Enhancing ESL Learners Speaking Skills through Asynchronous Online Discussion Forum

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Abstract

Communicating orally in a second or foreign language such as English can be a difficult task especially for the low proficiency learners as they may lack the confidence and feel shy and apprehensive when interacting verbally in the target language. This may hold them back from expressing themselves vocally though they are fully aware that in order to be fluent in the target language, they need to practise speaking not only in the classroom but also outside the classroom. This paper discusses the use of an asynchronous online discussion forum (AODF) as a communication tool to assist the low proficiency ESL learners to build their confidence and practise using the target language orally. As an online discussion forum, the Multimedia Enhance Discussion Forum (MEDiF) was specifically designed to be used by a selected group of low proficiency ESL learners at tertiary level for one academic semester. This online forum allows the learners to audio and video-record their discussions, listen to the recorded discussions and respond to their friends' ideas and opinions. Interviews and observations of the discussions on the MEDiF were conducted to gather data. The findings generally indicate positive responses from the ESL learners although there were also some obstacles faced by them while utilizing the MEDiF.

Keywords: asynchronous online discussion, speaking, language learning, low proficiency, ESL

1. Introduction

Speaking is one of the four important micro skills to be developed as a means of communication especially for English as second language learner. Speaking skill is as important as other skills that need to be developed for the enhancement of communication among learners of the target language. Speaking in the language classroom is a process in which learners use dialogue that encourages them to negotiate meaning and to apply their knowledge of the language learnt. Through repeated practice, it is hoped that the learners would be able to harness their oral communication skills which they would need once they have left the university. It was found that one of the most important criteria to seek for new employment is having communication skills (Zaremba 2006). Thus, having the ability to communicate orally especially in English which is considered as a global language is crucial if these learners were to achieve success such as when attending job interviews, job training, or fulfilling other job-related tasks which requires the use of the said language (Osbon et al., 2008).

It is common knowledge that ESL learners particularly in non-native speaking countries usually have limited opportunities to utilise English outside the classroom (Boonkita, 2010). Hence, various steps have been taken by the language educators to provide these learners with suitable environment where they can practice using the target language beyond the classroom. One such step taken by the educators is to implement a virtual learning environment such as the asynchronous online discussion (AOD) to enhance speaking skills among the ESL learners. The AOD creates an authentic learning environment similar to a face-to-face classroom environment where knowledge and information can be effectively constructed, validated, communicated and shared (Yap & Chia, 2010). The AOD not only creates opportunities for learners to communicate in the target language, but also provides an environment for the learners to discuss, explain, elaborate and defend their opinion using their higher learning order thinking skills (Rourke & Anderson, 2002).

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2. Literature Review

2.1 Asynchronous Online Discussion Forum

The asynchronous online discussion forum (AODF) is an interactive communication tool that helps learners to communicate and interact with their teachers and peers outside the classroom. It is believed that the asynchronous online forum encourages independent learning among the learners since they are able to take charge of their own learning (Gibbs, Simpson & Bernas, 2008). Learners will be more autonomous or self-regulating in their own learning since they are able to carry out the online discussion forum at their own pace and with less anxiety since there is no restricted time to organise their thoughts and sentences before responding to others.

Past researchers have examined the benefits and the usefulness of utilizing the asynchronous online discussion forum that could develop learners' critical thinking and argumentation skills (Smyth, 2011; Schrire, 2006). This is because asynchronous online discussion forum gives them the space to communicate in a way that is entirely different from the traditional face-to-face discussion in the language classroom. In fact, online discussion forum not only motivates learners to speak, but also encourages those who are shy and withdrawn to be more courageous and willing to participate. Furthermore, online discussion provides them with a non-threatening environment that reduces their anxiety and concerns about being embarrassed if they were to speak face-to-face in front of the public. The online mode of learning offers educational flexibility since it is independent of time and location (Bernard & Lundgren-Cayrol, 2001; Hew & Cheung, 2003). It also provides extra time for the learners to reflect, think and search for additional information before contributing to the discussion (De Wever, Schellens, Valcke & Van Keer, 2006; Pena-Shaff & Nicholls, 2004). Besides, all exchanges of information between learners are also stored for future reference (De Wever, Van Keer, Schellens & Valcke, 2007). Thus, the learners can be more autonomous and take charge of their discussion and learning activities and this will further increase the accessibility and opportunity for more frequent interaction (Bernard & Lundgren-Cayrol, 2001; Hew & Cheung, 2003).

