The Challenge of Grading in Self and Peer-Assessment (Undergraduate Students’ and University Teachers’ Perspectives)

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Abstract

The goal of the article is to find out the challenges of grading in student self and peer-assessment from teachers’ and students’ perspectives and to suggest ways to cope with them. Peer and self-assessment have accumulated a great significance in the last few decades related to vast application of the cognitive approach and the attempts of making students active agents of educational process rather than passive recipients of information. The overwhelming majority of modern educators believe that these concepts are the cornerstones of modern pedagogy and contributes to the promotion of learner autonomy to a great extent. Therefore, they lead to an improved learning environment and better learning outcomes. However, the concepts have some challenges when it comes to the final stage - grading. Depending on the social, cultural, and educational background, grading of the peer and self-assessment may be accompanied by hesitation and uncertainty as well as subjectivity and lack of reliability.

In this work, the issue was investigated from two perspectives, teacher and student, to find out how the stakeholders perceive the problem and what can be done to cope with challenge of grading in self and peer-assessment. The research uses a questionnaire consisting of 20 questions with participation of 31 teachers and 100 students at Qafqaz University, Baku, Azerbaijan, to come to the conclusion about the issue addressing the challenge. The work is believed to be useful for educators to apply self and peer-assessment effectively, and also it can be a useful source for further research in the field.

Keywords: Grading, peer-assessment, promotion of learner autonomy, self-assessment, student-centered learning.

Introduction

One of the first concepts one might recall when pronouncing self and peer-assessment is Student-Centered Learning (SCL) which places the learner at the center of the learning process giving him/her autonomy and responsibility for his/her own learning. The teacher acts as a facilitator, resource person and fellow learner. The main characteristic of SCL is to make learners privileged with strategic choices regarding what, how, why, where and when to study. Such choices are supposed to contribute to deeper learning with understanding which is
contrary to surface learning or rote memorization. A large number of techniques are used by learners, such as reflection, discussion, research, self and peer-assessment to facilitate learning. Although there is stress on individuality, the learner is in harmony with the surrounding world by means of agreed standards for evaluation. Hence, the learner has a sense of place in a wider community that promotes self-reliance, sustainability, responsibility, and mutual caring (McDonald, 2012). In terms of long-run effects, introducing self-managed study practices is believed (Trede & Smith, 2012) to have a positive effect on encouraging students to be a lifelong learner with self-control mechanism in mind. Implementation of student self and peer-assessment has been widely spread today, however, the question remains to be answered is whether the results obtained from such assessments can be regarded as a summative indicator of achievement or not.

Literature Review

Grading. According to Abdul Gafoor (2014), marking is defined “as a system which assigns a numerical score, used for evaluating and reporting achievement in students’ work in schools,” which was popular until the Grading System was introduced.

Absolute Grading is described as the system of grading in which marks are subsequently converted into letter grades using absolute standards. Symbols and letters being the basic components of the system, this grading can classify students according to their performances in two ways: direct or indirect (Abdul Gafoor & Jisha, 2014). Marking and grading are expected to be present at the end of the measurement in order to complete assessment process. However, whether a mark or a grade is an absolute necessity for a student to benefit from, assessment remains a question to be answered. Grading and reporting is not believed to be essential for educators to teach and students to learn (Guskey, 1994). From that perspective, checking the progress should not be regarded as grading and reporting only. Checking the progress may be seen as Formative Assessment while grading and marking may be considered as Summative Assessment.

Student self-assessment. The concept has been defined by many researchers from different aspects. Among them a commonly used one, which to a great extent summarizes the ideas about the term, identifying its nature and functions, is defining self-assessment as a form of authentic assessment in which a student reflects on her/his strengths and weaknesses in the purpose of identifying his or her learning needs and dealing with weaknesses in order to improve achievement and/or performance (Fitzpatrick, 2006). As it is seen from the explanation, self-assessment encourages the learner to take an active role in the educational process, making him or her reason own strengths and weaknesses which, in turn, empowers the student as an active learner.

On the other hand, due to autonomy input, the implementation of self-assessment may be taken for granted by some teachers, which is not desirable. Because of the great amount of autonomy and personal responsibility inherent in self-assessment, insufficient involvement, monitoring and use of feedback on the part of the teacher can adversely compromise the process and undermine the possible outcomes expected from self-assessment. Self-
assessment demands sincerity, integrity, honesty, recording skills, scheduling, ability to follow instructions, paying attention to detail, and independent thought (McDonald, 2012). The above-mentioned positive characteristics seem to be prerequisites for self-assessment, and in fact, it is believed to promote them as well in the long run. However, to achieve honesty / objectivity is quite a challenge.

