A CONCEPTUAL MODEL OF COMMUNICATION PROCESS EMPLOYED IN ACADEMIC ONLINE WRITTEN INTERACTION

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ABSTRACT

The understanding of interaction content would enhance one's understanding of how to communicate efficiently and efficacy among interlocutors. It is vital as the rise of the technology's devices exploited, and Internet has changed how communication works. One of it, mobile phones, has been utilized as a tool that develops interaction or communication among learners in tertiary academic institutions as it nurtures creative and critical thinking in the academic lessons setting as known as online written interaction. They have adapted these technologies in their academic system; due to its approach which aids synchronous and asynchronous learning towards achieving educational outcomes. Especially, it is basically incontestable as a medium of shared understanding of the messages or information expressed and exchanged globally. The communication process in the academic online written interaction progressed reflects that models of communication expanded to more kinds of communication process as well. Significantly, the models of communication serve as valuable purpose as that allows us in the academic setting to understand the specific concepts and steps within the process of communication. There are three general types of communication models in which all other communication models are mostly categorized namely; linear, interactive, and transaction models. Yet, for the setting of online written interaction, this paper intends to discuss and confers of how interactive and transaction model of communication overlaps and frames the academic interaction's process among the learners respectively. It is essential to understand the communication models, so one can use them for enhancing effective communication for their teaching and learning session onto practice.

Keywords: Models of communication; communication process; online written interaction

1. What is "Communication?"

Interaction or communication can be defined as the process of transmitting information and common understanding from one person to another (Keyton, 2011). The exchange of the communication evolves via ongoing developmental advances in technological instruments or media. It has altered the ways in which we communicate and placed an increasing emphasis on the selection of the medium in transmitting the message as written media to verbal, audio, and visual ways. These features of communication are essential in the modern world as we participate in what is now commonly called the information age; where accessing or being online to exchange, deliver and receive message globally in multidisciplinary fields and affairs is the most common forms. One of the most preferred way of communication of one and another in formal or informal situation is writing. Writing has been an indispensable medium in conveying messages as it is a process of communicating or interacting and expressing ideas of the organization thoughts into words with others.

In academic setting, the act of writing is not merely confined on documentation of black and white sheets. It appears that writing integrates in online or electronic medium as well and incorporating the most salient features of digital based resources of information for educational world. It offers many diverse activities in form of writing as a mean of interaction that integrates spoken, written and electronic communication for learners to stimulate collaboration and real-life learning environment (Madland & Richards 2016). The tools (i.e. computer-mediated or mobile-mediated as smartphone) that are accessible in online environment accommodate the context of interaction socially and constructively.

In Malaysia's higher education, online writing skills platform is employed as it is an immense advantage for learners to exchange interaction of written texts in academic structured form of activities as discussion, sharing informative articles or responses towards audiovisual materials that internalize new co-constructed knowledge in their learning activities (Alpal 2014). It has been an essential medium to foster communication, instill engagement and develop networking among them that increases their language learning experience (Kebble 2017) beyond face-to-face classroom interaction significantly.

When learners are interconnected to their interaction in online writing experience, the content of the interaction is a prominent focus especially when a second or foreign language involves as well as the lack of face-to-face. A successful communication requires more than just language use as in socio-cultural view of learning, the ability to create understanding that is regarded as crucial in learning process (Cole 1996; Matusov 2001; Resnick, Saljo, Pontecorvo, & Burge 1997). It is important to be aware that understanding contributes to learning from the social interactions as it leads to a well-established focus on the interactive process. Hence, meaningful learning would be achieved.

2. Problem Statement

The exchange interaction amongst tertiary learners in academic context is a major concern. Since the interaction in online writing is a jointly-composed text-based, the interaction of learners' responses can be too minimal, too elaborative or have been modified (Ying Zhao 2010). This might lead to a distort interaction among learners to understand the ideas of the content.

As a result, it could be worst as when learners interact in such educational activities, the communication process occurred would be affected and delayed. Hence, comprehensible communicative activity in online writing platform among learners would be impossible to achieve.

Especially, in academic setting, when content was delivered or exchanged, there was little possibility for learners to interact with each other (Anderson, 2003; Moore & Kearsley, 2005). This is because advances in online communication technologies have opened up significant opportunities for learners to interact with each other synchronously through web-conferencing or text chat, and asynchronously through discussion forums, email, and text messages on mobile devices, as well as through social networking software. During learners- learners interaction care must be taken to ensure the engagement has educational value rather than being simply social in nature among them. This is supported by Kuh (2003) as social engagement of learners as an important retention factor.

However, Arum and Roksa (2011) suggested that learners-learners interaction has come under scrutiny by for failing to engage learners academically. They claim that learners-learners social interaction does not necessarily promote academic achievement and more often distracts from learning. This challenges academic institutions to ensure that learners- learners learning activities of the communication process are goal-focused and robustly constructed to promote learning.

This indicates that even learners tried to attune and be attuned to one another in their respective expressions (Coelho & Figueiredo 2003), it would be unmanageable to attain without shared notions of the established communication process that might be affected by external factors as delayed feedback, technicality issues of the medium used or even noise occurred while the message being delivered. Hence, it is vital to explore the model of communication process involved in using the medium employed to reach the objectivity of such activities pedagogically. This is supported by Nagaletchimee Annamalai as she claimed that, *"With the increase number of online learning courses, more studies are needed to explore learners' interactions and the ways in which we can improve the interactions in teaching and learning activities"* (2018, p. 2).