In one study on asynchronous online discussion forum which utilized video-conferencing (McAndrew, Foubister & Mayes, 1996), it was discovered that this online discussion tool was effective in motivating learners to communicate in the target language. Since the online forum reduces physical barriers, learners can also communicate using non-verbal behaviours such as eye gazing and gesture to understand the other speaker's message (Bruse 1996). Moreover, with the absence of physical barriers, video-conferencing could increase collaborative learning among learners (Zähner, Fauverge & Wong, 2000) since they can unveil each other's knowledge while completing the tasks. Consequently, as the sense of community grows, so does the discussion.

2.2 Knowledge Construction in the Asynchronous Online Discussion Forum

Social constructivist theory proposes that knowledge is constructed by individuals who interact within an authentic social context (Wever et al., 2010). In other words, interactions are triggered by dialogue and shared knowledge within the socialised community. Based on this theory, language learners should be encouraged to speak using authentic dialogue in order to practise their target language skills within their own social learning community. It is also important to encourage learners to be effective speakers and to be independent in their learning. Social constructivism posits that learning takes place when knowledge is shared in a community and perceives learners as meaning-makers where the process of meaning-making is student-oriented. Thus, one way of achieving this student-oriented meaning-making process is to have an interactive speaking environment for the learners to develop and use their target language knowledge in an authentic learning environment beyond the classroom. In supporting the constructivist language teaching and learning approach, Applebee (1993, in Gray 1997) emphasizes that,

"[r]ather than treating the subject of English as subject matter to be memorized, a constructivist approach treats it as a body of knowledge, skills, and strategies that must be constructed by the learner out of experiences and interactions within the social context of the classroom. In such a tradition, understanding a work of literature does not mean memorizing someone else's interpretations, but constructing and elaborating upon one's own within the constraints of the text and the conventions of the classroom discourse community." (p. 200)

Given that information and/or knowledge needs socialisation, communication tools such as the asynchronous online discussion forum can be exploited to achieve socialisation since socialising involves day-to-day interaction between people (in this case between learners), who can exchange ideas and information deemed important for the creation of new knowledge (Davenport & Prusak, 2000). Therefore, a language class that can provide freedom in learning environment for learners to solve problems and experience language learning

independently among them will create a productive and constructive learning environment which will subsequently generate further creation of knowledge.

3. Method

The present study was a case study which examined ESL learners' perceptions on the use of a asynchronous online discussion forum known as MEDiF to practice and develop their oral communication skills and discussion skills in English. Participants in this study were eleven selected low proficiency ESL learners who attended a course in English for Academic Purposes (known as English for Social Sciences Course) in the Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia. All participants were in their 2nd academic year and they majored in different program of studies such Malay Language Studies, Development Science, History, and Social Work. All participants were from one intact class and they were divided into three discussion groups where two of the groups consisted of four students and one had three students. Observations of the participants' group discussion activities done on MEDiF were carried out once a week by the instructor for thirteen academic weeks. The aim was to monitor their participation on the online forum in terms of their participation frequency, length of discussions and language use. Focus group interviews were also conducted twice with the participants to probe their perceptions regarding the specific features of the MEDiF, learning opportunities, and construction of knowledge through the MEDiF.

3.1 Framework for the Study

A framework (see Figure 1) to guide the implementation of the present study was designed to ensure a smooth process of the implementation of the asynchronous online discussion forum (MEDiF) by the participants. The various stages involved in the implementation of the discussion activities as expected from the participants are described below.

