

AIMC 2018
Asia International Multidisciplinary Conference

**SUCCESS FACTORS FOR TECHNOLOGY AIDED PEER
ASSESSMENT TO IMPROVE ORAL PRESENTATION SKILL**

Fatemeh Mirzaei (a)*, Muhammad Ridhuan Tony Lim Abdullah (b), Waseem Sattar (c),
Norazman B Abdul Majid (d)

*Corresponding author

(a) Universiti Teknologi PETRONAS, Perak, Malaysia, Fatemeh_16005850@utp.edu.my

(b) Universiti Teknologi PETRONAS, Perak, Malaysia, ridhuan_tony@utp.edu.my

(c) Universiti Teknologi PETRONAS, Perak, Malaysia, waseem_16005300@utp.edu.my

(d) Universiti Teknologi Malaysia, Johor Bahru, Malaysia, nomanjid@yahoo.com

Abstract

This study is critical success factors for technology aided peer assessment to improve oral presentation skill among engineering students. The study utilized qualitative research aimed at determining the success factors of using technology aided peer assessment on oral presentation. 15 participants were selected from language instructors from language institute, Tehran, Iran. In this regard, the specific objectives are to identify the perceptions of teachers towards the use of technology aided peer assessment. It is to explore critical success factors of using technology and to investigate how to improve oral presentation based on language instructors' views. For this, the instruments used in this study were questionnaire to determine critical success factors toward using technology aided (instant messenger application) peer assessment and its effects on the engineering students' oral presentation and also to investigate whether the technology aided peer assessment can significantly influence the improvement of oral presentation. Findings of the current study illustrated how technology aided peer assessment can be acquired by utilizing the online applications as useful tools in improving oral presentation significantly and help language instructors to recognize and deal with each student's improvement in oral presentation after using technology in assessment.

© 2019 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Peer assessment; success factors; oral presentation; instant messenger application.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Many employers care about Communication skills more than other skills these days (Zedeck & Goldstein, 2000). For example, employers evaluate applicants' communication skills during interviews. So, applicants decide to improve their skills in language and other skills because of high competition among job seekers to get job (Zeigler, 2007). In 20th century, assessment as an important tool to evaluate learners in various subjects and skills which is defined many linguistics and researchers like Linn and Miller (2005) who defined it as "a systematic process of collecting information about students' progress towards the learning goals". They stated that it can be evaluated and measured the students' performances different ways and methods like essays, pencil test, teachers' observations and students' self-reports which are presented by Linn and Miller (2005). They argued that assessment shows a numerical evaluation which shows the individuals' learning improvement clearly. Juwah et al., (2004) added that assessment can be used for learning which is used as a measurement of learning previously that caused many researchers and linguistics paid more attention to assessment and feedback that influence students' learning and also it improves their learning and then make a new one way as peer assessment that is recently increased in language classes even it is facilitated online between teachers and students.

Esther, Marijke Kral, Gino Camp, Martens, Robert-Jan (2017) in their research argued that peer assessment influences students' learning during their lives and help them to develop their skills in different subjects. They also noticed peer assessment as peer review which produce and receive feedback from peers. According to Ertmer et al., (2007) the process of peer assessment provides students think critically in producing and receiving between themselves which activates their cognition system and has positive impact on their learning too.

This view is supported by Lin et al., (2001) who reported that students were positive to peer assessment and they believed that peer assessment aware them of their weakness and strengths. In this case, Dunlap and Grabinger (2003), claimed that reviewing someone else's works provide students to articulate their views and decisions which help them to improve their learning. In addition, Wooley, Was, Schunn, and Dalton (2008), mentioned that peer working and peer assessment are more beneficial for students in writing and Ertmer et al., (2007) supported it and added, students are developed in thinking critically and improve in their productions.

