



---

## **Affective factors of peer-assessment: perceptions of learners in English as a second language writing class**

Pushpakumara P.B.S.L.\*

Department of English Language Teaching, University of Sri Jayewardenepura, Nugegoda, Sri Lanka

---

### **ABSTRACT**

*Peer-assessment has drawn attention as a viable alternative assessment in the recent past. There is empirical evidence that peer-assessment enhances learner performance and various other skills. Further, previous studies that have examined the affective factors related to peer-assessment suggest that it reduces learner anxiety and stress and enhances confidence and motivation. However, some argue that peer-assessment increases stress, and that learners develop negative attitudes towards peer-assessment. These mixed views seem to have prevented teachers from incorporating peer-assessment into their teaching. Therefore, an investigation to determine if learners believe that peer-assessment reduces anxiety and stress and enhances their confidence and motivation will shed light on this topic. The present study was conducted using one hundred and twenty-five (N=125) participants in a state university in Sri Lanka to explore their perception regarding the potential of peer-assessment to lower students' anxiety and stress and enhance their motivation in English as a second language writing class. Qualitative data obtained through a questionnaire, focus group interviews and written reflections were analyzed using the qualitative content analysis method. The results suggested that peer-assessment reduced anxiety and stress and enhanced motivation because peer-assessment which took place among peers encouraged learners to openly discuss and freely exchange ideas on their writing. However, some participants identified limited language proficiency, limited competence in using marking scheme to evaluate English writing and friendship related biases as challenges and demotivating factors of peer-assessment in the English writing class. The participants of the study proposed group-based peer-assessment, use of a comprehensive marking scheme and regular practice in peer-assessment as solutions to overcome these challenges. Therefore, group-based peer-assessment using a suitable marking scheme can be recommended as a viable alternative assessment method to develop English writing skills of students in higher education institutes in Sri Lanka and other similar contexts.*

**KEYWORDS:** *Alternative assessment, Affective factors, English writing skills, Peer-assessment, Perception*

## **1 INTRODUCTION**

Peer-assessment is a widely discussed method of alternative assessment today (Topping, 2017; Double, McGrane & Hopfenbeck 2019). Learner centred peer-assessment which is defined as an arrangement for learners to consider and specify the level, value, or quality of a product or performance of other equal-status learners offers various benefits (Topping 2017). Most importantly, empirical evidence suggests that those learners who are involved in peer-assessment outperform others who receive teacher feedback only (Double, McGrane & Hopfenbeck 2019). Further, previous research findings suggest that peer-assessment develops learners' cognitive competencies such as critical thinking and higher-level thinking (Falchikov 2005), promotes learning, enhances learners' personal, intellectual, and professional skills (Zhu & Carless 2018) and social competencies such as communication skills, collaborative skills and lifelong learning (Nilson 2003). Also, there is empirical evidence in peer-assessment literature that peer-assessment reduces test anxiety and stress and enhances students' motivation (Peng 2009 & Kang'ethe 2014). According to Topping (2005), a trusting relationship with a peer who holds no position of authority might facilitate self-disclosure of ignorance and misconception, enabling subsequent diagnosis and correction (Topping 2005). Tsai et al. (2001) maintain a similar view and claim that peer-assessment enhances the student's higher thinking skills and motivation to study. According to Sivan (2000), the direct involvement of students in the assessment process by means of techniques such as peer-assessment enhances students' sense of ownership, responsibility, and motivation. Further, Topping (2009) suggests that learner involvement in setting assessment criteria helps them feel a sense of ownership and decrease any anxiety. Thus, there is empirical evidence that peer-assessment reduces test anxiety and stress and enhances students' motivation.

