

Facilitating Online Learning: Students' Online Discussion Strategies for a Project Work at a Technical University in Malaysia

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ABSTRACT

The use of online discussion forum is slowly penetrating into classroom teaching and learning as studies have proven that it contributes to a positive learning environment, provided that learners and educators know how to use it effectively. In order to know how to use the online discussion forum effectively, this study was conducted. The research objective was to identify the online discussion strategies employed by the participants. This case study involved fifteen 2nd semester Engineering Technology Malaysian undergraduates enrolled in "Professional English 1" course. Data were gathered from a focus group interview, individual interview and participants' reflective notes. Five participants volunteered to be interviewed individually and the remainder express their interest to be interviewed in a focus group interview. The participants were interviewed immediately after their online discussion activities. The participants were also asked to reflect to their opinions on their online discussion experience after each online discussion activities. These findings indicate that participants employed three online discussion strategies to facilitate their project work, namely: 1) devising and coordinating ideas before posting 2) interpreting others' responses before posting their ideas online, and 3) ratifying their own statements before posting. These strategies were employed by the participants to complete a proposal for a Community Service Responsibility (CSR) project. It is hoped that these findings could provide insights and create awareness among the lecturers on the strategies employed by the participants so that more effective and meaningful online discussions could be carried out.

Keywords: Online Discussion Strategies; Project Work; Engineering Undergraduate Students; Technical University; Case Study

INTRODUCTION

The use of e-learning in institutions of higher learning worldwide is constantly evolving and it has become a crucial component in the teaching and learning processes, particularly, in the study of languages (Islam et al. 2015). Currently, higher education institutions in Malaysia are moving towards e-learning and using technologies in the classrooms (Hamdan et al. 2017). One of the main purposes of employing e-learning is to complement traditional methods of teaching and learning such as manual presentation of lessons on the whiteboard, face-to-face interaction, and conventional discussions. The utilization of technology is seen as very useful to both students and teachers. Stanford et al. (2010) have identified many advantages of the use of technology in education and some of these include promoting differentiated learning and providing more opportunities for both teachers and students to interact beyond the classroom. Differentiated learning refers to the differences in students' learning pace, English proficiency level, learning style, intelligence, and interests.

Furthermore, Chen (2005) added that technology may improve important skills such as good time management and communication skills which include various strategies namely, negotiation, discussion, and the organisation and projection of ideas. This is further supported by Rajprasit & Hemchua (2015) stating that students, in particular, future engineers, need to possess the following ability: the ability to engage in discussions, explanations, formal and informal conversations, as well as carry out oral presentations, participate in negotiation, persuasion, problem-solving and conflict-resolution. Chen (2005) again highlighted that the use of technology during their learning process results in students' motivation to communicate with their teacher and peers to be heightened. The ability to communicate effectively with both parties, therefore, allows the students to enhance their emotional intelligence, as this is much needed in the 21st-century learning skills as highlighted by Mohamad et al. (2017). The authors stressed that students with high emotional intelligence are able to "... appraise and express their emotions accurately and wisely" which in return will lead to an effective discussion among the students (Mohamad et al. 2017, pp. 69-70). Therefore, common problems during classroom learning such as limited face-to-face contact hours and disengagement during traditional class discussions are addressed and can be overcome by integrating online discussions in the learning process.

Using the Online Discussion Forum (ODF) as a platform to communicate ideas is also taking its place in classrooms. The integration of online discussion in language classrooms could help university students gain more information and knowledge, in which these two elements are very fundamental and useful. Various studies have proven that ODF has become a common method of online learning, as it provides various advantages such as spatial and temporal flexibility in learning and communicating, and it broadens students' opportunities to share and express their ideas, especially when discussing complex and difficult topics (Wang & Member 2015, Hamdan et al. 2017).

However, there is still evidence pointing towards the disadvantages of online discussions, as many other studies have shown that students who participate in online discussions do not react instantly when given a problem or issue to discuss (Clark 2003, An et al. 2009, Qiyun & Huay 2007). Moreover, students claim that they face problems in identifying ideas that need to be posted, and they worry that their ideas are not relevant to the topic of discussion, or that their ideas will be disapproved by other members of the group (Vonderwell et al. 2007). Although the aim of an online discussion is to promote group discussion with less monitoring from the lecturers, some students feel that they are isolated and disconnected as there are no face-to-face and physical meetings (Xia et al. 2013). Thus, the intention of this study is to identify the strategies used by a group of undergraduate students from a technical university in using online discussion in completing their class projects including assignments in the Professional English I course. It is hoped that the findings of this study could provide some insights into the current and future directions of online discussion among university students.

