



REVIEW

Student Peer Assessment

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ABSTRACT

This paper mainly focuses on advantages and challenges of student peer assessment, which is an effective approach for students to increase the confidence and curriculum engagement as well as formative assessment.

1. Introduction

Learning used to be viewed as an individual process because of the impact of individualism.^[29] However, an increasing number of studies have been made to point out the fact that group and peer learning is better than individual learning to transfer knowledge.^[12] Consequently, a great variety of peer-learning approaches appeared^[24], and peer assessment involves different types of activities, such as peer tutoring^[28], peer discussion^[10] and so on.

In recent years, the use of peer assessment has been introduced in the curriculum to promote teaching as well as learning due to the changing conceptions of teaching and learning.^[7] Peer assessment is a way to use peers' grades and comments to assess the quality of other people's work. Nowadays, education focuses more on the "active engagement of students in the learning process,

students' responsibility, metacognitive skills and a dialogical, collaborative model of teaching and learning".^[25] In context of formative assessment, peer assessment, which is viewed as an approach to increase students' learning, plays a significant part.^[3]

The Assessment Strategies in Scottish Higher Education Project (1996) demonstrated the fact that peer assessment is the most frequently used method among a variety of assessments, including self-assessment, collaborative assessment and so forth, which can be considered as the most popular tool to engage students in assessment.^[8] Peer assessment has been regarded as a positive way to help students play more active role in the classroom to promote students' learning. Getting students involved in assessment is a great approach to give them more control and responsibility. McConnell (2000) finds out that if students get involved in decisions about learning and criteria for assessment through peer assessment, students' relationship

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and their studies will qualitatively better than those who are treated “recipients of teaching”. As a result, the more active role can give rise to the greater curriculum engagement.^[18]

2. The Definition of Peer Assessment

Different people hold various ideas of the definition of peer assessment. Falchikov (2007) defines the peer assessment as the fact that “students provide either grades or feedback to their peers on a product or performance, based on the criteria of excellence for that product or event which students may have been involved in determining”.^[9] In Strijbos and Sluijsmans (2010) points of view, peer assessment refers to an educational mechanism in which students, who are inspired to participate in the classroom discussion and reflection, and judge peers’ works and performances both qualitatively and quantitatively.^[26] Topping (2009) believes that peer assessment can be viewed as a mechanism for students, and aims of peer assessment are to determine and examine the level, value, and quality of performances as well as products of other students. In addition, peer assessment can be found extensive spread application in various programs and curriculums.^[27]

3. Peer Assessment Matters

Since peer assessment has become increasingly popular in both teaching and learning, it is believed that peer assessment has several benefits. Race (2001), who makes the research on how to get students involved in their own assessment, shows that there are seven good reasons why teachers undertake and introduce peer assessment in the teaching process.^[21] Besides, in Hamilton’s (2000) study, peer assessment plays a policing function and has some benefits as well as advantages to both students and teachers.^[10]

It is possible that the peer assessment can help students enhance the confidence and curriculum engagement. Denehy and Fuller (1974) find out that involving students in the peer assessment can give rise to a positive attitude toward learning and active participation in the classroom through an analysis of an attitude questionnaire.^[6] Besides, the result of the questionnaire designed by Sivan (2000) related to the peer assessment demonstrated the fact that a large amount of students believe that peer assessment help them increase the confidence and improve their presentation skills, and they also have intention and willingness to set the criteria of assessment by themselves.^[23] In addition, through the interview, Sivan (2000) found out differences between experienced peer assessors and inexperienced peer assessors.^[23] For example, experienced peer assessors

focus more on how to improve the assessment procedures; while inexperienced peer assessors pay more attention to the fairness of assessment.^[23] There is no denying that the importance of peer assessment is recognized by most students because such assessment can help them get involvement in learning and develop their critical thinking and analysis abilities.^[24] Race (2001) indicates that peer assessment can let students have a sense of ownership, which can strongly increase their participation in the learning process.^[21] If students feel that they can control their own learning, they can learn more deeply. Black and Wiliam (1998) find out the same result that students would learn more, improve their confidence and learning skills through the research about the impact of the peer assessment.^[2]

