Examining psychological aspects in online discussion

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Abstract

This paper discusses the psychological aspects evolved in the use of online discussion as experienced by a group of students who participated in online discussion. Samples consisted of 55 postgraduate students who were enrolled in a research methodology course that includes online discussion as one of the learning activities. Data were collected using open ended questionnaire. Findings were reduced into thematic categories to represent psychological aspects experienced by the participants in the online discussion process. Several psychological themes emerged namely: self-esteem, self efficacy, motivation, psychological resistance and academic anxiety which reflect the importance of psychological aspects that should be considered in the implementation of online learning approach.

Keywords: Psychological aspects; online discussion forum; asynchronous learning;

1. Introduction

Rapid progress in the world of Internet technology is changing the way people think and work. Internet-based technology developed from the activities that focus on resources to task-based activities and support for social interaction in the learning process. In the present day, the use of social interaction in the learning process such as online discussion becomes one of the important applications in online learning. On-line discussions allow students to interact virtually which has different nature as compared to face to face discussions. Yeh (2010) claimed some studies proposed that online learning communities promote active participation, increase academic achievement, contribute to knowledge creation, and improve learner cognitive abilities. However not many studies look into the psychological aspects that may have effect in the use of this approach. This paper discusses the psychological aspects involved in the use of online discussion as experienced by a group of students who participated in online discussion.

1.1. Online discussion

Learning through online discussion is known as asynchronous learning. The main characteristic of this type of learning is that the interaction does not happen at the same time. Students can engage in a dynamic and interactive
interaction in the learning communities with computers at their own time. According to Jaya (2007), asynchronous discussion allows students to do some critical thinking and hence express their own opinion. Although more time may be required, students are given a chance to familiarise themselves with others’ ideas and then develop a better response for the discussion. McConnell (2006) categorize online discussion as a network collaborative learning as it places the emphasis on networking people and resources together; and on collaboration as the major form of social relationship within a learning context. The key characteristic in this form of learning is it allows the students to read and respond to messages at the right time for individual students. This element is more open and accessible to anyone. Some of the benefits of the asynchronous discussion that may make it more effective than the traditional face-to-face discussion are that it allows those people who need more time to participate to contribute to a discussion (Andresen, 2009). Another important characteristic of online discussion is that the messages in the forum can be archived for access at any time. The salient feature of the asynchronous learning is a student can work according to their own needs and time. This study focused on asynchronous learning in the form of discussion forum.

1.2. Psychological impact in learning process

Literature reviews on psychological aspects of learning mainly concerns on construct such as self esteem, self concept, self efficacy and motivations. These factors are hypothesized as having impact on students learning in traditional face to face setting. Theory of Social Constructivism emphasized on the construction of knowledge that is supported through social interaction. In this premise, students’ involvement in social interaction plays key roles for successful learning. In the face to face classroom learning, the main challenge is to get students participate in the discussion. One of the major reasons cited are many students are not willingly involve because of shyness and low confident level that stop them from giving ideas or responded to others students opinion. The issue of self concept, self efficacy and also self esteem plays important roles in determining whether the students will take part or not.

Students who have high academic self concept and belief that they can do the task will be more readily to get involved in the face to face discussion. The problem lies in motivating students who lacks of self efficacy and low in academic self concept to take part in the process. The nature of online discussion which provides anonymity and also “time space” can be exploited to address this phenomena and encouraging students’ participation in the discussion thus helping their knowledge construction process. This paper intends to look into these psychological aspects as experience by the participants during their involvement in online discussion activity.

2. Methodology

2.1. Participants and instrumentation

Samples consisted of students involved in online discussion in one post graduate course (N=38, 27 female and 11 males students). Data were collected through open ended questionnaire to examine the psychological aspects of students faced in carrying out activities in online discussions. Three questions were asked: 1) What are the feelings emerge during their participation in online discussion? 2) Why do such feelings emerge? and, 3) What do they do to address the negative feelings if any.

