PEER AND SELF-ASSESSMENT FOR LEARNERS IN HIGHER LEVEL OF EDUCATION

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Abstract

There has been increasing interest in the use of peer and self-assessment for learners in universities. Such interest is mostly due to the awareness of the significant importance of the two kind of assessments toward students' learning outcomes. Educators suggest that peer and self-assessment could encourage learners to be more responsible and reflective. This paper will investigate the definition of peer and self-assessment, evidences that could justify the effectiveness of peer and self-assessment, and some numbers of principles of effective practice in the use of peer and self-assessment.
Keyword: peer assessment, self-assessment, reflective learners, outcomes

Assessment plays significant role in every level of education. Probably the main objective of an assessment is to improve students' learning and reflection. Since every method of assessment will provide some sort of valid information for teachers, parents and educators about student's progress in their learning, therefore basically assessment will bring "sense of direction" especially to the students themselves. As Orsmond and Merry (2000) state that in order to allow students to achieve the desired learning outcomes, the correct and appropriate assessment practice must be employed. Assessment may come in various forms and the result will reveal a sense of more permanent learning and clearer picture of students' ability (Astin, 1991).

Among some forms of assessment that have been practiced in higher education nowadays, there are two forms that are ultimately influential and beneficial particularly when people think about the relevancy of it with the students' future learning (Falchikov, 2007). They are peer and self-assessment. Peer and self-assessment have been studied in various situations and actively pursued as a means by which students are given more control over their learning and assessment achievement (Brown and Knight, 1994). Peer and self-assessment exercises are seen as means by which general skills of students can be practiced and developed. Recent days, the application of peer and self-assessment has grown rapidly, especially for students in the tertiary level. In addition, there is growing emphasis in higher education institutions that students should be developing content knowledge that can be instantly and continously used in the workplace such as teamwork, decisions-making skill and problem solving skills (Astin, 1991). Formal higher education becomes significant stage for every student because in this stage they start to prepare themselves to their professional work. Furthermore, in this stage students sharpen their skills and knowledge required for their upcoming professional work. Graduates entering the professional world are being challenged to demonstrate high level of knowledge, attitudes and skills.

Undeniably, every form of assessments that the students have undertaken during their study will contribute to their own

recent and future learning. McPherson (1999) emphasized that peer and self-assessment are methods of evaluation that has received higher attention in the academic literature over recent years due to the paradigm shift in higher education toward student-centered learning and desire to improve student motivation through enhanced engagement in classwork and assessment tasks. One of the most desirable outcomes of education for the learners in university is probably an increased ability to make independent judgement about their own and other's work (Brown & Knight, 1994). Overall, the central feature of all higher education is the development of autonomy in the learners that can be developed often by employing peer and self-assessment.

Peer and self-assessment sometimes combined or considered similar. In fact, both of these assessments share some potential advantages in common. Peer and self-assessment is often successfully employed in group work. Self and peer-assessment give learners a greater ownership of the learning they undertake. As McLoughlin and Luca (1994) also maintained that peer-assessment can help to develop self-assessment. Peer and self-assessment are alternative assessments that involve students deciding what value their own and it enables students to self-regulated activity. There are numerous reasons why students should be involved in assessing their own work. One of the reasons is that assessment always involves students to assess their own or their peer's work, hence it provides opportunities of rich and reflective learning. Students in general and students in higher level of education in particular, will be expected to practice self-evaluation in every area of their lives of graduation and it is good

exercise in self-development to ensure that these abilities are continuously extended. Therefore, the effectiveness of peer and self-assessment to create critical and reflective learners should be maintained by give more attention to the basic rules of effective assessment practices.

The definition of peer and self-assessment

According to Brown and Knight (1994) peer assessment is a process where students are involved in and are responsible for assessing their own piece of work. Undoubtedly peers learning is playing a significant part in current higher education (Falchikov, 2007). Students learn from each other in the learning process that they have undertaken including in the process of peer and self-assessment. Peer assessment is an assessment of students by other students to provide constructive feedback, which aims to improve the quality of learning and empowers the learners (McPherson, 1999). While Topping (1998) as cited in McLoughlin and Luca (2004) defined peer assessment as: " an arrangement in which individuals consider the amount, level, value, worth, or successfulness of the products or outcomes of learning of others of similar status". Dochy, Segers and Sluijmans (1999) stress that peer assessment is not only procedure to grade students' work, it is a part of learning process through which skills are developed. It is very difficult to deny that students can become better learner when they engage in deliberate thought about what they are learning and how they are learning it. Students assessment of other student work, both formative and summative, has many potential benefits to learning both for the assessor and the assessee. Firstly, it can encourages

students autonomy in their own learning process and it can stimulates higher order thinking skills. Secondly, peer assessment can encourage a greater sense of involvement and responsibility to students and establish a clearer framework and promote excellence (Spiller, 2009).