Student peer-assessment. The concept of peer assessment has gained a lot of attention in recent years. Gielen, Dochy, and Onghena (2010) found the surprising fact about the research done in the field - that the number of studies nearly tripled since Topping published his work on peer assessment in 1998. As Topping’s work can be considered as a trigger of the recent intensive research, his definition needs to be credited appropriately. According to him, peer assessment is a form of participative assessment where students grade and/or provide feedback on the works of their peers (Topping, 2009). The words “grade and/or provide feedback” must be emphasized in this case, owing to misinterpretation of the word “assessment” by some teachers. Students may grade each other in the process, however, it is a not a necessary condition in peer-assessment to be considered as effective. Feedback, in its turn, is considered to be more important than grading and a necessary part of the process.

Another side of the issue is teacher himself. Based on the reviewed literature, the role of the teacher in the peer assessment system is undeniable and relatively important and worthy of more attention (Van den Berg, Admiraal, & Pilot, 2006).

How peer assessment is conducted, depends on several factors, but one of them seems to be definitely influential. It is teachers’ understanding of their role in peer-assessment and how they put their theoretical knowledge into practice (Sandvoll, 2014).

New approaches to assessment with the self and peer-assessment in mind. Traditionally, and still today, most people seem to think of assessment as a form of testing or evaluation of what students have achieved throughout a course, and learning outcomes, accomplishments have solid results in the form of a grade (Sambell, McDowell, & Montgomery, 2013). However, they might have forgotten that this type of assessment, referred to as summative, allows subsequent access to further stages of education or employment. No doubt, it is a valuable method to obtain measurable data for decision making, but the idea of formative assessment and its benefit should not be ignored in the light of summative one.

Birenbaum (2003) states that a shift has been experienced in higher education regarding the testing and assessment, the latter started to substitute the former one. Gardner (2006) describes this process as a transformation from assessment of learning to assessment for learning. According to Sambell et al. (2013), assessment for learning includes both formative and summative assessment, but the main characteristic of assessment for learning is the principle of contributing to students' learning and development, and all assessment should be based on this principle.
In other words, implementation of a new approach requires that teachers understand the rationale behind the new approach, namely learner-focused, also develop their own conceptions towards the approach, in this case from content-focused to learner-focused. Nonetheless, the conceptual change may be quite challenging, since conceptions of teaching are based on individual’s knowledge, working experience, and emotions, which are formed over a long period (Sandvoll, 2014). Although the change is not expected to happen swiftly, the willingness of educators can contribute to the global trend of assessment in a gradual pace.

There have been many factors mentioned in previous works advocating or opposing the use of self and peer assessment in grading, such as sincerity of the assessors, inflation of grades, possibility of cheating, effectiveness of rubrics and others (Andrade, 2008).

Research methods

Structure. A quantitative research was held at Qafqaz University, Azerbaijan. A survey was conducted among English language learners in undergraduate programs and the total number of students was 100 while the number of teachers was 31. 10 questions were asked from teachers and equal number of questions from students, some coinciding and some different.

Participants. Students were randomly selected from the groups of language classes. They were in the same range of age (17-20), all studying at Qafqaz University, Azerbaijan.

Teachers were selected according to their working experience (3 or more years of teaching experience), and the academic degree they hold (MA and above), to provide qualified enough answers.

Limitations. The major limitation of this research is linked to the number of participants and institutions involved in the questionnaire. The questionnaire was held in one institution only. Obviously, the group is too small to be regarded as representative in general, but it can be viewed as representative of the institution. Thus, it is believed that the research will clarify certain principles and behaviors for teachers as well as students. Moreover, as the results obtained from this research coincide with some recent research results, they do have a value. See (Siou, 2015; Hwang et al, 2015).

Questionnaire. Questions were designed to find out the conceptions and attitudes of the participants towards self and peer-assessment. They were also expected to discover the challenges faced during the implementation and interpretation of self and peer-assessment. Likert scale was used with five following choices.