LITERATURE REVIEW

THEORETICAL FRAMEWORK

Producing collaborative learning and productive online discussions among students are the core directives of active learning in higher institutions in Malaysia. In order for students to acquire the 21st-century learning skills, they must be competent in communicating using technology as well as working efficiently with other members of the group (Salleh 2017). Therefore, this present research employed the Online Collaborative Learning theory and The

Productive Online Discussion model to develop the online discussion activities in Professional English 1 course. They are also used to manoeuvre the study.

The theory “The Online Collaborative Learning” proposed by Harasim (2012) is derived from the Constructivism Theory. According to the proponent, the elements of this theory include collaborative learning, knowledge building and the application of the Internet to navigate an interactive learning environment. This theory involves three important phases, namely; 1) idea generating, 2) idea organising and 3) intellectual convergence.

Idea generating is the first phase where students gather all the ideas by brainstorming, asking questions, asking for more elaborations and therefore engaging themselves in an autonomous participation. Since this is the phase which requires the students to interact with each other, the Internet is the best platform to gather these ideas and collaborate with the team members for idea generation (Sawhney & Prandelli 2000). The second phase, which is idea organising, is when students begin to showcase their intellectual process and progress in their discussions. They begin to organise their ideas, materials and data by agreeing and disagreeing with ideas presented by others as well as coaching each other by addressing problems and offering justifications for issues that are not clear (Kulikovskikh et al. 2017). These ideas are organised into separate themes or categories by classifying them into meaningful groups. The third phase is intellectual convergence and this is the most pivotal part of the process as students will begin to synthesise and achieve mutual consensus among the group members. During this process, they will expand what they know by giving thoughtful ideas during the discussion. Other students involved in the discussion relate these ideas to their ideas logically according to what they understand from the online discussion (Weinberger et al. 2007). Furthermore, this is the period when students start their convergent thinking process before reaching any conclusions or decisions.

The Productive Online Discussion Model, on the other hand, was proposed by Gao in 2009. This model provides a more systematic and comprehensive framework to understand how learning occurs when the online discussion is in process. This model focuses on the asynchronous discussion and how this type of online discussion can help students improve their cognitive, argumentative and constructive knowledge skills (Gao et al. 2009). These researchers opined that online discussion platform is able to keep records of the detailed discussion, therefore enabling students the ability to identify, examine and make connections between ideas. The proponents of this model outline three processes that are to be coordinated in an online discussion. These processes are 1) discuss to comprehend, 2) discuss to critique, 3) discuss to construct knowledge and 4) discuss to share improved understanding.

The first process, which is “discuss to comprehend” happens when students are actively engaged in cognitive processes. These cognitive processes include sharing and comparing information, elaborating justifications, making connections with previous knowledge, negotiating meaning, testing, modifying and applying knowledge, and finally, developing comprehension, all of which are gained during the online discussion. Actual comprehension is only developed by undergoing the cognitive process. After students discuss to get a better understanding of the issue that is being introduced in the discussion, they move to the second process which is “discuss to critique”. This is a stage where students start arguing intelligently on what they know and what they have experienced. During this process, students justify their arguments by providing justifications and evidence/s as to why their ideas or opinions should be accepted (Gao et al. 2009). The third process is “discuss to construct knowledge”. During this process, they will begin to build their knowledge based on what they obtained from the discussion. The fourth process, “discuss to share improved understanding”, is when they share opinions and ideas as a result of the understanding they have gained from the discussion.

Therefore, when students discuss via online productively, they are able to learn and understand from others and this leads them to a higher thinking level. This is supported by Rahman et al. (2011, p. 490) when they acknowledged that students who are involved in online learning "... become more structured to submerge themselves using deep processing approach which helps them in a more meaningful learning". This is the stage where students become more responsive towards their peers' opinions and try to link new information with knowledge or meaning that was constructed earlier. This is also the final stage of the Productive Online Discussion Model; whereby the students discuss to share improved understanding, as they begin to actively synthesise the knowledge that they have gained and accurately assert their improved understanding based on the content of the discussion (Gao et al. 2009).