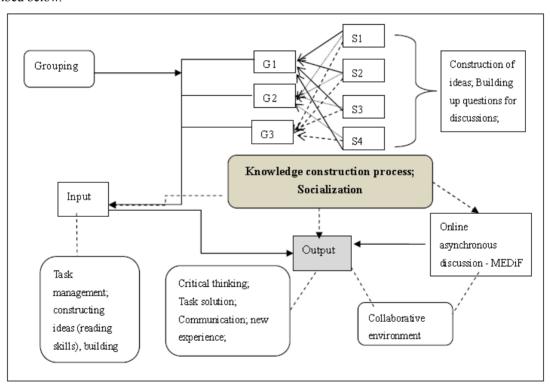


Figure 1. Framework for asynchronous online discussion forum

Prior to the implementation of the MEDiF discussions, all participants were introduced to the MEDiF as an online tool which they can utilize to interact, communicate, discuss, and complete their learning task. In terms of equipment, all they needed was a desktop or laptop computer and a head set, and microphone. The class instructor then demonstrated to the participants the various features of the MEDiF such as the audio and visual features and how to use the features to carry out and complete their discussion activities.

Stage 1. In stage one, participants first formed small discussion groups consisting of between 3 to 4 students per group. Members in each individual group then brainstormed face-to-face the topics or issues they wanted to

discuss on the MEDiF. They were given the freedom to choose any one topic related to their discipline of studies such as social or humanities issues or problems, or current happenings that interest them. Once they had agreed on the topic, they had to think of at least three or four discussion questions which they would use to guide them and to be discussed online. The topic and discussion questions formed were then uploaded on the MEDiF for them to discuss accordingly. Figure 2 and Figure 3 below illustrate the examples of topics selected and the questions discussed by the participants in their individual group using the MEDiF. To encourage responsibility among the participants, they were told that each of them they must lead one discussion question and must act as a group leader until each discussion cycle is completed.

There was no limit on the length or entry of the discussion as long as the discussion was completed with one or several solutions proposed. At this stage the participants construct and develop their knowledge online using cognitive skills through acquiring information within their group using higher level thinking order. The thinking process as a group is developed where participants need to give opinions or suggestions on the topics or issues raised and they need to make evaluation on all suggestions given before they decide on a suitable topic for the online project work. In this way, the participants socialized virtually to develop understanding of the task and to complete it and indirectly learn the language through online interaction.

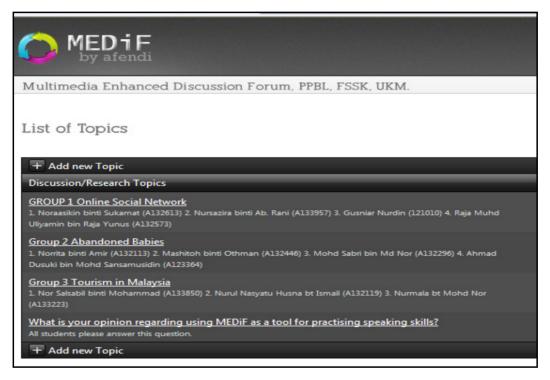


Figure 2. Example of topics posted in MEDiF

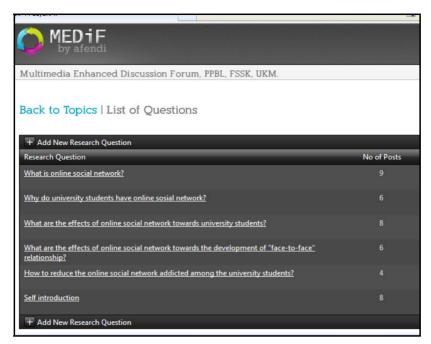


Figure 3. Example of discussion questions posted in MEDiF

Stage 2: The input or preparation. All learners were told to prepare the discussion points using information they gathered through readings. This stage would require the participants to apply their reading skills, metacognitive skills and cognitive skills in preparation for the online discussion. They were encouraged to gather as many reading materials as they can and read them prior to discussing the selected topics online. The purpose is to enable the participants to support their ideas with facts and additional information and in order to do this they would need to read critically and analytically. These processes allow the learners to use their language skills to gather and construct ideas, filter and share information within the group and develop their own language knowledge individually and independently.