Self-assessment refers to people being involved in making judgements about their own learning and progress, the achievement and the outcomes of their learning (Dochy, Segers & Sluijmans, 1999) which later continously contributes to the development of autonomous and responsible individuals (Sambell, Mcdowell & Brown, 1998 as cited in McPherson, 1999). The judgement they make may be about what they have done, what they should be doing or why they should be doing it. Commonly, course evaluations provide lectures with feedback that generally focus on what the lectures do. But with student self-assessment, it becomes possible to focus more directly on the students. Self-assessment has often been reported as an effective tool because it helps students to develop better understanding of the purpose of the assessment and the assessment criteria (Orsmond & Merry, 1997) as well as improves students' learning. Moreover, self-assessment encourages students to become independent learners and it can also increase their motivation. Self-assessment helps students to reflect the learning that they have undertaken in order to improve their future learning. In addition, Boud (1981) implied that in this kind of reflection, students step back to think about their learning strategies and their progress. Learning can only be undertaken when the learners monitor what is known, what remains to be known

and what is needed to bridge the gap between the two.

Experiences of students who have undertaken self-assessment exercise (particularly in higher level of education) are extremely relevant with their future careers where students are mostly expected to think critically and to develop specific skills needed when they proceed to professional working life such as problem solving and team working (Falchikov, 2007). Moreover, self-assessment is a way to increase students' active participation in their own learning and to foster reflective learning (Dochy, Segers & Sluijmans, 1999). Both peer and self-assessment are beneficial particularly to meet the formative purpose, where these assessment can be done in shorter time than summative one.

There are several purposes why peer and self-assessment procedures are carried out. First, and probably the most important reason is to promote and to facilitate student learning (Orsmond, Merry & Reiling 2000; Yorke, 2008). These form of assessments tend to shape every part of student learning. These assessments equip students with ability to revise their past learning and to prepare for future learning (Boud, 1981). By practicing peer and self-assessment, students are expected to sharpen the transferable skills needed for lifelong learning. These two assessments have an immediate purpose to get an estimation of students' achievement which is used to help students themselves in the learning process. The result of the assessment or the feedback given is used to help students to improve their next performance. Peer and self-assessment must not only serve as tools for crediting students with certificates but also as valuables for the monitoring of students'

progress and to direct them (Dochy, Segers & Sluijmans, 1999). Second purpose is to enable students to become reflective learners and reflective practitioners when they proceed to the professional life (Spiller, 2009). Peer and self-assessment encourage reflection on one's own learning. The other purpose is to get evidences to justify the quality of the learning and learners (Yorke, 2008). To be able to justify that learning gives the full benefit to students and to get broad pictures of students' achievement after certain time of learning, the assessments need to be employed.

Both peer and self-assessment can be used to help inform of the learning environment while improving self-regulation skills of students. Often, because of their complicated procedures, they are used for formative purpose rather than summative one (Knight and Yorke, 2003). Nevertheless, lectures and tutors should never avoid to employ it in every kind of learning environment, whenever possible, because it helps students to reflect to their own learning and develop students' critical thinking. Peer and self-assessment foster reflection on the students own learning process and learning activities.

Evidences that could justify the effectiveness of peer and self-assessment

The main objective of peer and self-assessment is to create critical and reflective learners. Despite of a problem that often occur in assessing this reflective learning and justifying its real contribution to improve student's learning and skills, collect evidences as a result of assessment is necessarily significant. Assessment requires the gathering of evidence of students' performance over a period of time to measure learning and understanding of students. With evidences,

lectures or tutors can get a picture of indication how far their students have grasped the knowledge and skills and whether or not they know what to improve in the assessed learning subject. Hall (2009) revealed one of the many ways to get to know whether students have improve their learning; he suggested that teachers or lectures can use reflective diaries. A reflective diary is a written comments by students that covers students' reactions, comments and problems regarding the assessments or tasks. Every time a learning process has taken place, it can be used by students to write down every opinion and comments about their recent assessment and later they can come back to read and reflect about all aspects that she/he has learned to recognize what she/he has learned and to improve what she/he thinks need to improve. Reflective diaries, as the name suggests, are more concerned with demonstrating reflection on an experience in learning (Hinett, 2002).

The other common method to collect an evidence of self-assessment is portfolio. Although a portfolio is mostly used for summative purpose but it is also can be used for formative purpose. Judith (2009) argued that in recent years, portfolio of students' performance and achievement has gained attention from educators, who view them as a way to collect evidence of students' learning. Portfolio engages students in the investigation of a real-world problem by gathering and sharing information, communicating ideas and findings and refining perceptions. With portfolio, students learn how to interact effectively with their lectures to gain fuller picture of their own achievement and progress. The most obvious benefit of preparing portfolio is the learning

reflection (Judith, 2009). Portfolio improves the students' ability to reflect to their own learning. Hinett (2002) stated that reflective diaries and portfolio are increasingly used in higher education as means of of facilitating or of assessing learning.