All mentioned studies pointed to the important role of cognitive process of using peer assessment and besides Rosa et al., (2016) considered the use of online peer assessment strategies as cognitive tool which involve students to be responsible in their own learning and they themselves evaluate their works and contribute the construction of knowledge. Therefore, it is revealed that many cognitive process are organized when students are engaged in peer assessment activities. Assessing in relative process encourage students to be improved in social and argument skills. Moreover, they are developing in solving problem when dealing with conflict in producing and receiving feedback. So, a social cognitive theoretical perspective towards self-regulated learning is adopted as a theoretical basis for oral presentation skills instruction which is considered in this paper.

Teaching oral presentation skills has some basic criteria which should be followed by teacher s and students. Firstly, students must have knowledge of the field and know how to organize the text structure. Third, they also need to have average level of language proficiency which able them to present

grammatically correct with appropriate fluency. Delivery is an important part of presentation when students use eye contact, body language and have good voice quality which shows that the presentation is perfectly done and exchange effectively (Halliday & Matthiessen, 2004). Teaching oral presentation skills for communicative purposes focuses on theories of situated learning which happens in social process and it is followed by process of co- participating between students and teachers or among students which is considered in this study and is investigated in peer assessment whether technology aided peer assessment influences on the performance of students and has possible learning benefits for the student as a presenter and describe factors which affect the production process of the oral presentation. The design of oral presentation activities acknowledges the importance of using online messengers by providing learners to become engaged in collaborative learning, with each other in co-participating process when they prepare for presentation in the class. The structure of the collaboration involves continuous peer review and assessment between students and also motivating aims, cognitive modes, and interpersonal behaviors.

2. Problem Statement

In high education, due to several reasons like limited time of class and large number of students, learners struggle to explain their ideas and describing the subject in English at international universities (Nurtjahja & Sabani, 2007; Yee & Mokhtar, 2013). Therefore, students deal with anxiety in speaking and shy to use English language in the class and so they prefer not speak and be silent. They do not feel confident enough to be present and afraid of making mistake in front of their classmate in the class (Zakaria, 2008; Kitano, 2001). Grgurovic (2011), in his research pointed to the role of practice for English speaking and stated that there is no adequate course and time for practicing speaking in English, he recommended that students should practice individually where there is audience and they do not worry to make mistake.

As mentioned in Cho and Cho (2010), and Li, Liu, & Steckelberg (2010), there are a few quantitative studies which investigate the effects of different types of assessment on student learning and very few studies considered the impact of peer assessment on both assessors and assesses. Some researchers noticed online assessment as a tool for assessing students' learning but there were some concerns, for example assessors do not have sufficient knowledge to assess, there was no grantee to comment neutrally and they need to know computer literacy which was very important when they were negotiating through online system (Tsai, 2010).

Although the teaching of oral presentation skills is stressed in many curricula, it has received little research attention to the impact of peer assessment on improvement of oral presentation skill. According to the social cognitive perspective (e.g. Bandura, 2001 cited in De Grez, Valcke, & Berings, 2010) feedback and assessment are important in process of learning. Latest improvements in the assessment field (e.g., Nicol & Milligan, 2006) emphasize on the role of assessment in learning and reveal that the exchange of responsibilities from teachers to students and involving students how beneficial in their learning and presentations (e.g. Cheng & Warren, 2005 cited in De Grez et al., 2010) but it is still necessary to consider the factors which affect students learning through using technology in peer assessment and how can be effective in improvement of their oral presentation skills.

3. Research Questions

3.1 What are perceptions of language instructors toward using online peer assessment in learning oral presentation?

3.2 What are the critical success factors of online peer assessment in improvement of students' oral presentation?

3.3 What are the main critical success factors that language instructors should prioritize in learning oral presentation?

4. Purpose of the Study

With the aims of contributing to a better understanding of students' improvement in oral presentation regarding peer assessment, it is comprising language instructors from language department will conduct a study on the perceptions of university instructors who will participate in processes of peer assessment throughout the 2017–2018 academic year. The main objective of this paper is to analyze language instructors' perception of the technology aided peer-assessment process after participating in it, reflecting on its critical success factors and suggesting modifications for its improvement. Therefore, the aim of this study is to investigate the critical success factors of technology aided peer assessment which improve students' oral presentation in an ESL context.

