." T.C. 7* *"I found the opportunity to assess myself. I saw my rights and wrongs. I realized what my shortcomings are." T.C. 4* *"We had the chance to see our shortcomings with the peer assessment. We saw what we could do better and differently. We saw that we could also choose different subjects." T.C. 16*
Improving the quality of own work from examining peers' works	*"If there had been an exam, we wouldn't be able to pass on that much information to each other. Everyone would work on the same subjects. With the way it was, everyone shared different subjects and we obtained interesting information. I believe my perspective expanded. There were some friends whose portfolios I liked a lot and this has brought me new ideas." T.C. 20* *"While I was making peer assessment, I saw different products in my friends' portfolios and I tried to apply them afterwards." T.C. 10* *"My friends' performances were very effective. I made changes to my portfolio after each peer assessment. I would have prepared a better portfolio if more peer assessments were made." T.C. 8*
Gaining more understanding of the assessment process and criteria	*"It raises awareness in me about what skills and criteria are the basis for assessment." T.C. 11* *"It allows us to practice the assessment of the assignment." T.C. 3* *"Classroom interaction increases. Assessment skills are gained." T.C. 9*
Recognizing individual differences	*"I saw how different my ideas were compared to my friends and everyone had different creative skills." T.C. 6*
Developing critical thinking skills	*"We look at our peers' activities and tell them what we see are missing. This enables us to comment and think critically [...] We get different perspectives with the feedback received from peers. This helps us to be open to criticism." T.C. 21*
Receiving feedback from a different source other than the teacher	*"Another person tells you about your shortcomings and what you should do." T.C. 17* *"We find the opportunity to be assessed from very different perspectives." T.C. 15*

Table 2: The Opinions of Teacher Candidates about the Benefits of Peer Assessment

It was stated by the teacher candidates that peer assessment helped them develop their own product review skills. During the peer assessment, they compared their peer's studies with their own when they examined their work. This assisted them in realizing their own deficiencies and that seeing giving them different points of view and examples that guided them in improving their own assignments. Following this assessment, teacher candidates welcomed the opportunity to improve their own products and to develop their portfolios before final submission.

From the perspective of teacher candidates, peer assessment helps students develop their skills in reviewing their own products, provides active participation in the assessment, enables them to learn to take responsibility and to give and accept criticism.

The Opinions of Teacher Candidates about the Limitations of Self and Peer Assessment

Three themes emerged as a result of the analysis of the opinions of teacher candidates about the limitations of self and peer assessment. Excerpts from teacher candidates' (T.C.) statements and themes are provided in Table 3.

Themes	Samples of Student Statements
Difficulty in being objective	"[...]We performed our assessment in groups consisting of 6-7 people. Of course, everyone wanted to get good scores even if they didn't think their assignment was good. Therefore, rather than solidarity within the group, an agreement arose to give each other a high score. [...]In other groups, a student who did not think that their assignment was adequate did not act objectively in the assessment because they thought that their peers would give low scores to their assignment. In some groups the assessment results were very inconsistent and in some the scoring was almost the same. When peer assessment, which is theoretically an advantageous assessment type for students' development, is implemented, it is experienced that there are not many objective results. T.C. 4 "Assessment cannot be objective. Because the student is more positive towards their close friends and more negative to the people they don't like much. In short, the student cannot get the scores they deserve." T.C. 5 "A person cannot be objective in assessing himself/herself." T.C. 8
Not having experience for marking	"[...]It is the teacher of the course who is the master of the subject and who will make the best assessment. The person teaching, he/she should do the measurement and assessment." T.C. 20
Very time-consuming	"Too much time is wasted with peer assessment." T.C. 19

Table 3: The Opinions of Teacher Candidates about the Limitations of Self and Peer Assessment

From the above statements, it is evident that the peer assessment process during scoring has become an agreement based on mutual interest rather than cooperation. Before starting to assess, teacher candidates frequently stated that their peers could not be objective in both self and peer assessments. Some teacher candidates claimed that the relationships between peers would always be reflected as positive or negative, and that they preferred to be evaluated by the instructor.