1. I definitely agree
2. I agree
3. Neither agree or disagree
4. I disagree
5. I definitely disagree
The questionnaire was piloted with participation of 3 students and 1 teacher before carrying out the major one. It was supposed to contribute to the final version of questionnaire in terms of simplification of wording, expected direction of answers, and/or ideas leading to controversial answers.

The proposed questions were as following:

**For teachers:**

2. Use of self-assessment promotes the sense of responsibility for their own learning in students.
3. With a critical eye on student’s work, self-assessment encourages student to develop.
4. Students do not mind to provide and receive feedback from each other.
5. Students do not mind to be graded by each other.
6. Self and peer assessments are as reliable as teacher assessment in terms of grading.
7. I can certainly use the results obtained from self and peer-assessment as official grades.
8. The students become less objective when official grading is based on the results of self and peer-assessment.
9. Students can assess each other objectively.
10. Students can assess themselves objectively.

**For students:**

1. I am less anxious when assessed by peers compared to teacher.
2. I feel more responsible for my learning when I am asked to assess myself.
3. Self-assessment helps me to discover my own strengths and weaknesses.
4. I don’t mind to be assessed by my peers.
5. I prefer to give/receive feedback from my peers rather than give/receive grades from them.
6. Self and peer assessments are as reliable as teacher evaluation in terms of grading.
7. I would like to see the results of self-assessment as my official grades.
8. I would like to see the results of peer-assessment as my official grades.
9. I think my peers can objectively assess me.
10. I think, I am objective enough when assessing my own work.

**Findings**

The questionnaire was prepared using the web-based service "surveymonkey.com" to collect the responses from both teachers and students. The surveys were open from March 30th to April 10th, 2016.
The results of the conducted survey revealed the expected yet intriguing beliefs about student self-assessment and peer-assessment from each perspective. Two different tables demonstrate the results exposing the number of respondents in each category as well as their share in terms of percentage.

*The results of the survey designed for teachers:*

<table>
<thead>
<tr>
<th></th>
<th>I strongly agree</th>
<th>I agree</th>
<th>Neither agree or disagree</th>
<th>I disagree</th>
<th>I strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use of self and peer-assessment makes assessment stress free and lowers anxiety.</td>
<td>19.35%</td>
<td>64.52%</td>
<td>9.68%</td>
<td>6.45%</td>
<td>0.00%</td>
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<td>6</td>
<td>20</td>
<td>3</td>
<td>2</td>
<td>0</td>
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<tr>
<td>2</td>
<td>Use of self-assessment promotes the sense of responsibility for their own learning in students.</td>
<td>23.33%</td>
<td>56.67%</td>
<td>13.33%</td>
<td>6.67%</td>
<td>0.00%</td>
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<td>7</td>
<td>17</td>
<td>4</td>
<td>2</td>
<td>0</td>
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<tr>
<td>3</td>
<td>With a critical eye on student’s work, self-assessment encourages student to develop.</td>
<td>25.81%</td>
<td>58.06%</td>
<td>9.68%</td>
<td>6.45%</td>
<td>0.00%</td>
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<td>18</td>
<td>3</td>
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<td>4</td>
<td>Students do not mind to provide and receive feedback from each other.</td>
<td>0.00%</td>
<td>32.26%</td>
<td>41.94%</td>
<td>19.35%</td>
<td>6.45%</td>
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<td>13</td>
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<tr>
<td>5</td>
<td>Students do not mind to be graded by each other.</td>
<td>6.45%</td>
<td>29.03%</td>
<td>35.48%</td>
<td>25.81%</td>
<td>3.23%</td>
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<td>2</td>
<td>9</td>
<td>11</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Self and peer assessments are as reliable as teacher assessment in terms of grading.</td>
<td>6.45%</td>
<td>22.58%</td>
<td>22.58%</td>
<td>35.48%</td>
<td>12.90%</td>
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<td>7</td>
<td>7</td>
<td>11</td>
<td>4</td>
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<tr>
<td>7</td>
<td>I can certainly use the results obtained from self and peer-assessment as official grades.</td>
<td>0.00%</td>
<td>25.81%</td>
<td>41.94%</td>
<td>22.58%</td>
<td>9.68%</td>
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<td>8</td>
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<tr>
<td>8</td>
<td>The students become less objective when official grading is based on the results of self and peer-assessment.</td>
<td>6.45%</td>
<td>45.16%</td>
<td>25.81%</td>
<td>19.35%</td>
<td>3.23%</td>
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<td>14</td>
<td>8</td>
<td>6</td>
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<td>9</td>
<td></td>
<td>0.00%</td>
<td>29.03%</td>
<td>38.71%</td>
<td>29.03%</td>
<td>3.23%</td>
</tr>
</tbody>
</table>
Students can assess each other objectively.