In spite of the increasing students’ confidence, peer assessment can also improve students’ understanding as well as mastery. The similar questionnaire was designed online by Sitthiworachart and Joy (2003) to check students’ view on peer assessment on program learning.^[22] More than 60% students felt that when assessing or marking other people’s work, they can find out their own mistakes and have a better understanding of the computer programming, which can promote them to learn better.^[22] Clarke (2005) thinks that peer assessment is meaningful and valuable because students often give and receive criticisms of their work from other people instead of the traditional way of being assessed by teachers.^[5] During the process of peer assessment, mistakes are not considered as failure, but regarded as possibilities to further learning. Race (2001) shows clearly that peer assessment allows students to learn from peers’ success as well as weaknesses, which can lead to the deepest learning experiences and promote students learning skills.^[21]

Just like what Slavin (1995) finds out that students tend to take part in the assessment and want to establish the criteria by themselves^[24], Race (2001) holds the viewpoint that applying and setting criteria to peers’ work is the most effective and productive approach to develop and deepening students understanding of the learning materials.^[21] As a learning tool, peer assessment can provide students with skills to make judgments about what forms a high demanding work.^[27] Under this kind of circumstances, peer assessment provides students with profound learning rather than superficial learning. Once students master the ability of measuring and judging other people’s work, which is much more strict learning process than just reading and writing, students can do their own assignment with high standards and requirements.^[21]

McConnell (2000) demonstrates that peer assessment can lead students to a greater classroom engagement.^[18]

During the process of evaluation, students will use their related experience to assess other people's assignment, ask relevant questions and participate in the assessment from students' standpoints rather than teachers'.^[18] Kearsley (2000) also puts forward the similar point of view that students would feel that the feedback from their peers is quite useful and meaningful to their learning because it is from students' perspective instead of teachers'.^[13] However, Kearsley (2000) shows his concern with the fact that students tend to give their peers' negative evaluation; so he wants to remind students to be constructive and positive in their comments as well as feedback.^[12] What's more, Falchikov (2000) made a research about the peer assessment, and results suggested that feedback from peers who have related experience may be more positive than those received from teachers and experts.^[7]

What's more, peer assessment provides students with some other benefits which are not mentioned before. For example, Vickerman (2009) put forward the idea that peer assessment can enhance students' motivation of learning and their responsibilities, and also help students develop skills for lifelong learning.^[30] In addition, the formative assessment produced by peers can help complete learning cycle and inspire the ongoing development of skills, such as presentation skills, writing skills, vocational skills and so forth.^[30]

Peer assessment benefits not only students, but also teachers. Peer assessment can be viewed as a shift responsibility from teachers to students. A study designed by Lin (2001), which teachers empowered students to do the assessment in the class, finds out that students have a strong share of control and want to take part in the assessment process.^[15] As a result, peer assessment is a kind of transferring power and both students and teachers are changing their roles. A few teachers use the peer assessment to save time and reduce their working load so that teachers can stand back to observe students. Besides, as an effective assessment tool, peer assessment can give teachers a more comprehensive and accurate picture of how students perform and act in the group work.^[4] However, for most teachers, peer assessment grades are only recommendations and teachers would make the final mark according to the criteria. Teachers are changing their role from assessors to trainers and guides to monitor the whole assessment process and carry out the quality check, which is also a quite significant part to play.^[8] As a result, the focus shift of teachers is more towards the quality of the teaching and exploration of further knowledge.

4. Challenges of peer assessment

Despite of the benefits and advantages, peer assessment

is under questioning and challenges as well. There remain many unsolved problems that need to improve.