2.2. Data analysis

Data were transcribed and coded with the aid of Nvivo V7. Students responses and trend of interaction in online discussion were also analyzed to identify traces of psychologica effects on the online discussion process. Findings were reduced into thematic categories to represent psychological aspects that emerged in the learning process through online discussion.
3. Findings

Data from the open ended questionnaire revealed few themes about psychological aspects that emerged during students’ participation in online discussion process. These psychological aspects can be categorized into positive and negative feelings. Further examinations revealed different trends of the positive and negative feelings according to the phases of the discussion activity namely: 1) the beginning phase, 2) the middle phase and 3) the ending phase.

3.1. The beginning phase

In the beginning phase, the respondents reported mixed feelings between the feeling of excitedness with anxiety and lack of confident to participate in the discussion. Some of the responses are:

“... very excited....” (F7, M1, M8, F17)
“......mixed feelings.... excited... happy ..., worried... excited cos this is my first experience....” (F18)
“......excited but a bit worried and scared if i give wrong information......” (F14)
“......just curious to know how the discussion online will be.. a bit nervous and worried ....” (F13)

Most of negative feelings reported can be referred to academic anxiety and psychological resistance that reflects lack of self efficacy and low self esteem. Negative feelings mixed with academic anxiety and self efficacy that affects the respondents' self esteem also can be traced.

“......worried and apprehensive.. F2) " a bit nervous.... (F6)
“......scared, and worried because never involve in discussion online before .... F3)
“......not very confident, need to read the whole discussion from the start before giving response.” (F8)
“......shy to post my opinion.. Worry if i didn’t get any response from friends and feel inferior to participate in the discussion...”(F9)
“......a bit uncomfortable to share opinion as my topic is personal to me (P10)
“......Worried because I don't understand how to start ... (F11, F12, F20, F25)
“...... a little bit afraid and worry-not knowing what to write(F15,M2);
“...... worry whether my comment would appear stupid and or childish (F15)
“......feeling worried and scared if I give wrong idea....(F27) ...... a bit scared if i make mistake ..... (M5)

3.2. The middle phase

In the middle phase, the negative feelings were lessening and the positive feelings begin to dominate the situation. Traces of deep processing and critical thinking are escalating when the respondents began to participate more actively in the online discussion:

“......happy and excited because i got many inputs...” (F7)
“......feel a bit interesting.. Because i can give response to other people even though we never talk to each other in the class... so feel happy because easy to communicate with other people...” (F9)
“......feel relief when i get feedback...” (F16, F19)
“... feelings of inferior gone... because my friends also having the same problem as me...” (F14)
“......feel confident with my ideas when i got the responses from friends...” (F16)
“... begin to like it because i get a constructive critics...” (F22)
“... become more confident after reading comment from other people...” (F24)
“... feel excited and happy after getting feedback and comments from others...”(M6)
“......feel confident after sending my first posting ... can review others and also own ideas...” (M5)

Further examinations revealed that online discussion gives students opportunities to prepare themselves before participating actively online which could not be done effectively during face to face interaction. The respondents reported that they prepare themselves by reading other peoples postings and other materials related to the topic of the discussion. Some of the respondents admitted that they prepare the draft and edited them few times before posted them in the discussion forum.

“.... Prepare the draft first… edit many times before posted it …” (M11)
“..... have to be careful... scared if my ideas is not accurate... draft the response first... need to really understand before giving my response...” (F2)
At this stage, negative feeling still can be seen but at a low level:
“... still worry and scared if i give wrong idea...” (F12)
“...still feeling worry and nervous but also feel a bit excited during the process ...” (F15)
“... after reading others postings, begin to feel scared and worried because their ideas are good and shown that they already have clear picture of their projects as compared to myself... (F18)
“... a bit anxious when i see other responses and participation..... a bit scared to try... “ (F23)

3.3. The ending phase

In the ending phase, majority of the respondents reported more positive feelings. Most of them reported that they feel satisfied, happy and become more motivated to participate in the discussion.
“... i feel very satiesfied and happy...” (F5, F6, F8, F9, F13, F15, F20, F23, F24, F25, F26, M5, M10)
“...... i feel comfortable to discuss with friends online.....” (F2, M9)
“... i like to read comments in the discussion...” (F1,F3, M5)
“....i can give my opinion and get input from others.....”(F3,F6, F8, M3
“... feel confident... “ (F20, F24,F27, F27)
“... feel motivated...” (F21, F22, F26, M4)

3.4. Summary of the finding

Analysis on the number of positive and negative feelings at the beggining, middle and the ending phase is shown in table 1. As a whole, the data showed that the number of negative feelings surpass the number of positive feelings at the beggining of the process for both female and male repondents. The trend changed at the middle of the process whereby the number of positive and negative feelings are more balance with the number of positive feelings slightly higher than the negative feelings. At the ending phase, the positive feelings dominate the process with minimum level of negative feelings for both female and male respondents.