PAST STUDIES ON ONLINE DISCUSSION FORUMS

The online discussion forum is a powerful instructional tool that often complements a face-to-face classroom learning. Hence, a lot of studies have been conducted to identify the positive effects of discussion forums, in particular on the development of students' language learning. Some of these studies are researches on the area of idea development in online discussions (Robert 1991, Yang & Lin 2015), importance of understanding responses by group members of online discussions (Webb & Mastergeorge 2003, Al-shalchi 2009, Dogruer, Eyyam & Menevis 2011), and the importance of reconfirming ideas of participants in online discussions (Richardson & Swan 2003, Hewitt 2005, Xia et al 2013). There is also evidence from previous studies that highlight the importance of using external sources to support participants' arguments when they are discussing online (Arend 2009, Shana 2009)

The adaptation of this theory and model therefore precisely navigates the researchers to analyse how an online group discussion activity can be strategised in order to result in an effective discussion activity. The process and stages which were elaborated in the theory and model offer new insights to the course developers on how to create and prepare students for an active and efficient online discussion session.

METHODOLOGY

BACKGROUND OF THE STUDY

The participants of this research were 56 undergraduate students who were in their fourth semester, taking Set 3 for Professional English I subject. All the students from this set were given ten weeks to discuss a Community Service Responsibility (CSR) project via the online discussion forum. Only eight students out of 56 volunteered to be interviewed for the focus group interview, while five students volunteered to be the participants for the individual interview. Apart from the interviews, participants were also asked to respond using their reflective notes which were made available online after each online discussion sessions.

The students who enrolled in this set came from two different classes. The students were from various engineering disciplines namely, Mechatronics, Mechanical and Machine Technology, Mechanical Engineering, and Welding Technology. Professional English 1 is a compulsory subject. Students can only register for this course if they have taken and passed the prerequisite subject which is Fundamental English. These students have taken the Malaysian University English Test (MUET). They must have obtained at least Band Two in order to be accepted by the university. According to the Malaysian Examinations Council (MPM), Band two refers to a limited user who is not fluent in English and therefore very frequently makes grammatical errors. They also have a limited understanding of the language

and its context, resulting in having limited ability to function in the language. The participant's age range was between 20-22 years old. All the participants were males except for one student.

Every student in Set Three participated in the online discussion forum, as it was part of the Professional English 1 formative assessment. It was a formative assessment since the online discussion was an ongoing assessment and it involved getting feedback from the lecturer. This assessment focused on the details of contents and students' performance throughout the duration of the assessment. Discussion topics were given in weeks three to seven. The students were divided into a group of five to six students. Each group was instructed to discuss their ideas and progress based on their projects via online discussion. The participants facilitated their own online discussions, closely monitored by the lecturer who participated in the online discussion forum as well. It was important for the lecturer to be involved in the discussion as a motivation for the participants to participate and actively engage in the online discussion.

This study adopted a case study approach since the researchers intended to explore in depth the online discussion strategies among engineering students. A case study approach was chosen because it is intrinsic in nature, as the researchers tried to better understand a particular case (Stake 2005). The researchers were interested to explore the case deeply, therefore the researchers were the key players themselves. They investigated and probed in detail to find the answers to the research question This is parallel to Hox and Boeije's (2005) statement as they mentioned that the researchers had to immerse themselves in the natural setting in order to collect detailed information from the participants and their online discussion experiences.

RELIABILITY AND VALIDITY

DEFINITION OF RELIABILITY AND VALIDITY

The definition of reliability in qualitative studies is it that it functions to “generate understanding” of a certain problem that is being studied (Stenbacka 2001). If the readers are able to understand the research and make connections to the problems, it makes the study reliable. In addition to this, reliability is also a factor that needs to be concerned when researchers begin to design the study, analysing the data and result and evaluating the study itself (Patton & Cochran 2002). The process of conducting a qualitative research should be planned carefully in order for the research to be reliable and trustworthy. Bashir et al. (2008, p. 35) stated the term “validity” is in which data is “plausible, credible and trustworthy”. The validity of the research depends on the validity of the findings and instruments that are used for the study. Therefore it is vital that a research is valid in order to sustain the credibility of the findings and results. To achieve this level of validity, there is a need for a qualifying check or measure for the study that is being conducted (Golafshani 2009).