The literature on peer-assessment reports contradictory findings too. According to some studies, peer-assessment increases stress, and learners develop negative attitudes towards peer-assessment (Eg: Guerrero & Villamil 1994; Nelson & Murphy 1992; Pope 2005). Liu and Sadler (2003) argue that these attitudinal problems can create a sense of discomfort and nervousness between participants, and, consequently, peer-assessment can become an unconstructive activity. Pope (2005) conducts an experimental study to measure the effects of the type of assessment and gender on student stress levels and performance and finds that peer-assessment increases stress. However, Pope (2005) concludes that stress still leads to increased performance. According to Pond et al. (1995), students have low motivation for peer-assessment when peer-feedback has no bearing on final assessment. Group behavior is another factor that determines motivation among peers involved in group-based peer-assessment. Nelson and Murphy (1992) and Nelson and Carson (1998) examine the behavior of peer writing groups and find that some group members are hostile towards their peers, overcritical of the peers' writing and behave like attackers who express critical comments. Consequently, peer writers fear being criticized for their language errors and become highly dissatisfied with the peer writing group. Liu and Sadler (2003) also agree with this and point out that the manner in which some learners respond to their peers' writing generates a sense of discomfort and uneasiness among the participants. Therefore, Peng (2009) points out that if such problems exist, peer-assessment could become an unconstructive activity.

### **1.1 Significance of the study**

Despite the potential benefits of peer-assessment, learner centred peer-assessment has not become a common practice in educational settings. The usefulness of peer-assessment is devalued by some researchers

claiming that peers usually offer vague non-specific feedback and provide no solid explanations (Min 2005). Further, previous peer-assessment studies that have explored the learners' perception about affective factors such as motivation, anxiety, fear, and embarrassment have reported mixed results (e.g. Guerrero & Villamil 1994; Nelson & Murphy 1992; Peng 2009; Pope 2005). Also, published research discussing the learners' perception about peer-assessment in the Sri Lankan educational context is limited (Kommalage & Thabrew 2011). It is important to understand how learners, the key stakeholders of our educational programmes, perceive peer-assessment because it is learners who receive the advantages and disadvantages of new innovations in education such as peer-assessment. Yet, as Barkhuizen (1998) points out "...learners are hardly ever asked in any overt systematic way about their language learning experiences" (Barkhuizen 1998, p.85). Chavez (2003) also argues that "...only the learners themselves can allow us to glimpse their attitudes, judgments, and perceptions" (Chavez 2003, p.164-165). The present study, therefore, set out to bridge this gap by investigating English as second language (ESL) learners' perception about peer-assessment and attempted to shed light on this underexplored area in Sri Lanka. Accordingly, the following research question was formulated.

How do Sri Lankan ESL undergraduates in writing class perceive peer-assessment?

Peer-assessment in ESL writing class was used due to several reasons. Primarily, writing entails a composing process where learners focus not on a final product but on a nonlinear generative and gradual process whereby writers collaboratively discover and construct meaning jointly (Zamel 1983). According to Berg (1999) and Min (2005), peer-assessment is popular in particular in ESL and English as a foreign language (EFL) writing classes as giving feedback to improve a partner's initial drafts

during composition lessons is affectively, cognitively and linguistically beneficial to develop feedback provider's composition-writing skills. Further, writing requires the learners to use punctuation, grammar and vocabulary correctly. Therefore, writers need to consider stylistic factors such as choice of words, sentence complexity, text cohesion, content, effective paragraphing and organization of the writing task. Due to these reasons, effects of peer-assessment on learners' affective factors such as anxiety, stress and motivation were examined in ESL writing classes.

## **2 RESEARCH METHODOLOGY**

### **2.1 Research design**

Qualitative data collection tools such as interviews, questionnaires with open ended questions, and written reflections were used to understand the participants' perceived views regarding peer-assessment. Interviews are particularly useful to investigate phenomena that are not directly observable, such as learners' self-reported perceptions or attitudes (Mackey & Gass 2005).