Discussion
Advantages of Self and Peer Assessment

The findings of this study demonstrated that self and peer assessment serve as a powerful learning activity rather than an assessment tool. In other words, self and peer assessment is a valuable source of feedback for the professional development of initial teacher candidates. Similarly, some researchers suggested that the focus of self and peer assessment should be on comments rather than grades (Carless, 2015; Chambers, Whannell, & Whannell, 2014). In this study, it has also been concluded that peer assessment develops metacognitive awareness, helps in reviewing their own products, provides active participation in the assessment, enables them to learn to take responsibility, and to learn how to give and receive criticism. The statements of teacher candidates demonstrated that analyzing their own studies according to the criteria improves self-assessment skills, supports their learning and clarifies expectations. Teacher candidates reported that they had the opportunity to learn the strengths and weaknesses of their assignments during the peer assessment. At all stages, but particularly at the beginning, learning from mistakes was key to moving on to the next stage

of partnership in assessment (Cook-Sather, Bovill, & Felten, 2014). As demonstrated in studies by Ndoye (2017), and Hawe and Dixon (2017) interactions between the teacher and peers and with peers prompted students to think more deeply about their learning and task-related work, and to take action in ways that reduced the gap between current and desired or expected performance. Similarly Hanrahan and Isaacs (2001) noted that, considering the isolation of students in lessons in general, peer assessment might be the only opportunity for students to see their peers' work. In such a case, strengthening the "*seeing*" with the structure of assessment criteria is a bonus. The nature of the other benefits that the students claim to have gained is quite extensive. For example, reading the works of others requires empathy, and feedback improves one's ability to think critically beyond thinking about developing their own product. Students may also develop empathy for their teachers as they appreciate the difficulties that teachers face in assessments. Such benefits are related to the lifelong learning of students; and are especially useful for students learning to be responsible for their own learning (Hanrahan & Isaacs, 2001). Similarly, in the study conducted by Adachi, Hong-Meng Tai, and Dawson (2018), the self-peer assessment was also perceived by faculty members as an authentic assessment that leads to better learning and increasing understanding of standards, while improving the transferable and feedback skills of students. Moreover, parallel with the findings of this study Adachi et al. (2018) found that peer assessment supports *cooperative learning* and *self-assessment* supports *critical independent learning*.

The findings of this current study also align with studies showing that the participation of students in self-assessment increases their motivation towards learning. For example, Cook-Sather et al. (2014) reported that key benefits of working collaboratively on teaching and learning are: enhanced engagement, motivation, learning, metacognitive awareness, teaching and classroom experiences, student-staff relationships and a stronger sense of identity. In addition, Wanner and Palmer (2018) reported that engaging students as partners in assessment and feedback process gives them a sense of ownership and shifts the power of the assessment process from the teacher to the students.

Findings from this study showed that teacher candidates gained different perspectives and examples while examining the work of their peers during the peer assessment process which guided them in the completion of their own assignments. Similarly, Vickerman (2009) found that by experiencing a range of writing styles, techniques, ideas and abilities, students learned from their peers' performances. McDowell (1995) reported that students participating in a series of peer assessment studies contributed to the development of interpersonal relationships, time and project management skills, and important qualities of peer assessment tasks. Likewise, Topping (2005) and Ndoye (2017) suggest that peer assessment improves students' verbal communication and negotiation skills as well as their ability to manage criticism. In studies conducted by Falchikov (1995), and Landry, Jacobs and Newton (2015), it was found that if students were involved in more than one peer assessment task, they became more familiar with the application of assessment criteria and became critical, independent learners because they had a better understanding of the subject being reviewed. Lyons (1998) claimed that peer assessment provided a valuable source of feedback and a vital professional habit in the training of pre-service teachers.