The significance of oral communication for engineering students has been generally revealed, with focus non-native English speakers. Batley (1998), found out that many engineers may have strong technical and quantitative skills but they are still weak to communicate in English and state their ideas in English language. It has been revealed that engineers are unable to present themselves effectively. Myles (2009), in his study claims that engineering students face some challenges with English language when they participate in meeting and work in projects and have difficulty to deliver their knowledge in professional interactions with their colleagues. Usually, second language learners are able to communicate and interact easily but in formal situations they are anxious to speak in English language and they fear to make mistake grammatically in their communications (Kassim & Radzuan, 2008). Chen (2006), considered learning English language as a need for Chinese technical personnel in mechanics, computer science and electrical engineering. He discovered that learning to speak in English is difficult for and most of the learners wanted to improve themselves in speaking English. In another case, Freeman (2003), found that all undergraduate and graduate engineering students include native and non-native English speakers, wish to be strong in communication, oral presentations and professional conversations and they desire to be trained as they are approaching to their graduation.

5. Research Methods

The aim of this research is to examine language instructors' perceptions of using technology such instant messenger applications in learning oral presentation and to investigate the use of instant messenger applications promotes students' learning oral presentation. In addition, to determine what factors is more effective in promoting language learners' learning oral presentation among engineers and engineering students who are learning English language in language institutes in Tehran, Iran. Data were collected through written survey questionnaire and semi-structured interviews with the participants. The use of

these two data collection instruments help validate both the answers in the questionnaire and interviews. Written survey questionnaire in this study is adapted from Lee Chin Yin (2016). The survey is composed of three main parts. The first part of the questionnaire consists of questions that deal with participants' personal information. The questions in this section ask about participants' age, gender, and academic background. Second part asks about language instructors' perception and opinion of using instant messenger applications. Last part is identification questions to ask what factors are important in improvement of language learners' oral presentation.

In order to investigate the language instructors' perceptions of using instant messenger applications in oral presentation learning improvement interview which provides the opportunity for interviewer to get extra information and explore some other factors which are not mentioned in the questionnaire.

4.1. Data analysis

All the data collected through questionnaires are entered into the computer using the statistical software package SPSS. Information from survey are coded for statistical analysis and later tabulated in the form of the tables to show the descriptive statistical measurement. To determine language instructors' perceptions about using instant messenger applications, the analysis of questions (Likert scale) was conducted through the themes and categories. And also, the investigation of the impact of using instant applications to oral presentation learning improvement was analyzed by interview questions which was recorded and transcribed. These are then incorporated into the finding from the questionnaires to support the obtained results from the study.

5. Findings

5.1. Research question 1: What are the perceptions of teachers towards the use of online peer assessment?

Based on Hassan M Salem (2005), ten indicators were chosen and to measure the reliability of the indicators. Another eight of the indicators were adopted from Volery, and Lord (2000). These indicators are considering the accessibility, availability and reliability of Internet in and out of the class. While the last fourteen items from Nguyen and Tran (2015), measure the effectiveness of using instant messenger applications in peer assessment on improvement of students' oral presentation

According to the results of previous section, it is shown that most of the respondents agree with the use of instant messenger applications by language learners to improve speaking skill, encourage to participate in discussion, and check and comment instantly. These findings are similar to the results of Nicol and Mcfarlane-Dick (2006), they have found out that checking comment provide language learners to be better evaluators and to regulate their learning effectively.

Hence there are a lot of indicators available to measure instant messenger applications critical success factors base on student's perception and so they are used to achieve and examine language instructors' perceptions. Regarding to the results of presented study, it was found that the majority of respondents are positive about using instant messenger applications to deliver instruction between learners as instructional

resources and on the other hand, the moderate number of respondents are neutral about presenting subject in instant instruction because they believe that out of the class they are busy and can not be on instantly. It might show that they do not used to check and assess their students over the time of the class and also learners. In addition, according to interview all of them said that the students improve in comprehension of the language and present better in the class because they check their understanding of topic with each other before coming to the class and also attend in class confidently.