### **2.2 Participants and materials**

Altogether one hundred and twenty-five (N=125) participants were involved in the study. First, eighty-three (N=83) first-year students following a six credit 300 hour long common English as a second language (ESL) programme at a state university in Sri Lanka were randomly selected to the study. The participants were randomly selected because the purpose of this study was to examine the perception of students performing peer-assessment exercises in mixed ability groups where learners with different proficiency levels share knowledge with each other. They were in their early twenties (Mean age = 21, SD = 0.81), and were from different parts of the country. Further, they represented diverse socio-economic backgrounds. They received

instruction on every weekday from 8.00 a.m. to 10.00 a.m. During the one-year course, the participants were asked to assess nineteen writing tasks including paragraphs, essays and a letter written by their peers and offer feedback and comments to the peers. When giving comments in writing, the learners used English. However, they were allowed to discuss and offer feedback orally in their mother tongue. Also, a marking scheme adapted from the Advanced Level marking scheme for the essay questions issued by the Department of Examinations, Sri Lanka in 2016 and the rubrics developed by Jacobs et al. (1981) was used to assess peers' writing. The class teacher trained the students to use the marking scheme as objectively as possible. After the participants gained hands on experience in peer-assessment, they were ready to share their experience regarding the merits and demerits of peer-assessment and challenges for effective implementation of peer-assessment and suggest as to how peer-assessment can be implemented more effectively. Their views regarding peer-assessment were gathered through a questionnaire and focus group interviews. As the selection of participants from different courses ensures the reliability, validity and accuracy of data (Dörnyei 2007), forty-two ( $N=42$ ) second year students pursuing English as a major in the same university were also selected for the study. They were involved in four peer-assessment exercises where they exchanged feedback and comments on four different English essay writing tasks each of which consisted of about 200 words. At the end of the study, the participants shared their experience through a reflective essay on the topic "Advantages and disadvantages of peer-assessment vs teacher assessment." Seven focus group interviews with six members in each group were also conducted with the participants of the English major students to further explore their perception regarding peer-assessment. Approximately, each focus group interview lasted for about 15 minutes, and the interviews were held in English as the students

were pursuing English major. All the participants involved in the study were given pseudonyms in order to protect their identity.

### 2.3 Data analysis method

The present study used the deductive qualitative content analysis method. Accordingly, the themes listed in Table 1 that emerged from the peer-assessment literature were used to analyze the data obtained from the open-ended questionnaire, focus group discussions and written reflections.

Table 1: Code names and definitions

Code	Definitions
Affective disposition	This code covered issues related to <ul style="list-style-type: none"> <li>• motivation</li> <li>• anxiety</li> <li>• fear</li> <li>• embarrassment</li> </ul>
Challenges to peer-assessment	This category referred to <ul style="list-style-type: none"> <li>• limited language proficiency of the learners</li> <li>• lack of competency in using the marking scheme</li> <li>• friendship</li> </ul>

## 3 RESULTS AND DISCUSSION

### 3.1 Affective factors: Motivation and anxiety

The results of the present study indicated that peer-assessment motivated most of the participants. For instance, some participants of the present study pointed out that "Peer-assessment can be a motivation and can create a healthy competition." Peer-assessment motivated learners of the present study as it not only allowed learners to compare their essays with the essays of their peers but also created an opportunity for the learners to compare their standard and know their true level of

proficiency against peers. For instance, Indika of the present study, pointed out that the comparison between his level of language proficiency and his peer's level of language proficiency encouraged him to learn better: "Peer-assessment helps us know others' ideas, exchange knowledge and correct mistakes. When we assess peers, we get to know where we are and how much we need to improve further." A similar view was shared by Himalika: "Peer-assessment helps me identify where I am and where my peers are." Further, comparative study of a learner's level of proficiency and peer's level of language proficiency through peer-assessment exercises appeared to encourage learners to learn better. For instance, Inusha stated that "When we assess peers, we get to know where we are and how much we need to improve further." Manel shared a similar view: "I could learn new words by reading others' essays. I could compare my answer with a peer's essay, and I could understand my position. Then I felt that I need to improve further." Similarly, Anushka explained how peer-assessment motivated her. "This knowledge exchanging activity is very good. Today, I marked an essay, and it is far better than my essay. After reading it, I felt if I too could write like this. I learnt from that essay too. I also got a photo of it, and I can read it again and learn further. Now I notice that I am behind many of my friends." Priyadarhsani elaborated how peer-assessment motivated her: "If I read an essay of a weaker peer then I notice many errors and I tend to think that when others read my essays, they will have the same difficulty. Such a feeling motivates me to improve further." These results of the present study indicate that when learners become aware of their standard in comparison with the peers' standards, they are motivated and determined to work harder and achieve better standards. These results match with those observed in earlier studies by Baker (2016), Race, Brown and Smith (2005) and Williams (1992) who point out that peer-assessment allows learners to compare their products and performance

with other learners, determine their standards in comparison with the peers' standards and exchange knowledge, information and ideas appropriately.

