#### **CHAPTER II**

#### REVIEW OF RELATED LITERATURE

This chapter discusses two major topics, which are review of related literature and previous studies.

#### A. Review of Related Literature

Explaining the theories related to the topic discussed are required due to they are the foundation to conduct this study. The aspects covered in this heading are CALL, online discussion, online asynchronous discussion, possible challenges in online asynchronous discussion and possible strategies to overcome the challenges in online asynchronous discussion.

# 1. CALL (Computer-Assisted Language Learning)

Computer-Assisted Language Learning or people generally abbreviate with CALL, is traditionally defined as "presenting, reinforcing and testing" certain language items. It presents regulation and example for learners before they are tested their knowledge of the regulation, and later on the computer will give feedback or mark, in which the teachers can use it as their investigation.<sup>1</sup>

Regarding the definition of CALL, Beatty also has contributed to define the term as any process in which a learner uses a computer and, as a result, improves his or her language.<sup>2</sup> This definition has similar sound

<sup>&</sup>lt;sup>1</sup> Nazh Gündüz, "Computer Assisted Language Learning (CALL)" 1, no. 2 (October 2005): 197.

<sup>&</sup>lt;sup>2</sup> Ken Beatty, *Teaching and Researching Computer-Assisted Language Learning*, Second Edition (Edinburg: Pearson Education, 2012), 7.

with Scott and Beadle who state that CALL is any process in which learners use computer to improve foreign language competence.<sup>3</sup> Scott and Beadle also explain more about the technology used in CALL, as well as a computer; smart phone, tablet, MP 3 Player, and console are the members. In addition, they widely mentioned that in CALL, people commonly applied:

- a. Authentic foreign language material, such as video clips, flashanimations, web-quests, pod-cast, web-casts, and news etc.;
- b. Online environment where learners can communicate with foreign language speakers, through email, text-based computer-mediated communication (synchronous and asynchronous), social media, or voice/ video conferencing;
- c. Language-learning tools (online apps or software), such as for phonetics, pronunciation, vocabulary, grammar and clause analysis, which may include a text-to-speech function or speech recognition, and often includes interactive and guided exercises;
- d. Online proprietary virtual learning environments, which offer teacher-student and peer-to-peer communication;
- e. Game-based learning.

#### 2. Online Discussion

#### a. The Definition of Online Discussion

<sup>&</sup>lt;sup>3</sup> David Scott and Shane Beadle, "Improving the Effectiveness of Language Learning: CLIL and Computer Assisted Language Learning" (ICF International, June 25, 2014), 19.

Online discussion is described as an online tool used to deliver learning and do conversations, in which the learners can involve.<sup>4</sup> It is generally used discussion boards, forums, and thread.<sup>5</sup>

- A discussion board is the tool that provides the space for online discussions.
- 2) Discussion boards can hold multiple forums, which can be organized by the topics.
- 3) Discussion threads are conversations within discussion forums and begin with a leading question or prompt. Users can respond to the original prompt and can reply to other responses.

# b. Various Types of Online Discussion

There are numerous studies which discuss about online discussion, likewise this study. In line with this, the researcher tries to explain the various types of online discussion. There are two types of online discussion<sup>6</sup>:

1) Online Synchronous Discussion (OSD)

According to Al-Shalchi, online synchronous discussion needs the members of group to take part at the same time. It is commonly supported by media such as video conference, instant message, and live chat.<sup>7</sup>

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<sup>&</sup>lt;sup>4</sup> "Online Discussion," *Cornell University Center for Teaching Excellence*, accessed April 25, 2016, http://www.cte.cornell.edu/teaching-ideas/teaching-with-technology/online-discussions.html.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Olla Najah Al-Shalchi, "The Effectiveness and Development of Online Discussions" 5, no. 1 (March 2009): 104.

<sup>&</sup>lt;sup>7</sup> Hratinski, "Asynchronous & Synchronous E-Learning - A Study of Synchronous and Asynchronous E-Learning Methods Discovered That Each Supports Different Purposes," 51–52.

Moreover, Poe and Stassen say that other tools which can be used are audio, data and application sharing, shared whiteboard, virtual "handraising", and joint viewing of multimedia presentations and online slide shows. This discussion type seems similar with traditional learning since the learners and teacher are scheduled at the same time. 8

# 2) Online Asynchronous Discussion (OAD)

Differing from online synchronous discussion, online asynchronous discussion used e-mail, threaded discussion, file attachment, newsgroup, and bulletin board, in which the members can participate at the different time.