| 0 | 9 | 12 | 9 | 1 | 31 |

Students can assess themselves objectively.

| 0 | 6 | 15 | 10 | 0 | 31 |

The results of the survey designed for students:

<table>
<thead>
<tr>
<th>I strongly agree</th>
<th>I agree</th>
<th>Neither agree or disagree</th>
<th>I disagree</th>
<th>I strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am less anxious when assessed by peers compared to teacher.</td>
<td>25.77%</td>
<td>43.30%</td>
<td>14.43%</td>
<td>12.37%</td>
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<td>25</td>
<td>42</td>
<td>14</td>
<td>12</td>
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<td>2</td>
<td>I feel more responsible for my learning when I am asked to assess myself.</td>
<td>29.29%</td>
<td>47.47%</td>
<td>10.10%</td>
<td>10.10%</td>
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<td>29</td>
<td>47</td>
<td>10</td>
<td>10</td>
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<td>3</td>
<td>Self-assessment helps me to discover my own strengths and weaknesses.</td>
<td>42.00%</td>
<td>40.00%</td>
<td>14.00%</td>
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<td>42</td>
<td>40</td>
<td>14</td>
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<tr>
<td>4</td>
<td>I don’t mind to be assessed by my peers.</td>
<td>9.00%</td>
<td>35.00%</td>
<td>31.00%</td>
<td>23.00%</td>
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<td>9</td>
<td>35</td>
<td>31</td>
<td>23</td>
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<tr>
<td>5</td>
<td>I prefer to give/receive feedback from my peers rather than give/receive grades from them.</td>
<td>29.29%</td>
<td>40.40%</td>
<td>22.22%</td>
<td>5.05%</td>
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<td></td>
<td></td>
<td>29</td>
<td>40</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Self and peer assessments are as reliable as teacher evaluation in terms of grading.</td>
<td>7.00%</td>
<td>39.00%</td>
<td>27.00%</td>
<td>22.00%</td>
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<td>7</td>
<td>39</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>7</td>
<td>I would like to see the results of self-assessment as my official grades.</td>
<td>30.00%</td>
<td>38.00%</td>
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Discussion

The collected responses revealed the common beliefs about self and peer-assessment in terms of anxiety, responsibility, reliability, grading, and objectivity.

Both teachers and students (approximately 85% and 68%) believe that self and peer-assessment do lower anxiety and make assessment stress free to some extent. Around 80% of teachers and 76% of students share the positive view about self and peer-assessment in terms of increasing the sense of responsibility in students. The role of this type of assessment as a promoter of self-consciousness and critical learning is not denied by the vast majority of participants from both sides (108 respondents out of 131).

However, when it comes to the questions about reliability, grading, and objectivity of student self and peer-assessment the agreement observed in the previous questions disappear leaving wide range of distribution of responses. Only 29% of teachers think that student self and peer assessment are as reliable as grading done by teachers, consistently, most (85%) of the teachers are skeptical about using the grades obtained from student self and peer assessment as official grades.

The answers for the last three questions designed for teachers explain the reasons behind this lack of reliability. The overwhelming majority of teachers do not think of students as adequately objective agents when grading themselves or their peers.

When the responds for the similar questions from students’ perspective are analyzed it becomes obvious that students are more willing to see the results of self and peer-assessment as official grades, yet the only remaining doubt seems to be the distrust in peers’ objectivity compared to their own objectivity.

Conclusion

This research reached the following conclusions and recommendations about use of student self and peer-assessment in the classroom.

- Student self and peer assessment is an effective tool to lower the anxiety in assessment.
• The implementation of it certainly increases the sense of responsibility in students about their own learning.

• It creates an atmosphere where students are able to have a critical eye on his/her and/or peer’s work.

• It is particularly effective when used as a formative assessment to provide/receive feedback when compared to summative assessment for grading.

• In implementation of student self and peer-assessment rubrics should be used to minimize subjectivity thus maximize objectivity.

• Rubrics should be made together and students should be trained to assess based on rubrics to overcome the distrust in peer’s objectivity.

References