Written reflections of the English major students also support the view that peer-assessment motivates learners. For instance, a student of the English major group said that "Students are afraid of their teacher because there will always be that line which separates the teacher and student in a hierarchical aspect, which would make the student uncomfortable or demotivated to approach the teacher. In addition, the students feel that it is an obligation to accept the feedback of the teacher, and they would not dare to argue even if the feedback is inappropriate." Upamali of the same English major group stated that "When one of the peers corrects, the student is interested in knowing and understanding his mistakes so that next time he could perform better than his friend. Thus, this method itself is a motivational factor to boost the learning of students." According to Avishki, "Both parties gain advantages through peer-assessment. As peers are in the same age level, each of them has the same mental capacity to grasp opinions given by the other party. So, it becomes very effective, and it motivates the learners." These results indicate that the involvement of students in peer-assessment encourages learners to take the ownership and responsibility for their own learning and develop motivation. This finding is consistent with that of Sivan (2000) who claims that the direct involvement of students in the assessment process by means of techniques such as peer-assessment enhances students' sense of ownership, responsibility and their motivation.

Participants of the present study explained how peer-assessment reduced anxiety and created a conducive learning environment as peer-assessment took place among socially and cognitively similar learners. For instance, Himalika said in the open-ended questionnaire that "We can get a lot of things from our peers'

knowledge and improve ourselves. It is easy to understand the ideas of peers.” Similarly, Madusha pointed out that “We friends have similar ideas so they can understand my ideas well. They can talk about our mistakes openly.” According to Dewmini, “Peer-feedback makes the student comfortable because it is their friend who gives them the feedback.” Similarly, Manel pointed out that “When peers assess, we can grasp the points very well due to the closeness.” Suresh shared a similar view and pointed out that “Peer has a closer relationship with his friend. Therefore, explaining the mistake does not make the peer offended or embarrassed unlike a teacher explaining the student a mistake.” These results are consistent with the findings of Topping (2005) who points out that a trusting relationship with a peer who holds no position of authority might facilitate self-disclosure of ignorance and misconception, enabling subsequent diagnosis and correction.

The participants of this study also pointed out that “peer-assessment lessens anxiety towards English” because learners can openly discuss and get problems clarified with the peers. For instance, one participant of the English major group pointed out that “If we have any kind of question in peer correction or feedback we can directly go and talk to the marker because they are our friends and do not have hesitations to talk to friends. Then we can get the issue clarified with reasons... Student may be unable to go and talk to the teacher about the question she or he has either because of fear of talking or not having time.” A similar view was shared by Menaka of the same English major group. “Students also relied on their peers more than teacher since they feel more comfortable to accept the feedback on their essays from a close friend.” Thus, a number of participants in the present study stated that peer-assessment reduced anxiety and stress and enhanced their motivation. This finding is consistent with that of Peng (2009) who argues that peer-

assessment reduces test anxiety or stress and enhances confidence or internal motivation.

### **3.2 Challenges to peer-assessment**

However, some participants stated that they were not able to get involved in peer-assessment exercises effectively due to their limited language proficiency. For instance, one participant stated in the open-ended questionnaire that “When there are difficult things that I cannot understand and correct, I feel embarrassed.” A similar view was expressed by Priyadarshani participant. “Poor knowledge, not knowing the grammatical structures, not being able to understand and correct complex sentences are problems about peer-assessment. Therefore, when essays are not properly evaluated due to the said reasons, students get demotivated.” Similarly, Upamali stated that “I feel shy when my peers get to know my errors in the English language.”