The results of this study showed that participating in the formation phase of a graded scoring scale increased the teacher candidates' awareness about goals and expectations. Similarly, Ballantyne, Hughes and Mylonas (2002) found that one way to involve students in the assessment process was to enable them to participate in the formation of the rubric scale (graded scoring) that is necessary for the assessment. Preparing rubrics with students brought much-needed transparency to the assessment process, with its potential for positive impact on student learning. Through this cooperative class effort, Ballantyne et al. (2002) showed that

(1) the instructor was given the opportunity to transform their goals and standards into a meaningful language for the students, (2) as a group, the students could set goals and standards for approaching the assessment task, and (3) show others their own assumptions, expectations and goals related to the course. Implementing the assessment criteria and making judgments is a higher level of learning achievement. Thus, the learning achievement of self and peer assessment is often much higher than performing the task single-handedly. More importantly, when students are involved in formulating and prioritizing the assessment criteria to use in self and peer assessments, they gain significant achievements in the learning outcomes of the assessment. In this respect, teacher candidates in the pre-service education should be given opportunities to practice measurement and assessment studies that require them to use their high-level thinking skills in realistic situations rather than traditional paper-and-pencil tests.

As a result, when used effectively, self and peer assessment can enable students to become active participants in their own learning and that of their peers'. In addition, such alternative formative assessment practices in teacher education can assist students in developing valuable experiences and skills in their professional development.

Limitations of Self and Peer Assessment

Although there are strengths in self and peer assessment, the findings of this study also revealed that there are some limitations that need to be addressed to provide students with a valuable learning experience. The limitations outlined by the participants included the difficulty in being objective, not having experience in scoring and the process being very time-consuming. In line with the findings of this study, Hanrahan and Isaacs (2001) grouped the uncertainties experienced by students into three themes: "difficulty in being objective", "not being sure of standards" and "lack of experience with scoring". These studies the authors emphasized that these concerns can be overcome through practice and education. In addition, it may be useful to develop clear criteria in peer assessment to ensure that feedback from other students is accurate and valuable and to have each work evaluated by more than one student (Orsmond, 2006).

The difficulty in being objective resulted in many teacher candidates arguing that educators should be responsible for all assessments and that this task should not be given to the teacher candidates. Similarly, in studies conducted by Brindley and Scoffield (1998), and by Davies (2006), it was demonstrated that more than half of the students thought that assessment was the responsibility of the teacher. Likewise, in research conducted by Ballantyne et al. (2002), 37% of the students believed that students should not participate in the assessment, with 44% advocating that the assessment should be the responsibility of the teacher. Other studies also emphasized this phenomenon. Falchikov (1995) and Cheng and Warren (1997) observed that some students found difficult to be objective and tended to give higher scores to their friends. Brindley and Scoffield (1998) and Falchikov (1995) found that students were reluctant to give low scores to their peers, even when they deserved low scores. Topping (2005) noted that peer assessment caused social discomfort in learners and that there was a central tendency in assessments, with most students being evaluated as "average". Akpinar and Kranda (2016), Chetcuti and Cutajar (2014), Koc (2011), McDowell (1995) were not convinced that the students would score their peers fairly. In a study on this subject conducted by Mulder, Pierce, and Baik (2014), it was demonstrated that there was a negative shift in the student perception following the peer assessment experience. In general, the impacts of student attitudes and perceptions on learning are undetermined; however, it was observed that scepticism towards the ability of students to correctly criticize and give

feedback prevented learning during the peer assessment process. Similarly, Kaufman and Schunn (2010) noted that the performance of students did not improve if they were sceptical about the peer assessment process or the validity of the process. Also, Lindblom, Pihlajamaki and Kotkas (2006) and McCutcheon and Knewstubb (2018) found that self-assessment was sometimes difficult to accept, because students stated that it was impossible to be objective when considering their own products. Lindblom et al. (2006) reported that students had difficulty in being critical when evaluating the writings of their peers during the peer assessments. In addition, the students found it easier to evaluate the technical aspects of the texts rather than the subject content. Therefore, it was emphasized in the study that students should have a form for self or peer assessment with clear criteria, and supportive teachers who provide guidance. In other words, the more transparent the procedures, the less likely are personal differences in standards and interpretation to influence marking. Potential collusion may be overcome by asking students to justify their decisions and defend their ratings; moderating self-assessment marks where necessary by teachers; and teachers re-marking work when student peer marking gave rise to discrepancies (Boud, 1989). Boud also reported that in cases where grades were central to the assessment, taking an average of several peer assessments served to increase the reliability of peer ratings.