## 3. Online Asynchronous Discussion

## a. Definition of Online Asynchronous Discussion

Online asynchronous discussion forum is a tool to interact in online course, in which it enables asynchronous communication among learners, and between the learners – teacher. As well as ones interact with others, this tool allows learners to communicate without the limitation of time and place, to post questions, to share their opinions and queries. <sup>10</sup> In line with the definition, Mokoena says that online asynchronous discussion is an interaction between learners and lecturers facilitated by a technology to

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<sup>&</sup>lt;sup>8</sup> Poe and Stassen, Teaching and Learning Online: Communication, Community, and Assessment. A Handbook for UMass Faculty, 6.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> Lee, "Different Types of Human Interaction in Online Discussion: An Examination of Using Online Discussion Forum," 2.

transfer knowledge<sup>11</sup>. There are three types of interactions which are commonly occurred<sup>12</sup>:

- 1) learner-learner
- 2) learner-teacher
- 3) learner-content

According to Hew and Cheung, this type of discussion will improve learners" critical thinking. In relation to this statement, Al-Shalchi cites from expertise that learners are prior to do research to deepen their knowledge before posting arguments, since they perceive not having much knowledge and they want to have intelligent look. Concerning about this, the researcher experienced when she was the member of online asynchronous discussion. Before having a post, she tried to read journal articles, educational websites, and other scholar works in order to be able to contribute meaningful information for her classmates. This occurred due to the fact that the time given to think is much longer than synchronous discussion. As a consequence, the researcher could provide supported point of view from expertise.

Dealing with media used in online asynchronous discussion, there are numerous kinds of discussion boards can be used to facilitate this activity, and one of them applied in this study, that is "*Schoology*".

<sup>12</sup> "An Introduction to Online Discussion." *Macquarie University Sydney - Australia*. Accessed April 22, 2016 http://www.mq.edu.au/iLearn/resources/online discussions.htm.

<sup>&</sup>lt;sup>11</sup> Sello Mokoena, "Engagement with and Participation in Online Discussion Forums," *The Turkish Online Journal of Educational Technology*. Vol. 12 Issue 2, April 2013, 97

Online Discussions: A Case Study of Peer Facilitation," *Computers & Education* 51, no. 3 (November 2008): 1111–24, doi:10.1016/j.compedu.2007.11.002.

# b. Advantages and Disadvantages of Online Asynchronous

# **Discussion**

In applying online discussion, an instructor has certainly considered the impact as well as the advantages of the discussion. Depending on the type of discussion applied by the instructor, the learners will have different experiences, advantages, and disadvantages. In line with this, the researcher found that many studies stated the advantages and disadvantages of online asynchronous discussion. Obviously, the table below provides the advantages and disadvantages mostly stated by literatures, in which it cited from Macquarie University, Sydney – Australia:

Table 2.1

Advantages and Disadvantages of Online Asynchronous

Discussion<sup>14</sup>

Advantages	Disadvantages
Learners can participate at a time and	Those with poor writing skills
place that suits them.	are disadvantages.
The act of typing forces learners to	Lack of facial cues can lead to
take time and contribute more	misunderstanding.
developed ideas.	
Can reduce the amount of time the	Discussion can go off topic.

<sup>&</sup>lt;sup>14</sup> "An Introduction to Online Discussion."

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teacher has to give to telephone and	
face-to-face meetings and time in the	
office.	
Shy learners get more of a chance to	Some learners tend to too readily
have a say.	agree with others or paraphrase
	others" contributions.
Encourages reflection and deeper	Learners can tend to respond to
thinking.	topics in an overall fashion
	rather than in detailed specifics.
Foreign learners have more time to	Learners lose motivation to
compose their thoughts.	participate unless they perceive
	"value" in the discussion
Peer-peer learning encouraged.	Requires consistent input from
	teacher.
Answers are seen by all.	Lag between posts can make
	following discussion difficult.
Forms a basis for creating FAQs.	Technical problems (server
	crashes, network down time,
	etc.)
Expert thinking about a topic can be	Lack of access to computer or
modeled and learnt.	network handicaps some
	learners.
Encourages big picture thinking.	Reading and thinking overload.

Effective and efficient means to	Needs to be moderated and
make whole class communication.	monitored for inappropriate
	postings.
Build a learning community.	

# 4. Possible Challenges in Online Asynchronous Discussion

Even though applying online asynchronous discussion as an alternative class has a number of benefits, the learners are often encountered challenges in the discussion. According to Hew and Cheung in their book, there are ten categories of learners" experiences of challenges in online discussion which are concluded from various research results as follow<sup>15</sup>:

## a. Not Seeing the Need for Online Discussion

In this category, there are many aspects which may lead the learners cannot find the reason to participate online discussion, such as:

- 1) Both of the learners and the instructor can meet to learn together in the class.
- 2) The topics discussed do not have connection with the topics discussed in the class meeting; therefore, the learners do not find the necessity of the discussion in their learning.
- 3) The discussion has unattractive topics.