During the focus group discussion too, the participants shared their concerns about the peers’ proficiency and ability to assess peers. Accordingly, one participant stated that “When a learner with lower-level language skills marks an answer of a higher proficient learner, lower proficient learner has a difficulty to evaluate it. Reading such an answer is good but assessing it is difficult because he may not know even some words and he may not know whether a sentence is correct or not even.” Thus, learner views suggested that poor language proficiency of the students demotivated some learners to get involved in peer-assessment. These results support the findings of Cheng and Warren (2005), Orsmond, Merry and Reiling (1996) and Peng (2009) who argue that students have reservations toward peer-assessment due to their own perceived incapability of assessing their peers.

Learners’ incompetence in using the marking scheme is another challenge for effective peer-assessment. For instance, Menaka of the English major group pointed out that “Since a

student is still learning, the accuracy of marking cannot be perfect. Moreover, the individual marking and feedback can vary from person to person.” Similarly, Avishki said that “Another weakness of peer feedback is that peers do not have a proper knowledge about the marking scheme.”

Friendship is another challenge to implement peer-assessment successfully. The participants of the present study shared their views regarding friendship biases. For instance, Priyadarshani pointed out in the open-ended questionnaire that “Sometimes a proper assessment is not done due to friendship and as a result mistakes are not properly identified.” Another participant said that “When deducting marks from friends’ essays, I feel that it may affect the friendship.” A similar view was shared by Manel. “Sometimes we can’t give low marks because of our friendship.”

The participants shared similar views regarding the impact of friendship on peer-assessment during the focus group interviews as well. For instance, Menaka of the English major group stated that “We will show our sympathy and compassion for our friends thinking that our friendship will be affected like that. So, at that time we will give more marks.” The findings of the present study are consistent with the findings of Peng (2009), Sande and Ilorente (2014) and Sluijsmans et al. (2001) who claim that teachers usually express their resistance to peer-assessment due to friendship effects because the students do not want to take a risk of jeopardizing the friendship.

### **3.3 Suggestions for effective implementation of peer-assessment**

The participants of the present study proposed some suggestions to overcome the challenges such as friendship, lack of competency to use marking scheme correctly and limited language proficiency and implement peer-assessment more effectively in the language classroom.

According to some participants of the present study, the marking scheme has been useful to independently evaluate the essays of their peers and avoid friendship biases. For instance, Upamali pointed out during the focus group interview that “We learned to offer marks using a marking scheme. When we write our essay also, we can think about that marking scheme and write our essay.” Similarly, Priyadarshani said that “Even we learned about the marking scheme and became familiar to the marking scheme because of this peer-assessment... Although we don’t follow the marking scheme when we write, when we assess peers, we mark the essays using the marking scheme. Then we see if others have written according to the marking scheme or not and give feedback accordingly.” Similarly, Dewmini pointed out that “When we know the marking scheme, we can know the structure, format and how marks are offered.” According to Bagya, “It (the marking scheme) is very useful. It is easy to mark with a marking scheme like that.” These results are consistent with the findings of Jonsson and Svingby (2007), Azarnoosh (2013) and Patri (2002) who point out the importance of using reliable rubrics in peer-assessment.

Many participants believed that group-based peer-assessment can resolve some challenges in peer-assessment such as limited language proficiency and ensure more effective and productive peer-assessment exercises. For instance, one participant pointed out in the open-ended questionnaire that “Groups should be formed using learners from different proficiency levels, and when they mark essays, we can improve our knowledge.” A similar view was presented by Priyadarshani. “A group should be formed, and each essay is discussed in the group. This will help even the weaker students.”