In this present study, three measures were taken to determine the reliability and validity of the instruments. These measures taken were expert validations for the interview questions and reflective notes, members check and triangulation. For the first measure, feedback, comments and responses regarding the interview questions and semi-structured reflective notes from three experts were sought after. The three experts were from three different universities; all of them were skilled and trained language practitioners and skilful researchers. The second measure taken, which was members check, was also carried out in order to maintain the reliability and validity of the instruments. The transcribed responses from the interview sessions were returned to the participants for them to check the accuracy and clarity of their verbal responses. Once they agreed with the transcription, they signed an

agreement form, claiming that their responses were correctly transcribed. The third measure, which was triangulation, was also used to enhance the accuracy of this study. To triangulate the data and findings, three instruments were used in this study; individual interview, focus group interview and reflective notes. The data gathered from these three instruments supported each other by providing concrete evidence and justification of the data collected by the researcher.

DATA COLLECTION

Three research instruments were used for data collection: focus group interviews (FGI), individual interview (II) and reflective notes (RN). This process using multiple instruments is known as triangulation. It is needed in order for the researcher to enhance the accuracy of the data (Creswell 2012). The participants were given pseudonyms for confidentiality purposes, which is parallel with Crow and Wiles' (2008) suggestion to safeguard the confidentiality of the participants.

To ensure that the data was correctly obtained through proper procedure, one of the researchers was given the task of observing the online discussions as well as administering the interview sessions and responding to the semi-structured reflective notes. This particular researcher was also the subject lecturer. Following the final online discussion session, the participants were invited to the focus group interview and individual interview. Only 13 students volunteered to be the participants. Several students preferred to be interviewed as a group because they believed that when they were in a group, they could generate more ideas, reduce their anxiety levels, and obtain support from other group members. Several questions were asked related to the strategies that they employed in ensuring the online discussions were effectively engaged by the participants. All the interview responses were recorded and transcribed verbatim. The transcripts were later returned to the participants in order for them to check the accuracy of the content. Participants were also given the task to reflect towards the online discussion activities by providing short answers to the questions related to their feelings and experiences using the online discussion forum after each online session. Their responses were known as reflective notes.

DATA ANALYSIS

The data gathered from the three research tools namely focus group interviews, individual interviews, and reflective notes were categorised into specific themes. In order to achieve this, the data gathered was processed using Nvivo and went through the coding process. The responses from the participants were categorised into themes based on the same ideas or repetition of terms that they used in the interview transcripts and reflective notes. Sub-themes were also identified during this process. Once these themes and sub-themes were identified, the researchers triangulated the data until an agreement was achieved to build the final set of the themes that represent the content of the interviews and reflective notes.

FINDINGS AND DISCUSSIONS

From the findings, the following are the online discussion strategies the students used to facilitate their online discussion. The strategies were: 1) devising and coordinating ideas before posting, 2) interpreting others' responses before posting their ideas online, 3) ratifying their own statements before posting.

DEVISING AND COORDINATING IDEAS BEFORE POSTING

The findings indicated that it was important for them to devise their ideas before posting them online. This sense of consciousness was to avoid any kind of misunderstanding or misinterpretation that might arise from the discussion among the group members. Three steps were taken by the participants in devising and coordinating their ideas prior to posting them online: 1) explaining their ideas to the group members via WhatsApp prior to posting them online, 2) identifying the main ideas of the discussion, and 3) revising and listing the ideas before posting them online. The findings of the current study which discusses the first strategy are consistent with one of the processes mentioned by Harasim (2014) in her Online Collaborative Learning Theory which is idea organising.

EXPLAINING THEIR IDEAS TO THEIR GROUP MEMBERS VIA “WHATSAPP” PRIOR TO POSTING THEM ONLINE

The first step taken by participants was explaining their ideas to their group members via “WhatsApp” prior to posting them online by asking questions and getting approval for the ideas that will be posted. It is an important process for respondents before they post their ideas online. This act of seeking approval was also visible in classroom discussions and via WhatsApp application among the group members. The participants commented in the RN, that they had set up their own “WhatsApp” group. In the interview, the researcher further probed by asking when and why do they need a WhatsApp group when they can use the online forum as a platform to ask questions. One of the participants, MA from the FGI replied, “...I will use it (*WhatsApp*) to ask first, then when there are no comments, I will put my idea online”.