<sup>&</sup>lt;sup>15</sup> Khe Foon Hew and Wing Sum Cheung, Student Participation in Online Discussions: Challenges, Solutions, and Future Research (Springer Science & Business Media, 2012), 16–25.

4) When the learners" postings are not awarded by the instructor, it may frustrate the learners to find the reason of participating online discussion.

Those are similar with Murphy and Coleman's finding that they who do not have the necessity to contribute online asynchronous discussion, or those who contribute only to meet the course requirements or they who cannot see the connection between the learned materials in online discussion and in actual learning will limit their participation to post ideas; indeed, they will contribute badly. As a result, the quality of their postings does not provide more knowledge for other members. This argument below is the example of Murphy and Coleman's results 16:

"I found the forum can become very frustrating when you are required to respond to a certain number of responses and questions. I find this can be a waste of time when you are merely answering for the sake of meeting the quota and thus the answers are not in any way helpful in the actual learning"

## **b.** Behavior or Practice of Instructor or Participants

This category concerns with other members" behavior in online discussion. Hew and Cheung states that the learners will stop their contribution if they encountered these challenges: First, other members of online discussion do not pay attention to their postings. Second, other learners tend to be the one who pontificates, or they are threatened by

<sup>&</sup>lt;sup>16</sup> Murphy and Coleman, "Graduate Learners" Experiences of Challenges in Online Asynchronous Discussions."

other members, or if the communication in online discussion becomes rude. 17

These two challenges in line with Murphy and Coleman's result in their research that domination by individuals in online discussion may lead other members feel excluded, feel isolated, feel being an outsider, and feel discouraged to participate in the group. The statement of Murphy's and Coleman's finding below is the example of the participants' feeling:

"I think the forum can become very frustrating when other learners are dominating the discussion or making postings daily (...) Usually it is the same group of learners who have these large discussions throughout the course and it ends up makingthe rest of us seem inadequate and/or not involved and this can become frustrating. Not that I am saying no one should respond in detail, hey if I miss a few days it is my problem, but several courses I have taken, particular learners have got carried away with posting on the forum and it is very frustrating and time consuming to read all the comments and then try to keep up with replies etc."

The third challenge in this category is when the learners do not meet the instructor's interests. Here, according to Hew and Cheung, they provide example such as when the instructor does not give feedback. The last challenge is when the members of online discussion only focus on the unread postings by their friends. It will happen if the tool of online discussion provides "read – unread" marker for participants" postings. As a consequence of this last challenge, the existence of important postings may not be concerned, and the topic may change, since the unread postings are generally as the newest on the top.

<sup>&</sup>lt;sup>17</sup> Hew and Cheung, Student Participation in Online Discussions, 17.

<sup>18</sup> Ibid.

# c. Personality Traits

As human being, the learners have various kinds of characteristics, in which according to Hew and Cheung, it may influence their participation in online asynchronous discussion.<sup>19</sup> This is in line with Chen and Caropreso who has investigated the influence of three personality traits on online discussion. Those are Extraversion, a personality trait which refers to one who tends to engage in social interactions; Agreeableness, a personality trait which refers to one who reflects the quality of continuing interactions; and Openness, which refers to one who reflects an interest in intellectual and imaginative experiences. 20 Those who become the sample of Chen and Caropreso are asked to do personality test, in which the result score at or above the 67<sup>th</sup> percentile was labeled as "High-profile" group, and the result score at or below the 33<sup>rd</sup> percentile was labeled as "Lowprofile" group. The member of high-profile group are the learners who are sociable, friendly, helpful, and broad-minded; and the low-profile group consists of the learners who are withdrawn, selfish, uncooperative, and conventional. The finding in the research is the learners who included in low-profile group are generally posting one-way communication, in which it means that they contribute by expressing questions, comments, statements or opinions, without inviting, encouraging, nor soliciting

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<sup>&</sup>lt;sup>19</sup> Hew and Cheung, Student Participation in Online Discussions, 18.