Totally, based on findings language instructors agree that learners use instant messenger applications for learning language and of course for promoting oral presentation which plays important role in their current or future job. On the other hand, according to study by Falchikov (2005), students' perceptions are positive on using online applications and respondents in his research believed that it is very effective in collaborative learning and students in peer assessment through using instant messenger applications, are learning without any limitation. A study done by Topping, Smith, Swanson, and Elliot, (2000) who carried out a research on students' perceptions, he discovered that most of students also learn to evaluate their own activity.

Finally, by looking at the results of questionnaires and interview according the first question, the respondents from language instructors of language institutes surveyed lies in their perceptions and view on using instant messenger applications. Most of the respondents viewed online applications as a must in their field of study. It should be mentioned that most of the respondents either 'strongly agree' and 'agree' that using instant messenger application is helpful but equally the respondents believe that there is a need in their classroom to be controlled by language instructors. The interviewees mentioned that with the speed of improvement of technology English language as an international language and learners' need, online applications can be used also in learning language and improve students and learners' learning in different skills for learners with different fields.

5.2. Research Question 2: What are the critical success factors of using instant messenger applications in improvement of language learners' oral presentation?

Most of the respondents agreed the use of instant messenger applications affect learners' learning oral presentation and help them to comprehend the subject in the classroom and check the mistakes in peer in and out of class. They 'Agree' that the instant messenger should be accepted as a useful tool to improve learners learning, but on the other hand the lecturers use instant messenger to control learners learning. They were also in favor of having message that promote the use of English when they cannot attend in the class. It is supported by results of Tseng and Tsai (2007), research which proved that peer assessment in any way help learners to promote learners' quality in evaluation of one another and affect their own work by assessing peer's work.

Interpersonal function of language which is emphasized by King (2002), plays an important role in language exchange and learners try to realize the purpose of the activities of the class through interaction by using instant messenger applications. The students have self confidence in the classroom that it was found in presented research. The most of the respondents 'Agree' that using instant messenger application give good feeling in the classroom and are self-confident to participate and be active in class discussion.

One of the interviewees emphasized that English language as worldwide language must be used in the classroom especially and also out of the class, because English language as a foreign language in Iran is not used and learners only should use English in the class. Thus, with the use of instant messenger which is controlled by instructors help them to learn and improve their language every time everywhere. He believed that learning language without limitation of time and place give learner a big opportunity to be fluent in speaking and enforce their learning and specially help them to find a good job. As Topping and Ehly (2001) found out in their research most of the respondents (students) agree to assess their learning which help them to achieve learning goals and also increase their knowledge and skills of English.

7. Conclusion

The aim of this research is to examine language instructors' perceptions of using technology such instant messenger applications in learning oral presentation and to investigate the use of instant messenger applications promotes students' learning oral presentation. In addition, to determine what factors is more effective in promoting language learners' learning oral presentation among engineers and engineering students who are learning English language in language institutes in Tehran, Iran.

The results of the study firstly indicate that the use of technology such as instant messenger application can be used as a resource for learning language specially improving learners' oral presentations. With the use of instant messenger application language learners feel comfortable to comprehend the subjects and answer the questions confidently. They can focus on concept of subjects without being worry because they were corrected before main presentation. Secondly, the results of this study strongly confirmed the previous studies based upon using peer assessment influences students' learning significantly. According to responses of interview and questionnaires, it was discovered that with the use of online applications, learners are motivated to learn and focus on the concept of the subject which is provided by teachers. Interviewees agree that using peer assessment help weak students to interact and participate in group discussion and also improve in learning English. Also, the use of instant messenger applications influences the interaction between instructors and learners. Due to use of online application, learners were encouraged to approach their instructors. Learners learn to use instant messenger application for purposeful activities beyond daily chatting, they could achieve high grade and think critically about their own works peer's work. So it can be highly recommended that the use of online applications and instant messenger applications as a useful tool for the on the go practice.