Engaging students as partners in assessment can take time to set up but support and more practice can speed up the process (Falchikov, 2005, p. 149). Students may question why they should step outside their comfortable, traditional role. They can feel confused, even frustrated, when a different approach is proposed. This resistance to change may be overcome when staff and students thoughtfully work together to co-design projects and responded to student concerns. Educators need to be clear about the purposes and nature of the partnership, and be welcoming when inviting students into partnership. It is also important to ensure that participation should be voluntary. This partnership in assessment can help to share power, lead the students to take control in assessing themselves, break traditionally hierarchical boundaries, giving students a voice and an active role in their own and others' learning experiences (Bovill & Cook-Sather, 2014).

Conclusion

In summarizing the findings of this study, it is evident that when self and peer assessment are used for feedback rather than scoring, a more cooperative, participative, supportive and democratic learning environment can be developed. However, in the process of teacher education, teacher candidates' assessment and evaluation skills should be improved. The limitations of the study can be overcome through training and practice.

Previous studies demonstrate that teachers in schools often adopt the way they were taught as their teaching models. This process is defined in the literature as the apprenticeship of observation. Thus, if teacher education is implemented in a more empowering and less authoritarian manner, teacher candidates are more likely to apply it in their future teaching careers. Therefore, the prerequisite of all teacher education programs should be the provision of learning environments that model the pedagogical expectations of teacher candidates.

Self and peer assessment practices can provide important opportunities for the development of skills such as self-regulation, critical thinking and decision-making, which are aimed to be developed by students in teacher education. This approach may allow the development of a learning environment that is more cooperative, more participative and more appropriate to the educational needs of students in the 21st century.

References

Adachi, C., Hong-Meng Tai, J., & Dawson, P. (2018). Academics' perceptions of the benefits and challenges of self and peer assessment in higher education. *Assessment & Evaluation in Higher Education, 43*(2), 294-306. https://doi.org/10.1080/02602938.2017.1339775

Akpınar, M., & Kranda, S. (2016). Sosyal bilgiler öğretmen adaylarının akran değerlendirmesine ilişkin görüşleri. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi, 29, 356-374*. https://doi.org/10.14582/DUZGEF.768

Ballantyne, R., Hughes, K., & Mylonas, A. (2002). Developing procedures for implementing peer assessment in large classes using an action research process. *Assessment & Evaluation in Higher Education, 27*(5), 427-441. https://doi.org/10.1080/0260293022000009302

Boud, D. (2007). Reframing assessment as if learning were important. In D. Boud & N. Falchikov (Eds.), *Rethinking assessment in higher education: Learning for the longer term* (pp. 14-25). London, UK: Routledge. https://doi.org/10.4324/9780203964309

Boud, D., & Associates. (2010). *Assessment 2020: Seven propositions for assessment reform in higher education*. Sydney: Australian Learning and Teaching Council. https://www.uts.edu.au/sites/default/files/Assessment-2020_propositions_final.pdf

Boud, D., & Falchikov, N. (2007). Introduction: Assessment for the longer term. In D. Boud & N. Falchikov (Eds.), *Rethinking assessment in higher education: Learning for the longer term* (pp. 3-13). London, UK: Routledge. https://doi.org/10.4324/9780203964309

Bovill, C., Felten, P., & Cook-Sather A. (2014). Engaging students as partners in learning and teaching (2): Practical guidance for academic staff and academic developers. *International Consortium on Educational Development Conference*, Stockholm, Sweden, 16-18 June.

Brew, A. (1999). *Towards autonomous assessment: Using self-assessment and peer assessment.* In S. Brown & A. Glasner (Eds.), *Assessment matters in higher education: Choosing and using diverse approaches* (pp. 159-171). Buckingham, UK: Open University Press.

Brindley, C., & Scoffield, S. (1998) Peer assessment in undergraduate programmes. *Teaching in Higher Education, 3*(1), 79-90. https://doi.org/10.1080/1356215980030106

Carless, D. (2015). *Excellence in university assessment. learning from award winning practice*. London, UK: Routledge. https://doi.org/10.4324/9781315740621

Chambers, K., Whannell, R., & Whannell, P. (2014). The use of peer assessment in a regional Australian university tertiary bridging course. *Australian Journal of Adult Learning, 54*(1), 69-88.