<sup>&</sup>lt;sup>20</sup> S.-J. Chen and E. J. Caropreso, "Influence of Personality on Online Discussion - Journal of Interactive Online Learning" 3, no. 2 (2004), http://www.ncolr.org/issues/jiol/v3/n2/influence-of-personality-on-online-discussion.

reactions. In addition, they tend to post slightly related or unrelated posting. <sup>21</sup>

# d. Difficulty in Keeping Up with the Discussion

In an online discussion, a learner is demanded to post their ideas about a topic. However, it is often found that she/ he contributes more than a single post, in which it leads other members frustrate to contribute since they cannot keep up all the postings. Hew and Cheung say that there are two main reasons why the learners are generally difficult to keep track online asynchronous discussion: there is a single post with more than one idea in it, in which it may lead the topic discussed changes. In addition, the learners feel difficult to read all postings since there are lots of postings which cause tired in reading.<sup>22</sup> This is similar with Murphy and Coleman's finding "... it is very frustrating and time consuming to read all the comments and then try to keep up with replies etc."<sup>23</sup>

# e. Not Knowing What to Contribute/ Lack of Worthwhile Comments to Contribute

According to Hew and Cheung, in the online discussion, another reason why the learners do not contribute is they are lack of positive ideas. In addition, it also caused by the lecturer provides questions for a single, fact-based answer. It can be shown in Arend"s finding for the example; he says that the participants feel bored to read their friends" contributions

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<sup>&</sup>lt;sup>21</sup> Ibid

<sup>&</sup>lt;sup>22</sup> Hew and Cheung, Student Participation in Online Discussions, 19.

<sup>&</sup>lt;sup>23</sup> Murphy and Coleman, "Graduate Students" Experiences of Challenges in Online Asynchronous Discussions."

since there are repetition postings. Therefore, those who want to contribute difficult to find their ideas, due to the discussion is limited, being close-ended, and having only a solution.<sup>24</sup>

# f. Exhibiting Surface-Level/Lower Order Critical Thinking

Considering critical thinking is important to learners due to it can solve problems in effective manner.<sup>25</sup> Hew and Cheung states that the categories of critical thinking are surface-level and in-depth level, in which it is explained more as follow<sup>26</sup>:

"Surface level critical thinking includes: (a) making conclusions or judgments without offering justification; (b) sticking to prejudices or assumptions (such as forming an irrational attitude of dislike against an individual, a group, or their ideas); (c) stating that one shares the conclusions or judgments made by others but without taking the idea further; and (d) failure to state the advantages or disadvantages of a suggestion, conclusion, or judgment. In-depth level critical thinking, on the other hand, involves: (a) making conclusions or judgments supported by justification; (b) setting out the advantages or disadvantages of a suggestion, conclusion, or judgment; (c) stating that one shares the conclusions or judgments made by others and supporting them with relevant facts, proof, experience, or examples; and (d) making valid assumptions based on the available indicators."

Then, based on those explanations, they conclude that the learners tend to be in surface-level, in which it affects their contribution in online asynchronous discussion.

# g. Displaying Low-Level Knowledge Construction

<sup>&</sup>lt;sup>24</sup> Bridget Arend, "Encouraging Critical Thinking in Online Threaded Discussions," *Journal of Educators Online* 6, no. 1 (January 2009): 1–23.

<sup>&</sup>lt;sup>25</sup> Lim Sze Chung et al., "Critical Thinking in Asynchronous Online Discussion: An Investigation of Student Facilitation Techniques," *New Horizons in Education* 59, no. 1 (May 2011): 52–65.

<sup>&</sup>lt;sup>26</sup> Hew and Cheung, Student Participation in Online Discussions, 20.

In online asynchronous discussion, Hew and Cheung state that the learners tend to display low-level knowledge construction since the discussion tasks are too complex.<sup>27</sup> Moreover, it also caused by the learners hesitate to ask others" ideas, in which it is due to they worry to disagree with their unfamiliar friends in the discussion, and they tend to play safe since other participants show rude comments.

#### h. Technical Aspects

According to Hew and Cheung's finding, one of the challenges encountered by the learners is difficult to log on to the online discussion.<sup>28</sup> In addition, other challenges which may occur according to Murphy and Coleman in this challenge is by the existence feature of "cannot be deleted or edited message posting". The following is the example argument based on what graduate learners" experiences<sup>29</sup>:

"... The inability to edit and delete messages after posting was frustrating and disconcerting at times, especially after discovering a post contained and error and I had to go back and do the thing all over again or try to: a) explain what I said that was wrong, b) say what I meant to say, c) explain my argument again, d) make the correction before someone else (like the prof) found it, e) make the correction before someone responded to it and confused the issue even more."

In addition, Murphy and Coleman find that several participants complain about the feature of the movement of messages. The following is one of the examples<sup>30</sup>:

<sup>30</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> Ibid, 21.

<sup>&</sup>lt;sup>28</sup> Ibid, 24.

<sup>&</sup>lt;sup>29</sup> Murphy and Coleman, "Graduate Students" Experiences of Challenges in Online Asynchronous Discussions."