In university level, students will also do some sort of work in collaboration with other students (working in a group). It can be in a form of group discussion, where student are expected to discuss and to find solutions of a problem (problem solving) or maybe in a form of group project where students are asked to complete a project. In this kind of activity, lectures can also encourage self-monitoring by having each student assess how often and well she or he (and other group members) performed the targeted skills and actions (Johnson et al, 1994). One way to do this is to give each group member an assessment checklist or questionnaire. These forms should ask each student for self-assessment about how often and how well she or he performed the targeted skills and other expected behaviours. Also, it can include the "you" statements about how well other members' of the group actions were perceived as helpful or unhelpful. This kind of checklist in assessing students' learning also can be used in the seminar presentation method (Knight and Yorke, 2003). Prior to the individual presentation, the students are given feedback checklist contains some criteria that may be agreed in assessing the presentation. During presentation of one student, the rest are expected to do peer assessment by using the checklist. After all students have had their turn to present materials, then the feedback (checklist) were collected and returned to each student.

All of the evidences mentioned previously is considerably significant in gaining perspectives about students' learning. Generally, they seem to be helpful in personalising and deepening the quality of learning. Moreover, these evidences usually provide tutors and lectures information about how far students understand about their reflection in learning. Ability to do self reflection is expected to be owned by students because reflection enables students to think about what and how they learn and to understand that this impacts on how well they do.

Some principles of effective practice in the use of peer and self-assessment

Peer and self-assessment is much more than students marking their own or each other's work. Boud (1981) argued that to improve learning, the activity must be an activity that engages students with the quality of their own work and help them to reflect on how to improve it. Also, assessment should enables students to give each other valuable feedback so they can learn from and support each other. Of course, to get the full benefits of these two kinds of assessment there are some principles that must be kept in mind and continously practiced.

First principle is that the assessment criteria must be negotiated and agreed between lectures and students in advance. McPherson (1999) stated that assessment techniques work best where learning outcomes and assessment criterias have been articulated in advance, shared with students and assessment criteria agreed. In other words, both lectures or teachers and students should share common criteria. Also, Boud (1981) emphasized that the most critical other than doing the assessment itself, is deciding which criteria to use. So the clarity of the criteria must be

discussed and agreed before students start to undertake their work (Hall, 2009). When agreed criteria are set at the start of a course or a learning process, students will fully familiar with it. Lectures or tutors should provide clear marking criteria and involve students in discussing or negotiating the criteria whenever possible. Students must have a clear understanding of what they are to look for in their or their peer's work. Once again, this step will give the students better understanding of what they are expected to complete in the assessments and they will have clearer vision on what effort to do to meet the criteria. Some literatures such as Dochy *et al* (1999) and Brown and Knight (1994) have revealed the significance of having the criteria agreed both by students and lectures or tutors. Students may have difficulties to understand a criterion which is solely come from the lectures. Students must be involved in constructing criteria of the assessment (Orsmond, Merry and Reiling, 2000). Agreed and clear criteria also enhance realibility of an assessment; students or lectures can turn back to the criteria whenever they need to clarify it in order to avoid any ambiguity that may occur when students undertake the assessment. Furthermore, as noted by Spiller (2009), active participation by students in assessment design and criteria is more sustainable for subsequent working life. One way to make sure students understand this type of assessment and the process that they have to go through to meet the criteria is by giving the students practice session with it.

Second principle is about the situation of the classroom. For peer assessment to work effectively, the learning environment in the classroom must be supportive. Students must feel comfortable and trust one another in order to provide honest and constructive feedback (Brown and Knight, 1994). Interaction and communication are the key words for the supportive classroom. Ensuring the supportive atmosphere of a classroom before allowing students to do peer-assessment is a must.

The third principle is about the assessor of the assessment. Whenever peer assessment is chosen as a form to assess students' work, anonymity of the assessor should be considered to be employed. Despite the fact that students may feel more relaxed about questioning and examining the feedback from the assessment when this is provided by peers rather than lectures or tutors, but inevitably, a problem may occur whenever peer-assessment is applied. Occasionally, students can over-mark each other's achivement because of friendship or loyalty (Brown and Knight, 1994). In addition, it is not surprising that a cohort student who have worked together will be unwilling to give low mark to their peer, especially when the assessment count toward end of a course or final degree classification. In peer assessment, it is sometimes the problem that students will conspire to give each other high marks or only "nice" but non-constructive feedback with the statement "I will give you a good grade/feedback, if you give me a good grade/feedback". Peer pressure on students not to mark down their colleagues point out that this can be done anonymously by students. Study by kelmar (1993) as cited in Mcpherson (1999) has proved that students tend to award slightly higher grades for their peers than do lectures. To avoid these kind of problems, anonymous feedback or grading will be a good solution, where students do not know who assess whose work.