Cheng, W., & Warren, M. (1997). Having second thoughts: Student perceptions before and after peer assessment exercise. *Studies in Higher Education, 22*(2), 233–239.

Chetcuti, D., & C. Cutajar, C. (2014). Implementing peer assessment in a post-secondary physics classroom. *International Journal of Science Education, 36*(18), 3101-3124.

Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging students as partners in learning and teaching: A guide for faculty.* San Francisco, CA: Jossey Bass.

Creswell, W. J. (2013). *Nitel araştırma yöntemleri beş yaklaşıma göre nitel araştırma ve araştırma deseni*. Çev. Ed. Bütün, M. ve Demir, B. S. Ankara, Turkey: Siyasal Kitabevi.

Davies, P. (2006). Peer assessment: Judging the quality of students' work by comments rather than marks. *Innovations in Education and Teaching International, 43*(1), 69-82. https://doi.org/10.1080/14703290500467566

Falchikov, N. (1995). Peer feedback marking: Developing peer assessment. *Innovations in Education and Training International*. *32*(2), 175-187. https://doi.org/10.1080/1355800950320212

Falchikov, N. (2005). *Improving assessment through student involvement: Practical solution for aiding learning in higher and further education.* New York, NY: Routledge Falmer.

Hanrahan, J. S., & Isaacs, G. (2001). Assessing self and peer assessment: The students' views. *Higher Education Research & Development, 20*(1), 53-70. https://doi.org/10.1080/07294360123776

Hawe, E., & Dixon, H. (2017). Assessment for learning: A catalyst for student self-regulation. *Assessment & Evaluation in Higher Education, 42*(8): 1181-1192, https://doi.org/10.1080/02602938.2016.1236360

Janes, D. (2007). Self, peer and group assessment in e-learning. *British Journal of Educational Technology, 38*(1): 175–76. https://doi.org/10.1111/j.1467-8535.2007.00682_7.x

Kaufman, J.H., & Schunn, C.D. (2010). Students' perceptions about peer assessment for writing: Their origin and impact on revision work. *Instructional Science*, *39*(3), 387-406. https://doi.org/10.1007/s11251-010-9133-6

Koc, C. (2011). Opinions of class teacher candidates related to peer reviews in teacher applications. *Kuram ve Uygulamada Eğitim Bilimleri, 11*(4), 1965–1989.

Landry, A., Jacobs, S., & Newton, G. (2015). Effective use of peer assessment in a graduate level writing assignment: A Case Study. *International Journal of Higher Education, 4*(1), 38-51. https://doi.org/10.5430/ijhe.v4n1p38

Lindblom, S., Pihlajamaki, H., & Kotkas, T. (2006). Self-, peer- and teacher-assessment of student essays. *Active Learning in Higher Education, 7*(1), 51-62. https://doi.org/10.1177/1469787406061148

Lyons, P.R. (1989). Assessing classroom participation. *College Teaching, 37(1)*, 36–38. https://doi.org/10.1080/87567555.1989.10532154

McCutcheon, T.S., & Knewstubb, B. (2018). Evaluating the alignment of self, peer and lecture assessment in an Aotearoa New Zealand pre-service teacher education course. *Assessment & Evaluation in Higher Education, 43*(5), 772-785. https://doi.org/10.1080/02602938.2017.1408771

McDowell, L. (1995). The impact of innovative assessment on student learning, *Innovations in Education and Training International*, *32*(4), 302–13. https://doi.org/10.1080/1355800950320402

Miles, M.B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded Sourcebook.* (2nd ed). Thousand Oaks, CA: Sage.

Mulder, R.A., Pierce, J.M., & Baik, C. (2014). Peer review in higher education: Student perceptions before and after participation. *Active Learning in Higher Education, 15*(2), 157-171. https://doi.org/10.1177/1469787414527391

Ndoye, A. (2017). Peer/self assessment and student learning. *International Journal of Teaching and Learning in Higher Education, 29*(2): 255-269.