"The discussion forum has a few minor design quirks that consistently annoy me, like the inability to flip back and read through discussion postings while composing a message, and the way it returns you to the top of the listings when you click to expand a thread, so you have to search through the list of postings to find where you were."

#### i. Lack of Time

Since the learners may have many activities outside school schedule, another challenge encountered by the learners according to Hew and Cheung is lack of time.<sup>31</sup> For college learners, they may have a part-time job, many tasks to do, and family time. As a consequence, it may lead limited contribution to online asynchronous discussion.

## j. Risk of Being Misunderstood

This last challenge is refers to the existence of text-only in online discussion. This is in regard to posting a comment, replying other members" comments, or reading others" replies. The challenge occurred when members cannot interpret the expression, gestures, and tone which may exist. Murphy and Coleman's finding below shows learners" limitation to contribute in online discussion<sup>32</sup>:

"I have difficulty with text only. Personally, I need to gauge the non-verbal gestures in relation to the verbal in order to fully understand the message. In text-only communication too much is left to assumption, which can cause major communication problems because of misperceptions."

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<sup>&</sup>lt;sup>31</sup> Hew and Cheung, Student Participation in Online Discussions, 25.

<sup>&</sup>lt;sup>32</sup> Murphy and Coleman, "Graduate Students" Experiences of Challenges in Online Asynchronous Discussions."

# 5. Possible Strategies to Overcome Challenges in Online

# **Asynchronous Discussion**

In this heading, the researcher tries to explain strategies to overcome those ten challenges according to empirical studies conducted by Hew and Cheung<sup>33</sup>, in which they are more concerned with the strategies for the instructor. In their research, they state that these strategies will not affect the learners" contribution definitely, and the implementation of the strategies indicates mix results. It means that these strategies still have limitation to be applied. However, they are convinced that the strategies can be useful.

The strategies of "a" to "e" below are according to Hew and Cheung, while others are from various journals since their book can read only to the fifth strategies. Here are the strategies:

# a. Not Seeing the Need for Online Discussion

For this challenge, Hew and Cheung provides five strategies from the previous research:

- 1) Determine topics based on main curriculum
- 2) Bring online discussion activity to be a mandatory or provide inducement for the learners, e.g. grades; and provide additional value, e.g. resources
- 3) Explain the purpose of online discussion, as well as the lecturer has high expectation to the learners

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<sup>&</sup>lt;sup>33</sup> Hew and Cheung, Student Participation in Online Discussions, 31–45.

- 4) Limit the time to participate
- 5) Implement discussion activities which may lead the learners to express their interest and emotion

While Hew and Cheung explain the strategies concern with the lecturer sperspective, Ryan Watkins and Michael Corry explain there are nine strategies to stay motivated in online courses which are concerned with the learners perspective. However, the seven of nine strategies are more related with learners participation in online discussion here are:

- 1) Make connection between what are studying and what will be encountered after graduation
- 2) Keep short-term and long-term goal in mind
- 3) Develop motivational support system
- 4) Visualize your success
- 5) Communicate with the instructor to find a help
- 6) Be an active participant
- 7) Reward yourself throughout the semester

## b. Behavior or Practice of Instructor or Participants

According to Hew and Cheung, they suggest that<sup>35</sup>:

- 1) The lecturer involves in the discussion
- 2) Use of ground rules

<sup>&</sup>lt;sup>34</sup> Ryan Watkin and Michael Corry, *E-Learning Companion: Student's Guide to Online Success - Google Buku* (USA: Wadsworth Cengage Learning, 2014), 155–162, https://books.google.co.id/books?id=VYEWAAAAQBAJ&pg=PA156&dq=how+to+stay+motivat ed+in+online+discussion&hl=id&sa=X&ved=0ahUKEwieuJL7vPzNAhXDKZQKHVSoCpoQ6A EIGzAA#v=onepage&q=how%20to%20stay%20motivated%20in%20online%20discussion&f=fal

<sup>&</sup>lt;sup>35</sup> Hew and Cheung, Student Participation in Online Discussions.

However, in psychological perspective, to overcome feeling excluded, feeling isolated, feeling being an outsider, and feeling discouraged are with these steps<sup>36</sup>:

- Stop mocking ourselves, stop not paying attention to ourselves, and start loving ourselves.
- 2) Stop condescending ourselves and try amusing ourselves.
- 3) Stop being negative thinker and start being positive thinker.
- 4) Fight our negative feeling of being isolated, an outsider, and discouraged.