Stage 3: The output stage in the devised framework stage is considered crucial in terms of language learning since the situation gives the learners ample opportunities to utilize the language orally as well as to construct and develop their knowledge within social context. At this stage, various language skills such as speaking, listening and discussion skills are employed to complete the given task. Learners socialized online to construct their learning by filtering and sharing information through discussion. Figure 4 below exemplifies the discussion thread carried out by one of the discussion group on MEDiF. Basically, they are using their critical thinking skills to communicate with each other given that they need to listen and respond to their group member's points of view that need an analytical and critical understanding of the discussion points. What is equally important is, right from the initial point of topic selection, followed by discussion and finally proposing solutions to problems and issues highlighted, the learners had eventually and collaboratively formed an online learning community.



Figure 4. Examples of discussion thread on MEDiF

4. Results

4.1 Findings and Discussion

The frequency of online discussions through the MEDiF conducted by the participants throughout the duration of study is as illustrated in Table 1 below. Generally, all participants were found to be enthusiastic and they actively contributed to the discussion task. For instance, Group 1 and Group 2 posted four discussion questions and Group 3 posted three questions. As the data show, Group 1 is the most active group with a total number of 42 postings, followed by Group 3 and Group 2.

Table 1. Frequency of discussions on MEDiF

Group	Topic	Number of postings	Types of research question	Number of postings
Group 1 N=4	Online social network	42	1 (Self-introduction)	9
			2 (Definition of terms)	6
			3 (What)	5
			4 (Why)	6
			5 (How)	5
Group 2 N=4	Abandoned Babies	21	1 (Self-introduction)	6
			2 (Definition of terms)	6
			3 (What)	4
			4 (Why)	5
			5 (How)	-
Group3 N=3	Tourism in Malaysia	23	1 (Self-introduction)	7
			2 (What)	5
			3 (Why)	6
			4 (How)	5

4.2 The Use of MEDiF as an Online Discussion Tool

At the end of the academic semester when the students had completed their language project through the use of MEDiF, the present researchers were interested to know the students' perceptions on this asynchronous discussion tool. This information is important since the researchers believed that the students' perceptions on the MEDiF had played an important role in influencing their participation in the online discussions. We found a very encouraging feedback from all learners in which they indicated that the MEDiF had given them the opportunities to practice speaking in English without any pressure and the feeling of anxiety and this had helped them improve their speaking skills. Majority of the students agreed that MEDiF is a good tool to practice their speaking and discussion skills while at the same time to acquire the target language. The students indicated that they were able to share ideas with their peers in English, something that they found difficult to do in a face-to-face situation. They also seemed eager to communicate in English towards the end of the semester as they felt more confident to speak in the target language. Most of them confirmed that speaking online had helped developed their self-confidence when speaking in English as they were not concerned with what people think of their language ability when speaking on MEDiF. They stated that the learning environment provided by MEDiF had given them a useful private space to communicate orally although in reality they are in a social group.

Additionally, the students also highlighted the learning that took place when using MEDiF for speaking. They reported that they felt comfortable when communicating in an asynchronous online discussion forum compared to face-to-face discussion. This had made them be more willing and eager to share their ideas with other group members. As expressed by two of the students below,

S4: "i want other group to join the discussion... we get more feedback.."

S7: "i like online... no one can see me.. i can practice speaking.. and I have more time to make sentences..."

In making comparison between face-to-face and online discussion, the students stated that in an online forum where no one was watching them, their level of shyness had reduced while their confidence level increased. However, in a face-to-face discussions, they would normally felt embarrassed when their peers listened to them while they were talking. In fact, they would avoid participating when they knew that other people were listening to them while they were talking. As described by S10,

S10: ...takut nak bercakap dalam kelas sebab ada orang dengar. saya tak pandai..tak ada vocab yang cukup. Tapi masa online saya ada masa yang banyak sebab rekodkan... so ada time untuk fikir dan buat ayat.. saya lagi confident masa online..."