Nicol, D., Thomson, A. & Breslin, C. (2014). Rethinking feedback practices in higher education: A peer review perspective. *Assessment & Evaluation in Higher Education*, *39*(1), 102-122. https://doi.org/10.1080/02602938.2013.795518

Orsmond, P. (2006). *Self- and peer assessment: Guidance on practice in the biosciences.* New York, NY: Higher Education Academy.

Ozan, S. (2008). Öz ve akran değerlendirmenin temel iletişim becerileri üzerindeki etkileri. Yayımlanmamış doktora tezi. Dokuz Eylül Üniversitesi, İzmir. Turkey:

Race, P. (2001). A briefing on self, peer and group assessment. LTSN Generic Centre. *Assessment Series No.9.* Retrieved from https://phil-race.co.uk/wp-content/uploads/Self,_peer_and_group_assessment.pdf

Rayner, S. (2007). A teaching elixir, learning chimera or just fool's gold? Do learning styles matter? *Support for Learning. 22*(1): 24–30. https://doi.org/10.1111/j.1467-9604.2007.00441.x

Reinholz, D. (2016). The assessment cycle: A model for learning through peer assessment. *Assessment & Evaluation in Higher Education, 41*(2), 301-315. https://doi.org/10.1080/02602938.2015.1008982

Sambell, K., McDowell, L., & Montgomery, C., (2013). *Assessment for learning in higher education.* London, UK: Routledge. https://doi.org/10.4324/9780203818268

Sluijsmans, D. F. & Moerkerke, G., (1998). Creating a learning environment by using self-, peer- and co-assessment. *Learning Environments Research* 1, 293–319. https://doi.org/10.1023/A:1009932704458

Sluijsmans, D., & Prins, F. (2006). A conceptual framework for integrating peer assessment in teacher education. *Studies In Educational Evaluation, 32*(1), 6-22 https://doi.org/10.1016/j.stueduc.2006.01.005

Spicuzza, F. (1996). An evaluation of portfolio assessment: A student perspective. *Assessment Update*, 8(6), 4–13. Retrieved from https://doi.org/10.1002/au.3650080604

Spiller, D. (2012). *Assessment matters: Self-assessment and peer assessment*. Retrieved from http://cei.ust.hk/files/public/assessment_matters_self-assessment_peer_assessment.pdf

Tan, K. (2007). Conceptions of self-assessment: What is needed for long-term learning? In D. Boud & N. Falchikov (Eds.), *Rethinking assessment in higher education: Learning for the longer term* (pp. 114-128). London, UK: Routledge.

Topping, J. K. (2005). Trends in peer learning. *Educational Psychology, 25*(6), *631–645.* https://doi.org/10.1080/01443410500345172

Topping, J.K. (2009). Peer assessment. *Theory into Practice*, *48*(1), 20-27 https://doi.org/10.1080/00405840802577569

Van den Berg , I., Admiraal, W., & Pilot, A. (2006). Peer assessment in university teaching: Evaluating seven course designs. *Assessment & Evaluation in Higher Education, 31*(1), 19-36. https://doi.org/10.1080/02602930500262346

Vickerman, P. (2009). Student perspectives on formative peer assessment: An attempt to deepen learning? *Assessment & Evaluation in Higher Education, 34*(2), 221-230. https://doi.org/10.1080/02602930801955986

Wanner, T., & Palmer, E. (2018). Formative self-and peer assessment for improved student learning: The crucial factors of design, teacher participation and feedback. *Assessment & Evaluation in Higher Education, 43*(7), 1032-1047. https://doi.org/10.1080/02602938.2018.1427698

Wen, L. (2006). Attitudes towards peer assessment: A comparison of the perspectives of pre-service and in-service teachers. *Innovations in Education and Teaching International, 43*(1): 83. https://doi.org/10.1080/14703290500467640

Yıldırım, A. & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri.* Ankara, Turkey: Seçkin Yayıncılık.

Yılmaz-Nalbantoğlu, F. (2017). Reliability of scores obtained from self-, peer-, and teacher-assessments on teaching materials prepared by teacher candidates. *Educational Sciences: Theory & Practice*, *17*, 395–409.