The first challenge is that many teachers argue that they are neglecting their responsibilities if they get students in the assessment.^[8] Many students, at the same time, think that only teachers can do the assessment and they have no ability to do so. It is known to all that the more students are involved in the curriculum, the better the effect of peer assessment is to improve learning and encourage personal and professional development.^[8] As a result, it is urgent for both teachers and students to be aware of their changing roles in the assessment. Teachers need to explain the reasons why students can expand their role and the benefits of the peer assessment in relation to their own learning.^[8]

The second challenge of peer assessment is that students are not qualified or suitable assessors because they are lack of knowledge and experience to do the peer assessment and carry out tasks.^[8] It is believed that peer assessment is a kind of mature skill which can be carried out in the classroom. Lampham and Webster (1999) indicate that students recognize the fact that they have no confidence to mark the peer work properly because of the lack of sufficient knowledge and experience.^[14] Most students hold the idea that they are short of skills to do the peer assessment and they think only teachers can assess their assignment.^[15] It is believed that students are short of adequate knowledge to assess other people's work appropriately. However, although students have the ability and knowledge to evaluate peers' work, they are also challenged whether they can assess each other in a fair and responsible way.^[11] Teachers need to train and guide students before the assessment to let them understand how to evaluate other's work and make appropriate comments.^[8] It is important for teachers to tell students the criteria of the assessment in details and teach them how to comment on other people's work in order to make students become thoughtful and reliable. It may take a long time to do the preparation work and increase the confidence before doing the peer assessment, but if students can command such skills, it would benefit both teaching and learning process via student-to-student interaction rather than teacher-to-student interaction.

The third challenge is that students' ability varies, which may cause the potential biases of the peer assessment.^[16] Mathews (1994) indicates that perceptions and viewpoints vary between people, so students may assess according to their own ideas which may differ from their peers.^[17] As a result, students would encounter difficulties in making assessments because of various ideas or cultural differences, which is hard to avoid. Mathews (1994)

suggests that it is essential for students to do the practice to master the assessment skills. Another feasible approach is that marks or comments can from multiple students instead of single assessor, which can make the feedback and comments more comprehensive.^[17] Although it is difficult to handle the cultural differences, it is better to do more preparation or background research to overcome such a challenge.

Some other challenges mainly focus on the fairness of the peer assessment. Students may award each other with high marks if they have close relationship; or may give low marks if they do not get along with each other well.^[8] McDowell (1995) shows the negative influence of peer assessment if students are cheating between peer markers due to the friendship, prejudice, favoritism and so on, which will lead to over marks or lower marks.^[19] In this kind of situation, teachers should play active role in guiding students to make assessment in a fair way; and teachers can review students' comments and grades to give a final mark from a professional standpoint. Mathews (1994) advises that if students have doubts of the marks and want to justify the decisions, they can ask teachers for help. However, the most effective way is to let students desist from collusion, which can allow students assess in a fair and reliable way.^[17]

What's more, peer assessment requires adequate preparation, particularly in the planning stages.^[1] It is not common for students to encounter difficulties because they lack the preparation and prior experience for the certain task. Purchase (2000) notes that students may find that it is hard to interpret tasks, and view the criteria as ambiguous.^[20] Beaman (1998) suggests that students can rehearse the peer assessment in advance to discover the potential problems.^[1] During the rehearsal, students do not need to mark each other.

5. Conclusion

All in all, although peer assessment is under doubts and challenges in some aspects, such as fairness and lack of training and experience, it is still an effective and useful approach for students to increase the confidence and take part in the curriculum as well as formative assessment. In addition, peer assessment can also help students develop their skills, improve the understanding of knowledge and enhance responsibilities and motivation of learning. However, there are still many problems and challenges of peer assessment that cannot be avoided. For example, teachers should provide students with training and let them get involved in the criteria setting so that both teachers and students can acquire the positive effects of peer assessment.

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