Another participant, PT, in his RN stated that he used this WhatsApp application as “... it was easy to explain using easy terms and build an easy construction of the sentence”. Meanwhile, a participant from the FGI, AS, felt that after generating his own ideas, “...it was important for him to explain to his teammates about his ideas and asked for their approval before posting it online”. Two other participants, MAI and MZNA in their RN noted that they would “...ask personally for clarification of the ideas before posting them online”.

When the researchers asked for their reason of discussing via “WhatsApp” before posting the ideas via an online forum, they claimed that this was mainly to minimise any kind of misunderstanding once the posts were published online. By getting approval from the other members of the group, it showed that their ideas would be understood and accepted by others. Their ideas would not probably be contested during the actual online discussion. Their feelings and actions are consistent with Robert’s (1991) remark that the performance of participants increases when they are encouraged and assisted by other group members in the completion of their group assignments. They felt that it was important for them to participate in the discussion as they valued the ideas given by their fellow participants. This is similar to a finding by Yuit and Thai (2010), as their participants in a survey indicated that they appreciated the value of online discussion and also understood the importance of participating in the session. The appreciation and understanding along with the assistance and opinions of other group members, allow them to have a sense of accountability and interdependence of what they will post online.

IDENTIFYING THE MAIN IDEAS OF THE DISCUSSION

The second step taken by the participants during the organising process was to identify the important points that surfaced or are being discussed by others during the online discussion. This was to ensure that they would contribute effectively to the discussion and further elaborated or gave more responses to the ideas that were being discussed rather than

discussing an unrelated issue. This conclusion was derived from the interview responses and reflective notes.

MA claimed through FGI that he, “... *responded to the important questions first then proceeded to the next question*” as he wanted to make sure that he was on the right discussion track. IL further elaborated that he, “... *outlined or organised the ideas by focusing on the subject that was being discussed at the moment to reduce confusion while discussing online*”. Finally, HA from the II said that he, “... *reconfirm the issue that was the most important and later investigate the importance of the issue*”. He believed that by reconfirming his state of mind with an investigation on the same issue, he would be able to justify and give positive feedback as he had already understood the situation and problem.

These responses were in line with the fact that entertaining important questions were essential in order for the participants to grasp the gist of the discussion and to clearly understand its flow. The conclusion derived from the findings by Yang and Lin (2015), who claimed that an accurate understanding of participants towards the issues discussed, therefore, has the potential not only to provide towards improved detection of main ideas but also to contribute insights towards a productive intervention during online interactions.

REVISING AND LISTING THE IDEAS BEFORE POSTING THEM ONLINE

The third step of outlining the ideas before posting them was to revise and list them down. MHZ from his RN stated that he, “... *will think and read twice before post my words in order for others to understand directly my words without having them to ask twice*”. AM from FGI mentioned that he, “... *will list down first and find more info then confirm the idea and post it*”. BL, from the same interview, indicated that he, “... *would revise the previous postings by his other group members, and would generate ideas from the previous discussions*”. This illustrated that revising and putting them in a readable manner allows them to clarify the text and therefore construct new knowledge based on what they have read and listed.

This strategy was also used by HAZ, as he explained that it was really important for him “... *to write down or mind map of what he was going to post so he can clearly see how his postings would look like when he published it online*”. Meanwhile, AN organised his ideas “... *roughly on a piece of paper of what I think I would write about and only after I was satisfied, I would start typing and post online*”.

Revising ideas before posting them online is crucial as these participants would want to post dynamic and genuine responses in order to obtain new knowledge. These findings are parallel with a study by Yang and Lin (2015) as the participants found that taking notes and receiving peers and lecturers’ revisions enabled them to clarify the text and finally construct new knowledge.

INTERPRETING OTHERS’ RESPONSES BEFORE POSTING THEIR IDEAS ONLINE

Participants reported the second strategy that they used was to interpret the responses from other group members before posting their own. From the FGI and II conducted on the participants, the study found that they employed three steps to this strategy namely; 1) asking for clarification, 2) understanding the previous responses and 3) searching the internet for better understanding. Hence, these findings collaborate with one of the processes involved in the Productive Online Discussion Model by Gao (2009) which is discussed to construct knowledge.