(S10: ... afraid to speak in the class because people listen.. i am not clever, I don't have enough vocab. During online I have more time to record... so i have time to think and make sentences.. i feel more confident when online...)

The present researchers also noticed that the students had shown improvement in their confidence level when speaking in the class after practicing their discussion on MEDiF. During in class face-to-face discussion at the beginning of the semester, they had shown less confidence to speak in English. In fact, they would use their mother tongue, Malay, to participate in the face-to-face discussion. They reported that they felt shy to speak as they did not know what to say and were afraid to speak in English although they knew the discussion topic very well. They also stated that they needed more time to think of suitable vocabulary and to construct sentences using accurate grammar. The students further indicated that when using MEDiF for discussion in English, their shyness and feeling of anxiety reduced because they were not standing in front of real people, but communicating with the computer.

In addition, when the students were interviewed regarding their perceptions on using MEDiF to learn language, they gave positive responses. For example,

S1: ...amat berguna dan baik untuk memperbaiki bahasa ... memudahkan kita berbual...dengan menggunakan bahasa Inggeris...dapat menghilangkan rasa malu...saya bertambah confident untuk berbual dengan bahasa Inggeris...

(...very useful and good to improve the language ... make it easier to talk ... in English ... can eliminate the shame ... I am more confident to talk in English...)

S8: ...dapat mengurangkan perasaan malu untuk bercakap dalam bahasa Inggeris berbanding bercakap berhadapan dengan rakan dalam kelas...membantu untuk meningkatkan kefasihan bercakap dalam bahasa Inggeris ...

(... can reduce the feeling of embarrassment to speak in English compared to speak face-to-face with friends in

class ... helps to improve fluency in English speaking...)

The students were also interviewed on their perception on the features of MEDiF that were useful to enhance their learning process. They indicated that they were satisfied with the learning features provided in MEDiF. Although some of them indicated that the feature such as the recording was complicated, but they learnt how to operate it with their peers' help. As expressed by them,

However, they also expressed their disappointment regarding the difficulties in participating on MEDiF due to reasons such as poor Internet connection, problems with the recording devices, and time constrains. As they complained,

(Difficult to go online, sometimes I went online at 1 o'clock in the morning...)

Table 2 below summarises the students' perceptions regarding the features of the MEDiF, the learning opportunities and the constraints they faced when completing their language project using MEDiF.

Table 2. Students' perceptions on the various aspects of MEDiF

Features		Learning opportunities	The constraint
Discussion can be recorded – become permanent.	Allows learners to practise the oral discussion many times in MEDiF before they save it for others to listen.	Able to make corrections on their pronunciation; practise speaking; self-learning	The discussions are not clear due to the Internet connection
Listen to recorded discussion.	Can have ample time to listen and understand the discussion before replying to it.	Can practice their listening skills and filtering information.	The participation of the learners need to be monitored; some are not independent.
Recorded discussions are made public.	Other groups can listen to their discussion and contribute to it.	Makes them aware of good English when speaking – able to practise self-correction.	Not confident in their own ability to speak in English.
Recorded discussions are asynchronous.	Learners can listen and reply to the discussion at any time as there is no specific time to do it.	Makes learning very flexible.	Too flexible; learners took their time to respond.
Community learning.	Other members can listen to the discussion.	Gain more ideas – develop social learning group.	Some learners are reluctant to participate in the discussion.

4.3 Problems Faced by the Learners when Using MEDiF

Although the specially designed MEDiF could be considered as a useful platform for language learners to practise their speaking skills, there were also problems faced by the learners when using this communication tool. First and foremost, they complained that the poor Internet connection on campus had hampered their effort to access the MEDiF whenever and wherever they wanted to. This had made it difficult for them to participate more actively in the online discussion. Since they were using the university's WiFi facility, which is shared by all students on campus, they had to spend longer waiting time to go online and to log in. In fact, some students had to wait till midnight just to log in or they had to log in very early in the morning when the university's server was not congested.