References

- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology*, 52(1), 1-26.
- Batley T. (1998), *Journal of European Industrial Training*, 22/7, 309-312
- Chen, Y. (2006). From Common Core to Specific. *The Asian ESP journal*. 1, 1-11. [Online] Available from: http://www.asian-esp-journal.com/June_2006_yc.php
- Cheng, W., & Warren, M. (2005). Peer assessment of language proficiency. *Language Testing*, 22(1), 93-121.
- Cho, Y., & Cho, K. (2010). Peer reviewers learn from giving comments. *Instructional Science*. doi: 10.1007/s11251-010-9146-1.

- De Grez, L., Valcke, M., & Berings, D. (2010). Peer assessment of oral presentation skills. *Procedia Social and Behavioral Sciences*, 2(2), 1776–1780. <https://doi.org/10.1016/j.sbspro.2010.03.983>
- Dunlap, J. C., & Grabinger, S. (2003). Preparing students for lifelong learning: A review of instructional features and teaching methodologies. *Performance Improvement Quarterly*, 16(2), 6-25. <https://doi.org/10.1111/j.1937-8327.2003.tb00276.x>
- Ertmer, P. A., Richardson, J. C., Belland, B., Camin, D., Connolly, (...) P. Coulthard, G (2007). Using peer feedback to enhance the quality of student online postings: An exploratory study. *Journal of Computer Mediated Communication*, 12(2), 412-433
- Esther van Popta, Marijke Kral, Gino Camp, Rob L. Martens, P. Robert-Jan Simons, 2017. Exploring the value of peer feedback in online learning for the provider. 20.24-34
- European Accreditation of Engineering Programmes. (2008). EUR-ACE Framework Standards for the Accreditation of Engineering Programmes. [Online] Available: http://www.feani.org/webenae/pdf/EUR-ACE_Framework_Standards_20110209.pdf (January 15, 2011)
- Falchikov, N. (2005). Improving assessment through student involvement: Practical solution for aiding learning in higher and further education. New York, NY: Routledge.
- Freeman, J. (2003). The science of conversation: Training in dialogue for NNS in engineering. *IEEE Transactions on Professional Communication*, 46, 157–167.
- Grgurovic, M. (2011). Blended learning in an ESL Class: A case study. *CALICO Journal*, 29(1), 100–117. Retrieved from http://www.postgradolinguistica.ucv.cl/dev/documentos/90,959,5%20Blended_learning_Grgurovic_2011.pdf
- Halliday, M. A. K. & Matthiessen, C. M. I. (2004). An introduction to functional grammar (third ed.). London: Edward Arnold.
- Juwah, C., Macfarlane-Dick, D., Matthew, B., Nicol, D., Ross, D., & Smith, B. (2004). *Enhancing student learning through effective formative feedback*. York: Higher Education Academy Generic Centre.
- Kassim, H., & Radzuan, N. R. M. (2008). Resolving Conflict: Enhancing Engineering Students' English. *The international journal of learning*, 14(11), 51-60. [Online] Available: <http://ijl.cgpublisher.com/product/pub.30/prod.1564> (January 15, 2011)
- King, J. (2002). Preparing EFL learners for oral presentations. *The Internet TESL Journal* 3(3). Accessed at <http://iteslj.org/Lessons/King-PublicSpeaking.html> on 03/11/2008.
- Kitano, K. (2001). Anxiety in the Japanese college classroom. *Modern Language Journal*, 85(4), 49–566.
- Lee Chin Yin, (2016). Adoption of Whatsapp Instant Massaging among Students in Ipoh Higher Education Institutions. Project Report submitted in partial fulfilment of the requirements for the award of Master of Education
- Li, L., Liu, X., & Steckelberg, A. L. (2010). Assessor or assessee: How student learning improves by giving and receiving peer feedback. *British Journal of Educational Technology*, 41(3), 525–536.
- Linn, R. L., & Miller, M. D. (2005). Measurement and assessment in teaching (9th ed.) Upper Saddle River, NJ: Prentice Hall.
- Myles, J. (2009). Oral Competency of ESL Technical Students in Workplace Internships. *TESL-EJ*, 13(1). [Online] Available from: <http://www.tesl-ej.org/wordpress/issues/volume13/ej49/ej49a2/> (January 15, 2011)
- Nicol, D. J., and D. Macfarlane-Dick. 2006. Formative Assessment and Self-regulated Learning: A Model and Seven Principles of Good Feedback Practice. *Studies in Higher Education*, 31(2), 199-218.
- Nicol, D., & Milligan, C. (2006). Rethinking technology-supported assessment practices in relation to the seven principles of good feedback practice. In C. Bryan & K. Clegg (Eds.), *Innovative assessment in higher education*. London: Taylor and Francis Group.
- Nguyen, N. H., & Mai, T. N. (2015). Factors Affecting Students Speaking Performance at Thnh Hein High School. *Asian Journal of Educational Research*, 3(2), 8-23. Retrieved from https://www.academia.edu/28693112/FACTORS_AFFECTING_STUDENTS_SPEAKING_PERFORMANCE_AT_LE_THANH_HIEN_HIGH_SCHOOL
- Nurtjahja, O. R., & Sabani, N. (2007). Intensive English language program for overseas students at Malaysian private tertiary education institutions. UUM Repository. Retrieved from <http://repo.uum.edu.my/3229/1/O1.pdf>