## c. Personality Traits

According to the finding of Chen and Caropreso, they suggest that to combine the low-profile and high-profile in the same group.<sup>37</sup>

## d. Difficulty in Keeping Up with the Discussion

For this challenge, Hew and Cheung propose these strategies<sup>38</sup>:

- 1) Using OAD application which provides thread links visually rather than as a list of postings headers
- 2) Setting a rule which says that they are allowed to post one idea per posting.
- e. Not Knowing What to Contribute/ Lack of Worthwhile

  Comments to Contribute

<sup>&</sup>lt;sup>36</sup> David D. Burns, M.D., *Mengapa Kesepian - Program Baru yang Telah Diuji secara Klinis untuk Mengatasi Kesepian* (Erlangga, 1988).

<sup>&</sup>lt;sup>37</sup> Chen and Caropreso, "Influence of Personality on Online Discussion - Journal of Interactive Online Learning."

<sup>&</sup>lt;sup>38</sup> Hew and Cheung, Student Participation in Online Discussions.

According to Hew and Cheung, they suggest overcoming this challenge by<sup>39</sup>:

- Providing open-ended questions which do not need right or wrong answer, and it only needs their personal ideas
- 2) Using sentence openers and message labels such as clarification/ elaboration questions, counter arguments, context- or perspectiveoriented questions.

Besides, O'Keefe, she proposes other ideas concerning how to be a good contributor in online discussion<sup>40</sup>:

- 1) To make our responses different from others, we can provide additional words which may lead other participants engaged in our posts or comments, such as questions.
- 2) To link readers" emotion with the content of our posts or comments, include experiences which relate to the topic discussed.
- To engage participants contribute to online discussion forum, attach current events such as local or national new stories in our responses.
- 4) To connect other courses with the course content to supplement discussion forums

<sup>&</sup>lt;sup>39</sup> Ibid.

<sup>&</sup>lt;sup>40</sup> Elle O'Keefe, "Tips for Creating the Perfect Discussion Post for Your Online Classes," *Rasmussen College*, June 7, 2011, http://www.rasmussen.edu/student-life/blogs/college-life/creating-the-perfect-discussion-post-for-online-classes/.

- 5) To ask a thought-provoking question or taking a controversial stand. For example, you can ask the "Yeah, but what if..." questions.
- 6) This last suggestion seems similar with the first suggestion of O'Keefe that is adding another valuable content which differs from other responses.

# f. Exhibiting Surface-Level/Lower Order Critical Thinking

Concerning the strategy to make the learners think critically in posting ideas, Arrend suggests the instructor "should use discussions as an openended, informal space for learners to share multiple viewpoints and problem-solving strategies." Another suggestion from Richardson et al. in their study is the learners can use peer feedback to improve their critical thinking. 42

# g. Displaying Low-Level Knowledge Construction

There are two strategies to promote high-level knowledge construction, according to deNoyelles et al., they are 43:

 Purposeful design of the discussion prompt, in which it has three strategies: Problem-based (asking learners to discuss with others), project-based (by creating product, the learners solve problems), and debate.

<sup>42</sup> Jennifer C. Richardson et al., "Using Peer Feedback in Online Discussions to Improve Critical Thinking," *ResearchGate*, February 19, 2015.

<sup>&</sup>lt;sup>41</sup> Arend, "Encouraging Critical Thinking in Online Threaded Discussions," 17.

Thinking," *ResearchGate*, February 19, 2015.

Aimee deNoyelles, J. M. Zydney, and Baiyun Chen, "Strategies for Creating a Community of Inquiry through Online Asynchronous Discussions" 10, no. 1 (March 2014): 156.

2) For learners, they can take a controversial stand.

# h. Technical Aspects

In the book of Karen L. Mayville, she suggests that to overcome technical aspects, the instructor can provide a full-day technical support to assist the learners acquire technology strategies.<sup>44</sup>

#### i. Lack of Time

The strategies to overcome the lack of time in online asynchronous discussion have been investigated by Min Shi et al. with the following results<sup>45</sup>:

- 1) Write postings clearly and concisely
- 2) Organize information in an easy-to-follow order
- 3) Be explicit and emphatic about the time requirement in the syllabus
- 4) Manage asynchronous discussion
- 5) Using the technical tool available
- 6) Utilize other resources

j. Risk of Being Misunderstood

For this challenge, before posting, Mya and Stassen suggest the learners<sup>46</sup>:

<sup>&</sup>lt;sup>44</sup> Mayville, "Knowledge Construction, Self-Regulation, and Technology Strategies Used by Experienced Online Nursing Learners to Actively Engage in Online Learning," accessed June 27, 2016