The students also reported that they had difficulty trying to record their voice clearly using MEDiF. As a result, they could not hear their own recorded voices or they could not capture what their peers were conveying on the online forum. Hence, they could not respond to their peers' ideas and opinions. Consequently, the students had to re-record their discussions many times and this situation had de-motivated them from participating actively in

[&]quot;... I like when I can record and listen to myself before posting it.."

[&]quot;i improve my pronunciation.. when I listen I know I make a mistake, so i record again..."

[&]quot;... susah nak online, kadang-kadang kena online pukul 1 pagi baru ok"

the discussion.

Selection of the right and suitable topics could also be considered as major contributing factor to the success or failure of any discussion, be it face-to-face or online. Since the students had chosen their own topics for discussion, they had different reactions towards the questions posed. Some indicated that they really enjoyed the topic they had chosen, and this was reflected in the number of entries in their discussion forum. The rest however, were not satisfied with the discussions activities. Apparently, they had fewer points to discuss or put forward since they found the selected topics were either too general or the scope was too limited for the discussion to be developed or expanded. As a result, those who faced this difficulty participated less in the forum.

5. Discussions

Findings in this study generally indicated positive feelings and great enthusiasm on the part of the low proficiency ESL learners to communicate in the target language. Nonetheless, the use of English in their daily lives, especially inside and outside the classroom among their peers is still lacking. There are some plausible explanations as to why this is the state of affairs. Most of them are timid because they are afraid to make mistakes especially when trying to choose the correct vocabulary and when constructing grammatically correct sentence structure. They also needed extra time to think of what and how to say or correspond in English. Most of these low proficiency ESL learners think in their first language most of the time and then translated all the ideas or information they wanted to convey in English. For these reasons, they needed longer time to think of suitable vocabulary to use, or to use the correct or the best sentence structures. They were also concerned if they had pronounced the words wrongly. On top of that, they required good listening skills to understand and participate in the conversation in the second language.

In a situation such as the above, online mediums of interaction such as the MEDiF could provide the space and platform for the low proficiency learners to practice their speaking skills in the second language. This is because the learning environment is operated and controlled by the learners themselves. There is less or no interruption at all from the class teacher while the discussion activity is ongoing. It is believed that when learners are given the opportunity to take charge of their own learning, it can foster and encourage ownership of learning in them. This will subsequently develop collaborative learning and problem-solving skills among the group members. Further, when the low proficiency ESL learners are given the opportunity to use the language in a non-threatening learning environment they will gradually overcome their timidity and apprehension and increase their self-confidence to speak in English. This is because when they are given ample time to think and practise what to say without any pressure by their teacher or peers, they will unconsciously learn the new language on their own and if the practice is done continuously the learning will take place more rapidly. Moreover, when low proficiency learners are provided with more time to construct and develop their ideas or thoughts, they are able to develop and express more complex perspectives on the topic compared to the time when they have to do it in real face-to-face discussion.

This study had discovered that the use of an asynchronous online discussion forum such as the MEDiF can be an effective tool to help the low proficiency ESL learners particularly to develop their speaking skill in the target language. By reducing the physical barriers, this online forum can actually help the weak learners to increase the use of English especially during oral discussion. The online forum also provides a virtual environment which simulates the traditional face-to-face classroom environment where knowledge which requires the use of higher order thinking skills on the part of the learners can be constructed, validated and shared collaboratively.

6. Conclusion

As evidenced by the data, it can be concluded that the use of an asynchronous online discussion forum such as MEDiF can help to improve speaking ability as well as discussion skills among the low proficiency language learners. The positive feedback from the students in the present study on the use of MEDiF as a tool for practising their speaking skill has corroborated the findings in past studies (Bernard & Lundgren-Cayrol 2001; Hew & Cheung 2003; De Wever, Schellens, Valcke, & Van Keer 2006; Pena-Shaff & Nicholls 2004) on the effectiveness of online forum as a pedagogical tool in the language classrooms. Nevertheless, further improvements need to be carried out in order to improve the features of the online forum such as MEDiF so that it can accomplish the objectives for which it was designed to achieve. Language teachers who utilize the online forum must also clearly explained to their learners on the effectiveness and the benefits of using the online tool to develop their language skills. This is because, for some reasons there may be some students who would still prefer to have the traditional face-to-face discussion and are reluctant to participate in the online forum. It is suggested that the learners are provided with sufficient preparation or training so that they are familiar with the online devices and would feel less awkward when utilizing the features of the online tools such as the MEDiF.