Qualitative data obtained during the focus group interviews also support the view that group-based peer-assessment where learners with different proficiency levels work together

can ensure more reliable and successful peer-assessment. For instance, Avishki stated that “When you group, all the good ones should not be grouped together. Similarly, all the weaker ones should not be grouped together. Mixed ability groups where students with different levels of language proficiency work together is a good solution I think.” Similarly, Manel pointed out the benefits of exchanging essays within a group and marking them in groups and stated that “I think if a group gets essays for marking, I think that is more effective. Because when the group has better students, we can always ask them whether this is right or wrong and through such discussions we can mark and learn.” A similar view was shared by Bimali of the study. “...group-based peer-assessment is the best way. Then at least we can discuss, ask our friends the things we don’t know and give good feedback. Individually we can’t do that.” Thus, results of the present study indicate that group-based peer-assessment helps learners overcome some inherent challenges associated with peer-assessment such as friendship biases, limited proficiency in the target language and students’ competence in using marking scheme.

Results also showed that constant practice can help students assess their peers better. For instance, one participant said during the focus group interview that “If we practice peer-assessment every day, we can learn...” Further, Upamali suggested that “It is good to practice peer-assessment constantly. To do this better, we need a teacher’s advice more often.” Thus, the participants of the present study pointed out that constant practice can ensure more productive, reliable and valid peer-assessment. Freeman (1995) shares a similar view and claims that constant practice in peer-assessment and group-based peer-assessment can ensure objectivity, reliability and validity of assessment.

#### **4 CONCLUSION AND RECOMMENDATIONS**

The results of the current study indicate that peer-assessment motivates learners. Also, some argue that peer-assessment creates an opportunity for the learners to compare their standard in the class with the peers’ standard and study harder to achieve higher levels of language proficiency. More importantly, peer-assessment which takes place among socially and academically similar learners helps learners reduce anxiety and stress and develop motivation. Learners can directly and openly discuss issues with their peers and get things clarified, and this is not usually possible with the teachers with whom students generally maintain a formal distant relationship. Therefore, peer-assessment which tends to motivate learners and creates a conducive learning environment can be recommended as a viable learning tool that can be used to develop the writing skills of the ESL students in Sri Lankan universities and other similar contexts. More research needs to be conducted to explore the potential of peer-assessment and add knowledge to the growing body of peer-assessment literature.

#### **REFERENCES**

- Azarnoosh, M. 2013, ‘Peer-assessment in an EFL context: Attitudes and friendship bias’, *Language Testing in Asia*, vol 3, no. 11, pp. 1-10.
- Baker, KM 2016, ‘Peer review as a strategy for improving students’ writing process’, *Active Learning in Higher Education*, vol 17, no. 3, pp. 179-192
- Barkhuizen, GP 1998, ‘Discovering learners’ perceptions of ESL classroom teaching/learning activities in a south African context’, *TESOL Quarterly*, Vol 32, no. 1, pp. 85-108.