 $https://books.google.co.id/books?id=4xBgEPRmAt0C\&pg=PA153\&lpg=PA153\&dq=strategies+to+vovercome+lack+of+time+in+online+discussion\&source=bl\&ots=ZI6y26i14\_\&sig=Id92\_qyrkAvA1V5UnSjPnsCQaD8\&hl=id\&sa=X\&redir\_esc=y\#v=onepage\&q=strategies\%20to\%20overcome\%20lack\%20of\%20time\%20in\%20online\%20discussion\&f=false.$ 

<sup>&</sup>lt;sup>45</sup> Min Shi, Curtis J. Bonk, and Richard J. Magjuka, "Time Management Strategies for Online Teaching," journal, (February 2016), http://itdl.org/journal/feb\_06/article01.htm.

- 1) To use emotion or smiley to clear emotional intent
- 2) Using capital letter to emphasize arguments is allowed, however, using all capital letter to post or comment should be avoided, since it seems shouting.
- 3) Posting and comment will seem mumbling if the participants use lowercase letter.
- 4) Be brief and to the point in writing post and comment.

For the readers, they suggest that to avoid misinterpretation by rereading the posting, in which if the readers begin misinterpreting it. Moreover, they also suggest that if the readers still cannot understand the message, they have to ask directly to the contributor before replying incorrect arguments.47

## **B.** Previous Studies

The topic discussed in this research has been conducted for a time. Therefore, the researcher provides the report of previous studies below in order to give clearest picture of the differentiation among the existence research:

1. Murphy, Elizabeth, and Coleman, Elizabeth. 2004. Graduate Learners' Experiences of Challenges in Online Asynchronous Discussions<sup>48</sup>

<sup>&</sup>lt;sup>46</sup> Poe and Stassen, Teaching and Learning Online: Communication, Community, and Assessment. A Handbook for UMass Faculty.

47 Ibid.

<sup>&</sup>lt;sup>48</sup> Murphy and Coleman, "Graduate Learners" Experiences of Challenges in Online Asynchronous Discussions."

The objective of this research is to provide insight into the challenges that a group of learners experienced with online discussions. Even though this research has similar focus with the recent study that is about learners" challenges in online asynchronous discussion, the recent study has another focus which makes it differs from Murphy and Coleman, that it how the learners overcome their challenges. Moreover, the method used to gather data will be different. Murphy and Coleman's research applied three phases in their research: 1) They became moderators in Web CT (a name of online discussion tool) who began a dialogue with a single question "how they would descr<mark>ibe th</mark>eir exp<mark>erie</mark>nces as a learner in web-based courses", which required the members to answer; 2) Analyzing and summarizing the learners" barriers and challenges, then posting nine categories of learners" challenges in online discussion forum to ask the learners to give comments which is the most relevant to them; and 3) Interview. The result show that there are four challenges in online discussion: learners" behavior, text only in communication, purposequality of the discussion, and forum features.

2. Durairaj, K., and Umar, I., N. 2014. The Motivating and Limiting Factors of Learners' Engagement in an Online Discussion Forum<sup>49</sup>

This study conducted to find learners" motivation in participating online discussion forum, in which it also aimed to find the challenges encountered by the learners. Even though this study has similar focus with

<sup>&</sup>lt;sup>49</sup> K. Durairaj and I. N. Umar, "The Motivating and Limiting Factors of Learners" Engagement in an Online Discussion Forum," *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering* 8, no. 12 (2014): 3776–82.

the recent research that is discovering learners" challenges and applying the same book as the reference entitled "Student Participation in Online Discussions: Challenges, Solutions, and Future Research" by Hew and Cheung (2012); both of them still have other different focuses. Durairaj and Umar"s research also find the learners" motivation in online discussion, while the recent research will also find the learners" efforts to overcome their challenges. Moreover, the recent research will not only present research finding in ten challenges as Durairaj and Umar done, it will also present the most encountered challenges by those all challenges.

3. Azizah, Nur. 2015. Teacher Challenges in Implementing Multimedia
Computer Assisted Language Learning Programs in Reading Narrative
Text Activities at the First Grade Learners of Persatuan Islamic Senior
High School in the Academic Year 2014-2015<sup>50</sup>

The objectives of this study are identifying teachers" implementation of multimedia computer assisted language learning programs in reading narrative text activities, their challenges in implementing, and their effort to overcome the challenges. The result showed that English teachers encountered several difficulties in teaching reading narrative text using multimedia computer assisted language learning, such as how to make class lively, and how to integrate multimedia into teaching material. Moreover, the teachers" challenges deal with their computer competence,

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<sup>&</sup>lt;sup>50</sup> Nur Azizah, "Teacher Challenges in Implementing Multimedia Computer Assisted Language Learning Programs in Reading Narrative Text Activities at the First Grade Learners of Persatuan Islamic Senior High School in the Academic Year 2014-2015." (Sunan Ampel State Islamic University Surabaya, 2015).

teaching style, learners" competence, teachers" heavy burden, related administrators" emphasis. For teachers" efforts, the researcher found that they join seminar or training, they should share and evaluation with other teachers, they should learn how to develop learners" motivation, and they should have contact with computer programmer.