This will ensure that the objectives of using the online discuss forum to enhance language skills can be fully accomplished.

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References

- Applebee, A. N. (1993). Literature in the secondary school: Studies of curriculum and instruction in the United States. Urbana, II: National Council of Teachers of English. (In Audrey Gray Contructivist Teaching and Learning, SSTA Research Centre Report #97-07) Retrieved from http://saskschoolboards.ca/research/instruction/97-07.htm
- Bernard, R. M., & Lundgren-Cayrol, K. (2001). Computer conferencing: An environment for collaborative project-based learning in distance education. *Educational Research and Evaluation*, 7, 241-261. http://dx.doi.org/10.1076/edre.7.2.241.3866
- Boonkit, K. (2010). Enhancing the development of speaking skills for non-native speakers of English. *Procedia Social and Behavioral Sciences*, 2, 1305-1309. http://dx.doi.org/10.1016/j.sbspro.2010.03.191
- Davenport, T. H., & Prusak, L. (2000). Working knowledge: How organizations manage what they know. Boston, MA: Harvard Business School Press.
- De Wever, B., Van Keer, H., Schellens, T., & Valcke, M. (2007). Applying multilevel modelling on content analysis data: Methodological issues in the study of the impact of role assignment in asynchronous discussion groups. *Learning and Instruction*, 17, 436-447. http://dx.doi.org/10.1016/j.learninstruc.2007.04.001
- De Wever, B., Van Keer, H., Schellens, T., & Valcke, M. (2009). Structuring asynchronous discussion groups: The impact of role support and self-assessment on learners' levels of knowledge construction through social negotiation. *Journal of Computer Assisted Learning*, *25*, 177-188. http://dx.doi.org/10.1111/j.1365-2729.2008.00292.x
- Gibbs, W., Simpson, L. D., & Bernas, R. S. (2008). An analysis of temporal norms in online discussion. *International Journal of Instructional Media*, 35(1), 63-75.
- Hew, K. F., & Cheung, W. S. (2003). An exploratory study on the use of asynchronous online discussion in hypermedia design. *E-Journal of Instructional Science and Technology, 6.* Retrieved April 1, 2009, from http://www.usq.edu.au/electpub/e-jist/docs/Vol6 No1/contents.htm
- Osborn, S., Osborn, M., & Osborn, R. (2008). Public speaking guidebook. Boston: Pearson Publication.
- Pena-Shaff, J. B., & Nicholls, C. (2004). Analyzing interactions and meaning construction in computer bulletin board discussions. *Computers & Education*, 42, 243-265. http://dx.doi.org/10.1016/j.compedu.2003.08.003
- Rourke, L., & Anderson, T. (2002). Using peer teams to lead online discussions. *Journal of Interactive Media in Education, 1*. Retrieved January, 2010, from http://jime.open.ac.uk/2002/1
- Schrire, S. (2006). Knowledge building in asynchronous discussion groups: Going beyond quantitative analysis. *Computers & Education, 46*, 49-70. http://dx.doi.org/10.1016/j.compedu.2005.04.006
- Smith, R. (2011). Enhancing learner-learner interaction using video communications in higher education: Implications from theorizing about a new mode. *British Journal of Educational Technology, 42*(1), 113-127. http://dx.doi.org/10.1111/j.1467-8535.2009.00990.x
- Yap, K. C., Chia, K. P. (2010) Knowledge construction and misconstruction: A case study approach in asynchronous discussion using Knowledge Construction Message Map (KCMM) and Knowledge Construction Message Graph (KCMG). *Computers & Education*, 55, 1589-1613. http://dx.doi.org/10.1016/j.compedu.2010.07.002
- Zaremba, A. J. (2006). Speaking professionally. Canada: Thompson South-Western.

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