- Topping, K. J., Smith, E. F., Swanson, I., & Elliot, A. (2000). Formative peer assessment of academic writing between postgraduate students. *Assessment and Evaluation in Higher Education*, 25(2), 149-169.
- Topping, K. J., & Ehly, S. W. (2001). Peer assisted learning: A framework for consultation. *Journal of Educational and Psychological Consultation*, 12(2), 113–132.
- Tsai, S.-C. (2010). Developing and integrating courseware for oral presentations into ESP learning contexts. *Computers & Education*, 55(3), 1245-1258. <https://doi.org/10.1016/j.compedu.2010.05.021>
- Tseng, S. C., & Tsai, C. C. (2007). On-line peer assessment and the role of the peer feedback: A study of high school computer course. *Computers and Education*, 49(4), 1161e1174
- Volery, T. & Lord, D. “Critical (2000). Critical Success Factors in Online Education. *The International Journal of Educational Management*, 14(5), page 216-223, 2000.
- Wooley, R., Was, C., Schunn, C. D., & Dalton, D. (2008, July). The effects of feedback elaboration on the giver of feedback. In Paper presented at the 30th Annual meeting of the cognitive science society, Washington, DC.
- Yee, C. P., & Mokhtar, A. H. A. (2013). International students’ learning experiences at private higher education institutions in Malaysia. *Proceeding of the Global Summit on Education 2013*, (pp. 298–312). Retrieved from http://worldconferences.net/proceedings/gse2013/papers_gse2013/092%20Chong%20Pui%20Yee.pdf
- Zakaria, I. (2008). Have political will to raise English standard. The Star Online Newspaper. Retrieved from <http://thestar.com.my/news/story.asp?file=/2008/6/3/focus/21429146&sec=focus>
- Zedeck, S., & Goldstein (2000). Sliding bands: An alternative to top-down selection. In R. Barrett (Ed.), *Handbook of fair employment strategies*. Westport, CT: Courum Books.
- Zeigler, R. (2007). Student perceptions of "soft" skills in Mechanical Engineering. ICEE 2007 Conference. Retrieved 5 October 2008, from <http://icee2007.dei.uc.pt/proceedings/papers/505.pdf>