The fourth significant principle is to give feedback as a result of assessments on time. A lot of studies of human learning have shown that the learning process can be substantially enhanced if the learners have appropriate knowledge of results showing how much progress they have made and pointing out specific areas where additional revision is needed (Brown and Knight, 1994). Therefore, feedback should be given rapidly and appropriately timed so that it can be used formatively. Because students also mainly use feedback to shape later pieces of their work. Students will somehow considered feedbacks as useless and probably they will not read it let alone act on it, if it is given in the end of a course. Once students finish a paper or any other form of final assessment, interest in any meaningful feedback diminishes considerably. Hall (2009) also implied that giving "on-time" feedback can trigger students' interest to act on the feedback. Orsmond and Merry (2000) suggested that one way of ensuring that assessment are effective in directing learning is by providing timed and constructive feedback to students. In other words, to make learning more meaningful, feedback from tutors or peers and student learning should not be separated. Moreover, a constructive feedback should be specific enough, so that the students can instantly know where they went wrong. Students should not only be offered comments about the overall quality of their work but also specific strengths and weaknesses of their work. Where appropriate, it should also include suggestions for improvement. Students deserve to know what they can do to improve their work or given tasks next time around. Astin (1991) suggested that an effective feedback should cover cognitive skills such as thinking, logic,

writing and analysis. Moreover, Astin (1991) stated that "assessment and feedback should be ongoing, iterative proceeding that is integral to the learning process rather than a one-time activity carried out only at the end of the learning process". (Astin, 1991: 15)

The fifth principle is regarding the manageability of an assessment. An assessment must be achievable and manageable for both staff and students in terms of workload and available resources (Astin, 1991). The workload associated with assessment requirements should be reasonable and manageable, and as Orsmond and Merry (1997) has repeatedly suggested that the assessment task should be described early in the course so that students have adequate opportunity to plan for their learning. An excess of workload can prevent student from adopting deep learning approach (Orsmond and Merry, 1997), in which they try to cope with the workload by adopting surface learning approach. This suggestion is also coherent with what Hall (2009) has suggested that in order to complete manageable and achieveable assessment, lectures or tutors should only assess the significant content knowledge or skills rather than assess trivial things. Additionally, an assessment should be cost-effective. Budget also should be considered as a requirement of manageable assessment.

Last principle is about the situation and condition needed to accomplish the effective practice of the assessments. Students will need opportunities for rehearsal in a non-threatening situation in order that they can make mistakes and find out about the problems in a non-marking environment (Astin, 1991). Tutors or lectures should give students a great deal of time to practice in preparation for peer

and self-assessment; they can not just directly to be asked to employ the peer or self-assessment without any proper rehearsals and preparations. Moreover, lecturers or tutors who use peer assessment frequently can help students develop trust by forming them in a small groups in the beginning of semester and having them working in the same groups throughout the term (McLoughlin and Luca, 2004). Also, it is best to begin by introducing peer feedback using a simple task with clearly specified criteria for performance (Orsmond, Merry and Reiling, 2000). Often, this helps to overcome any initial shyness or reluctance to engage with the process. As soon as students begin to understand and learn about basic principles of giving and receiving constructive comments or feedbacks, then they can develop some skills of facilitating each other's learning.

The ability to self-assess and to do peer assessment is key foundations to a career as a lifelong learner. Due to the growing demand for lifelong learners and reflective practicioners nowadays, the basic of higher education and the approach of assessment have been directed toward lifelong learning. By practicing peer and self-assessment, students will gradually treat assessment as part of their learning and later in turn they will consider that make mistakes are opportunities rather than failures. In other words, these assessments motivate students to take steps to further learning, despite of mistakes that they made in the process. In higher education stage, assessments often helps students to recognize and improve their own abilities and skills that they need in their professional life to solve unforeseen problems (Dochy, Segers and Sluijmans, 1999). One important message to be remembered, higher education is the key stage for all those proceeding to professional work. In this stage, students will have opportunity to gain and to develop skills such as leadership, teamworking and problem solving skills. Therefore, it is necessary to develop these skills as a part of the learning process in higher education. All of these skills are also developed by practicing peer and self-assessments continously. An assessment in all courses offered in a university, should give explicit emphasis to skills for lifelong learning such as the development of written and oral skills, research skills and high order of thinking skills (McPherson, 1999). Of course, numerous significant principles are needed to be acknowledged and practiced to develop the successfulness of all form of assessments including peer and self-assessments.

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