4. Sandy, Teguh Arie. 2011. Pengembangan Forum Diskusi Online dengan Strategi Belajar Mandiri Mahasiswa di Jurusan Teknologi Pendidikan Universitas Negeri Malang.<sup>51</sup>

In this thesis, the researcher has three main objectives: (1) producing an online discussion forum product, (2) conceptualizing independent-learning using the product, and (3) investigating the validity of the product for the effectiveness developmental of independent-learning in educational technology department. The result of the product development is (a) expertise validate the product 87.5%, and (b) validity from learners by the applying the product 81.7%. Therefore, it can be concluded that the product is categorized as valid tool to be independent-learning media.

5. Skog, Julie. 2015. Language and Interaction in Online Asynchronous

Communication in University Level Courses. 52

The first case study examines response patterns to messages by looking at the content of initial messages and responses, in order to determine the extent to which characteristics of the messages themselves

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<sup>&</sup>lt;sup>51</sup> Teguh Arie Sandy, "Pengembangan Forum Diskusi Online dengan Strategi Belajar Mandiri Mahasiswa di Jurusan Teknologi Pendidikan Universitas Negeri Malang" (Skripsi, 2011), http://karya-ilmiah.um.ac.id/index.php/TEP/article/view/18470.

<sup>&</sup>lt;sup>52</sup> Julie Skog, "Language and Interaction in Online Asynchronous Communication in University Level Courses" (Dissertation, Karlstad University Studies, 2015).

or other situational factors affect the interaction. The second study examines in what ways participants use a range of discourse devices, including formulaic politeness, humour and supportive feedback as community building strategies in the interaction. The third study investigates the role of the subject line of messages in the interaction, for example by examining how participants choose different types of subject lines for different types of messages. The fourth study examines to what extent features serving a deictic function are drawn on in the interaction and then compares the findings to both oral conversation and formal academic discourse. The overall findings show a complex communicative situation shaped by the medium itself, type of activity, the academic discipline and topic of discussion and by the social and cultural aspects of tertiary education in an online learning environment. In addition, the findings may also provide evidence of learning.

6. Fried, Audrey. 2016. Social Network Analysis of Asynchronous Discussion in Online Learning.53

The aim of the research is to investigate the relationship between different types of interaction in online discussion. The result of the study said that there is correlations between different types of in-degree interactions were moderate to strong while correlations between different types of out-degree interactions were only weak to moderate, or even not significant. Another result is notwithstanding outbound reading is a

<sup>53</sup> Fried, "Social Network Analysis of Asynchronous Discussion in Online Learning."

requirement for all interactions, it is not strongly correlated with other types of interaction.

7. Daulay, Pardamean. 2008. Analisis Isi Topik Diskusi Interaktif

Mahasiswa Universitas Terbuka dalam Fitur "Forum Komunitas UT

Online" (Content Analysis Interactive Discussion Topic Open

University in Fitur "Forum Komunitas UT Online"). 54

This research is conducted to describe UT student interaction pattern in community forum. By doing the study, the researcher found that there are 1201 email, with 1293 problem, which submitted by 479 learners, the most intensive problem is interaction personal (25,90%), general issue (14,24%) score or examination (11,91%), tutorial (25,90%), module (6,58%), learning material substance (4,08%), the way learning (4,08%), TAP/UKP (4,00%), TM/ML (3,41%), registration (3,41%), graduation (2,33%), curriculum (1,58%), accreditation (1,58%), scholarship (0,92%), school fee (0,58%), credit switching (0,42%), and diploma (0,17%).

Differing from those number 3 to the last studies, in which they mostly analyzed the content of the discussion, the interaction of participants of online discussion, and the implementation of online discussion in a program; the recent study is investigate the challenges encountered by learners when participating in online discussion and their efforts to overcome the challenges.

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<sup>&</sup>lt;sup>54</sup> Pardamean Daulay, "Analisis Isi Topik Diskusi Interaktif Mahasiswa Universitas Terbuka dalam Fitur "Forum Komunitas UT Online" (Content Analysis Interactive Discussion Topic Open University in Fitur "Forum Komunitas UT Online")" 2, no. 2 (July 2008).