ASKING FOR CLARIFICATION

It was vital that the participants needed to understand the flow of the discussion in order for them to participate in the online discussion. One step taken by the participants to confirm their interpretations and understanding of the issue being discussed was to ask for further clarification on matters which were vague and which needed more explanation and elaboration. As mentioned by MA and IL from the FGI, both stressed that, “...if I do not understand, I will ask to get clear (ideas) what they try to discuss in discussion” and “...if I still cannot understand the main idea that my friend post, I will directly ask my group members about the post in person or use the online discussion”. AS added that, “I asking to explain it to me when I did not understand what they are saying” and IL supported this approach when he explained that, “...if I don’t understand I will directly reply to the thread or asking more about the response until I understand what they want to say or what they want to respond”. The feedback gathered from other participants also helped the progress of their online discussion. This finding is similar to a study by Krish (2006) who discovered that immediate feedback from other participants helps learners to concentrate on their mistakes and get their discussion back on the track. This is supported by another study by Shahsavari and Hoon (2011), as they stated when participants were discussing online, it gave them the opportunity to think and formulate answers in a traditional way.

From the responses gathered, it can be concluded that participants would ask for second opinions or further clarification before posting their own ideas online, as they needed their postings to be relevant in the online discussion. This scenario is common and supported by a study from Webb and Mastergeorge (2003) who stated that effective helping behaviour that existed in group work results in the asking of accurate questions and the providing of comprehensive elaborations.

UNDERSTANDING THE PREVIOUS RESPONSES

Apart from asking for clarification to ensure that the content of the discussion was interpreted correctly, participants also perceived that there was a need to look through the previous responses posted by the group members from time to time. They stated that in order for them to essentially understand the essence of the discussion, they needed to reread and assimilate the information that was posted earlier by the other group members. AM from FGI stated he, “... understand from the information that they already posted in discussion” and this was further supported by IZ from II when she agreed that she, “...understood the content of the group online discussion by reading their earlier postings”.

Participants BL, HZ, and IL opined that they were able to understand the substance of the discussion by reading the postings which were made by other group members more than once. The reason for multiple readings was to ensure that they were in the right direction and to ensure that they were discussing the same issue.

As concluded by Al-shalchi (2009), learners can respond to posts made in the online discussion after they have had time to think about the topic and read what others have already contributed to the discussion. In this manner, they will have more time to think and do further research on the topic that was being discussed in order for them to contribute effectively.

SEARCHING THE INTERNET FOR BETTER UNDERSTANDING

The participants felt that the Internet was the solution to their problems especially when it comes to providing more inputs to their discussions or in providing meanings to new and difficult words. BL and HA, both from the FGI acknowledged that they used the Internet to resolve their uncertainty as BL claimed that the Internet offered him the solution to his

problem. He stated that when he did not understand an issue, he searched the internet for answers as he mentioned “...when I don’t understand I searched on the internet and then I will get the answer”.

Apart from the usual internet search, other participants used Google Translate. For instance, HA used it to translate ideas into his own language when he did not understand them, especially when the original poster of that idea is not available to explain it. He claimed that “...if the person is not available at that time, then I will just post the sentence or part that I do not understand to Google Translate, then I will be able to understand my group members’ responses in the online discussion”. In doing so, HA gained a better understanding of the other responses in the online discussion. MAMR in his RN also claimed that he used Google Translate to translate all the words in certain posts to ensure that he comprehended them. He claimed that he, “...using Google Translate so that it will translate all the words in that post”. This is to ensure that the ideas presented were easy to understand and acceptable by other group members.

Therefore, from these responses, the researchers believed that the participants were dependent on the Internet, especially on websites that could help them with their language use. This action is supported by an earlier study by Dryli & Kinnaman (1996) in Dogruer et al. (2011) and Azura et al. (2018), as they found that the Internet assists the learners in seeking information and at the same time grants them the opportunity to think critically and creatively in order for them to work efficiently as a group.

RATIFYING OWN STATEMENTS BEFORE POSTING

Another strategy used by the participants to ensure that their online discussion ran smoothly was by ratifying the validity of the statements that they intend to make before posting them online. Participants indicated that there were mainly three measures taken to ensure that the statements that would be posted were credible and useful for the discussion and did not interfere with the flow of the discussion namely; 1) referring to previous posts and 2) referring to peers for more information. This strategy confirms that one of Gao’s (2009) processes, namely, discuss to share improved knowledge, was also used by the participants in this study.