<table>
<thead>
<tr>
<th>Phases</th>
<th>Positive feelings</th>
<th>Negative feelings</th>
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<tbody>
<tr>
<td>Beginning</td>
<td>6 (Female) + 5 (Male)</td>
<td>21(Female) + 7 (Male)</td>
</tr>
<tr>
<td>Middle</td>
<td>16 (Female) + 7 (Male)</td>
<td>8 (Female) + 1(Male)</td>
</tr>
<tr>
<td>End</td>
<td>19(Female) + 5(Male)</td>
<td>2 (Female) + 1(Male)</td>
</tr>
</tbody>
</table>

The feelings that emerged can be categorize into psychological terms namely: self efficacy, academic anxiety, psychological resistance, self-esteem, and motivation. The elements of knowledge and skills about the technology used were one of the factors that emulate the feelings especially at the beggining of the phase. Students’ self efficacy about their ability to do the task were also influence their feelings and behaviour in the activity.

At the beggining, high academic anxiety was traced and mostly emerged from the feeling of inadequacy in performing the task in the aspects of knowledge and skills about the technology used and also the knowledge about the topic of discussion. However, in the middle of the process, the students begin to learn how to do the expected task and have enough time to get additional information and references materials before participating in the discussion. The online discussion give them time to prepare themself to participate in the discussion as compared to face to face discussion and this give advantage in terms of quality and the content of the discussion that contribute to the students knowledge construction process. This are also supported through the existance of critical thinking and deep processing that are traced in the process.
4. Discussion

Based on the result of the study, it is clear that mode of delivery using online discussion method needs to take into consideration some of psychological aspects that nurture and or hinder students to participate effectively in the discussion. Some of the respondents revealed that they are not familiar with online discussion. Thus, a structured and clear expectation is very important that give overview to the students on what action should be taken and how to accomplish the task. The emphasis should be given to the students self efficacy by providing assistance to increase their sense of Internet efficacy.

The findings of the study also showed that discussion online have advantages as compared to face to face discussion. In this environment, the number of students participating in the discussion is greater thus providing more opportunities for exchange and sharing of information between students (Anderson & Kanuka, 2002). This characteristic results in the feelings of satisfaction as reported by many respondents. The study also revealed the need of giving enough time to students to prepare them before participating actively in the discussion. Allowing considerable time frame will facilitate students learning and encourage deep processing of the discussion topic. At the same time it helps overcome the related problems such as self efficacy, self confidence, psychological resistance and also academic anxiety. In psychological terms, it can be seen as a positive impact as this process provides opportunity to students to gain confidence that help them resolve whatever negative feelings evolved in the process.

Another point to consider is the role of the instructor as a motivator and facilitator of the learning process. The study suggested the importance of effective online learning instructor who gives appropriate response and feedback. As suggested by Chen, Ko, Kinshuk & Lin (2005), immediate feedback can increase students motivation and increase students learning quality as they can immediately correct themselves and reinforce what they have learn. These processes also will generate the feeling of satisfaction among the students.

5. Conclusion

The study support that asynchronous learning in the form of online discussion has some distinct advantage as compared to face-to face interaction especially in term of psychological benefit that provide opportunities to students to increase their confidence level thus indulge in a more meaningful participation that aids their learning process. An obvious advantage in term of psychology is the nature “asynchronous learning” that provide an avenue for students to prepare themselves and to increase their self confidence thus increase their participation. However a good planning of this learning approach should include students’ self efficacy, suitable time frame and the active role of the instructor as the facilitator of the learning process.

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References