- Berg, EC 1999, 'The effects of trained peer response on ESL students' revision types and writing quality' *Journal of Second Language Writing*, vol 8, no. 3, pp. 215-241.
- Chavez, M 2003, 'The diglossic foreign-language classroom: Learners' views on L1 and L2 functions' in C. Blyth (Ed), *The sociolinguistics of foreign-language classrooms: Contributions of the native, near-native, and the non-native speaker*, pp. 163–208. Boston, Heinle.
- Cheng, W & Warren, M 2005, 'Peer assessment of language proficiency' *Language Testing*, vol 22, no. 1, pp. 93-121.
- Dörnyei, Z 2007, *Research methods in applied linguistics*, Oxford University Press, Oxford.
- Double, KS, McGrane, JA & Hopfenbeck, TN 2019, *The impact of peer-assessment on academic performance: a meta-analysis of control group studies*, Available from: <https://link.springer.com/content/pdf/10.1007/s10648-019-09510-3.pdf> [12 March 2020]
- Falchikov, N 2005, *Improving assessment through student involvement: Practical solutions for aiding learning in higher and further education*, Routledge Falmer, New York.
- Freeman, M 1995, 'Peer assessments by groups of group work', *Assessment & Evaluation in Higher Education*, vol 20, no. 3, pp. 289-300.
- Guerrero, MCM & Villamil, OS 1994, 'Social-cognitive dimensions of interaction in L2 peer revision', *Modern Language Journal*, vol 78, no. 4, pp. 484-496.
- Jonsson, A & Savingby, G 2007, 'The use of scoring rubrics: Reliability, validity and educational consequences', *Educational Research Review*, vol 2, no. 2, pp. 130-144.
- Kommalage, M & Thabrew, H 2011, 'Student-led peer assisted learning: the kuppi experience at the medical school of the university of Ruhuna in Sri Lanka', *Education for Health Change in Learning & Practice*, vol 24, no. 2, pp. 1-12.
- Liu, J & Sadler, RW 2003, 'The effect and affect of peer review in electronic versus traditional modes on L2 writing', *Journal of English for Academic Purposes*, vol 2, no. 3, pp. 193- 227.
- Mackey, A & Gass, SM 2005, *Second language research: Methodology and design*. Lawrence Erlbaum Associates, Inc, New Jersey.
- Min, H 2005, 'Training students to become successful peer reviewers', *System*, vol 33, no. 2, pp. 293-308.
- Nelson, GL & Carson, JG 1998, 'ESL students' perception of effectiveness in peer response groups', *Journal of Second Language Writing*, vol 7, no 2, pp. 113-131.
- Nelson, GL & Murphy, JM 1992, 'An L2 writing group: Task and social dimensions', *Journal of Second Language Writing*, vol 1, no 3, pp. 171-193.
- Nilson, LB 2003, 'Improving student peer feedback', *College Teaching*, vol 51, no 1, pp. 34-38.
- Orsmond, P, Merry, S, & Reiling, K 1996, 'The importance of marking criteria in the use of peer assessment', *Assessment & Evaluation in Higher Education*, vol 21, no 3, pp. 239-250.
- Pond, K, Ul-Haq R & Wade, W 1995, 'Peer review – A precursor to peer assessment', *Innovations in Education and Training International*, vol 32, no 4, pp. 314-323.
- Peng, JF 2009, *Peer assessment of oral presentation in and EFL context*, PhD Thesis, Indiana University, Indiana, USA.
- Pope, NKL 2005, 'The impact of stress in self- and peer-assessment', *Assessment &*

*Evaluation in Higher Education*, vol 30, No 1, pp. 51-63.

Race, P, Brown, S, & Smith, B 2005, *500 tips on assessment*, Routledge Falmer, London.

Sande, JCG & Ilorente, JIG 2014, 'Peer assessment and self-assessment: Effective learning tools in higher education', *International Journal of Engineering Education*, vol 30, no 3, pp.711- 721.

Sivan, A 2000, 'The implementation of peer-assessment: An action research approach', *Assessment in Education: Principles, Policy and Practice*, vol 7, no 2, pp. 193-213.

Sluijsmans, DMA, Moerkerke, G, Van Merriënboer, JJG & Dochy, FJR 2001, 'Peer assessment in problem-based learning', *Studies in Educational Evaluation*, vol 27, no 2, pp. 153- 173.

Topping, KJ 2005, 'Trends in peer learning', *Educational Psychology*, vol 25, no 6, pp. 631-645.

Topping, KJ 2009, 'Peer assessment', *Theory into Practice*, vol 48, no 1, pp. 20-27.

Topping, K 2017, 'Peer assessment: Learning by judging and discussing the work of other learners', *Interdisciplinary Education and Psychology*, vol 1, no 1, pp. 1-17.

Tsai, CC, Liu, EZF, Lin, SSJ & Yuan, SM 2001, 'A networked peer assessment system based on a vee heuristic', *Innovations in Education and Teaching International*, vol 38, no 3, pp. 220-230.

Willaims, E 1992, 'Student attitudes towards approaches to learning and assessment', *Assessment & Evaluation in Higher Education*, vol 17, no 1, pp. 45-58.

Zamel, V 1983, 'The composing process of advanced ESL students: Six case studies', *TESOL Quarterly*, vol 17, no 2, pp. 165-188.

Zhu, Q & Carless, D 2018, 'Dialogue within peer feedback process: Clarification and negotiation of meaning', *Higher Education Research and Development*, vol 37, no 4, pp. 883-897