REFERRING TO PREVIOUS POSTS

The participants acknowledged that to reconfirm the validity of the statements and facts posted online, they would refer to the previous postings in the online discussion. These postings were reviewed so that participants could refer to any information or messages there were discussed earlier in the discussion. He stated that he “...would refer back from the post to confirm it back”. BL also emphasised that he would reconfirm a statement in the online discussion and usually follow up on the idea so that the other members would know what was being discussed as he emphasised that he “...would reconfirmed the statement that is made from the online discussion is usually follow up the idea so that other members know what we discussed in online discussion”.

AN also added that he would also look at who posted specific statements to ensure that he did not veer away from the discussion. JL in II acknowledged that he reconfirmed his postings by rewriting them as his new post for other group members “...will much aware about the statements” and they were alert that new information was being posted online. He also added that, to make the statements more significant, he would make simple notes about his explanations to further clarify if any of the group members were unable to understand them. The participants felt that if they did not refer to earlier postings, they might miss unread messages and this could have led to the collapse of the discussion.

This finding is supported by Hewitt (2005) who found that only an average number of the students would read or refer to unread messages, and a large portion of them tended to ignore these messages. These actions, according to him, would lead to two problems in the online discussion which were unintended thread abandonment and the unintended sway of the discussion topic. In the present study, the participants were attentive to these potential problems and avoided them, hence ensuring that they did not deviate from the original intent and point of discussion.

REFERRING TO PEERS FOR MORE INFORMATION

Having peer interaction during the online discussion is important as it can develop knowledge sharing as emphasised by Xia et al. (2013). They indicated that student connection and social relationships are the main ingredients in effectively exchanging ideas and developing an understanding of key concepts and issues among learners. This is evident as HZ from FGI stressed he “...would recheck it later to make sure all my sentence is correct just in case my friend still do not understand what I have posted I will ask them to contact me personally and ask about what they do not understand”. IL also agreed that it was important to “...ask the confirmation of the statements via online discussion or if it urgent I will ask in person”.

Furthermore, IZ from II supported this by using other mobile applications such as WhatsApp to “...confirm back the information and by asking face to face whether my friend or the lecturer regarding that information”. AHI and MH from their RN noted that they would, “... ask opinion with all group members” and “discuss with other groupmate”. These responses from the participants were parallel to the findings of Richardson and Swan (2003) when they found that when learners are asked to provide constructive feedback to each other, they are actually participating and assisting each other’s learning process. They added that this will lead to a greater understanding and appreciation of their peers’ experiences and viewpoints. Furthermore, by encouraging these students to participate in giving feedback to their peers, effective interaction increases, which in return builds up students’ satisfaction towards the course.

Hence, from the responses given by the participants, it showed that they were aware that the process of referring to their peers would make their postings more significant and comprehensive.

CONCLUSION

This paper aimed to identify the online discussion strategies that were employed by the participants. The literature of this study has shown that there are various methods of getting students to be engaged in effective online discussions as stated by Shahirah et al. (2018). Yet, this study does not propose that online discussions should replace conventional face-to-face learning. Along with other studies, the present study merely confirms the advantages of online discussions as part of the whole learning process. Yet, to experience the benefit of these advantages, it is important for students to employ the appropriate strategies.

In summary, the three online discussion strategies employed by the participants in facilitating the completion of their CSR project work are; 1) devising and coordinating ideas before posting, 2) interpreting others’ responses before posting their ideas online and 3) ratifying their own statements before posting. Three steps were taken by the participants in devising and coordinating their ideas prior to posting them online: a) explaining their ideas to the group members via WhatsApp prior to posting them online, b) identifying the main ideas of the discussion, and c) revising and listing the ideas before posting them online. The steps

taken for the second strategy were a) asking for clarification, b) understanding the previous responses and c) searching the internet for better understanding. Finally, the steps taken for the third strategy were a) referring to previous posts and b) referring to peers for more information.

These strategies are adaptable and relevant to the nature of their classroom learning. It is hereby suggested that a further study is conducted with a larger sample of participants to generalise the results obtained from this study. Other than identifying additional online discussion strategies employed by the participants in this study, future studies are also suggested to recognise potential barriers that prevent students from having an effective online discussion.

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