The emphasis here is that, by having any appropriate activity that mainly employs online medium, the reciprocal interaction among learners is crucial. This is because learners need to reflect their understanding of the knowledge in the interaction discussed. Hence, this clearly suggests that a significant investigation is required to explore the communication process onto learners' academic online written interaction activity in order to support and facilitate critical thinking, discourse, and meaningful engagement among them pedagogically. Particularly, two models of communication namely; interaction and transactional models will be discussed in this paper on a conceptual perspective of how these two processes involved or formed the academic online written interaction academically.

3. Online Written Interaction

As a mean of communication, writing is immersed into technology to deliver such messages, as by using electronic or online medium. The significance of writing increases as when one needs to communicate or interact in English language, in which it is extensively used for global mediation of knowledge (Mahboob 2014; Mansoor 2005; Marlina & Giri 2014; Rahman 2002 in Fareed, Ashraf, & Bilal 2016:81). Hence, online written interaction is incontestable as a medium of shared understanding of the messages or information expressed and exchanged in academic world, such as Learning management System (LMS) platform, electronic mail (e-mail), electronic messaging (e-messaging), and video conferencing and to name a few as in Figure 1.

Figure 1. Sample of Online Written Interaction in Academic Setting
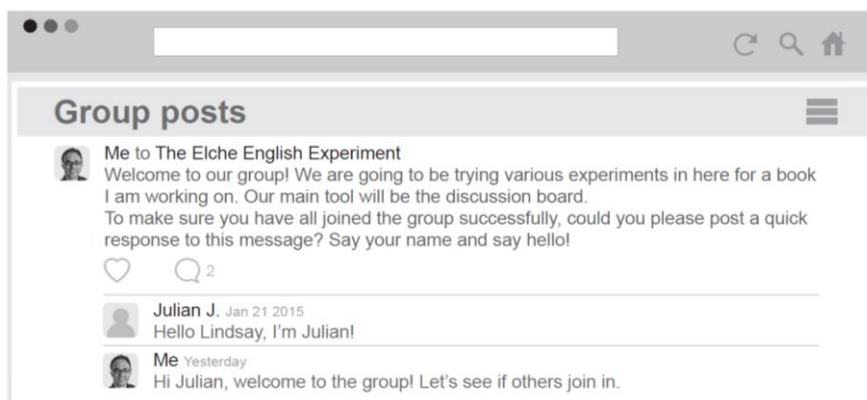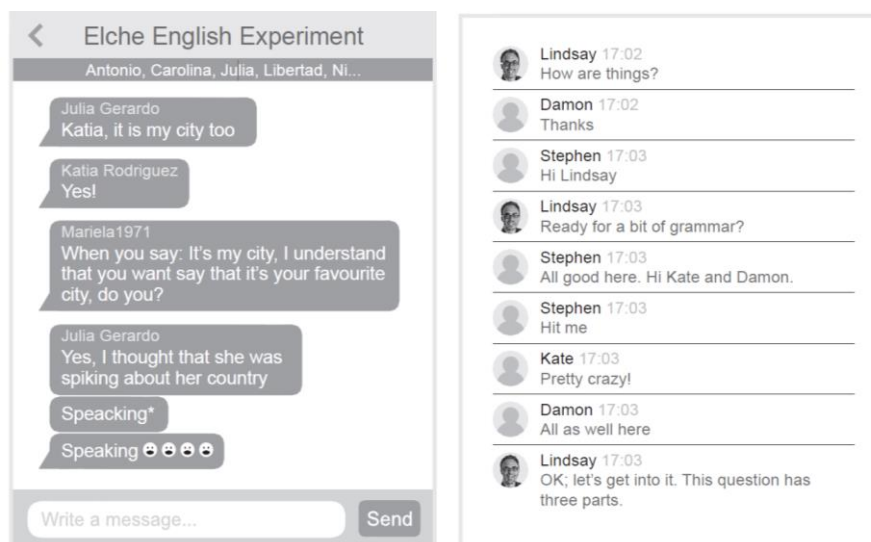
Online written interaction is exerted as teaching and learning platform due to educators and learners will be immersed with new information and communication technologies (ICTs) educational environment that stimulate and enhance the educational process (Victoria López-Pérez et. al., 2011). Especially, Kellogg (2001) claimed that writing is a cognitive process that tests memory, thinking ability and verbal command to successfully express the ideas, because proficient composition of a text indicates successful learning (Geiser & Studley 2002; Hyland 2003; McCutchen 1984; Nickerson, Perkins, & Smith 2014). As a result, the online platform of writing activities is ubiquitous in Malaysia's tertiary institutions.

Moreover, it is believed that by having interaction among learners, it would motivate learners to engage with each other as essentially leads towards learning as their participation takes place. "*When students participate in online discussions they are exposed to a broader range of views allowing them to develop more diverse perspectives and to collaborate in the construction of new meaning*" (Callagher, 2008, p. 11). By having such approach in lessons it could allow learners to be informative or informed as well as inspired by such activities (Bender, 2003). This is because online written interaction provides the ambience of learners would reflect before they write (Croxton, 2014, p. 316). Learners then would feel less intimidated than in a face-to-face discussion, and less dominated by more vocal students.

As communication technologies improves as online written interaction in academic setting, the communication process occurred through intrapersonal, interpersonal, small group, mass, intercultural and contextual venues. The communication process takes place in the academic online written interaction progressed that reflects the models of communication expanded to more kinds of communication process as well. Significantly, the models of communication serve as a valuable purpose as that allows us in the academic setting to understand the specific concepts and steps within the process of communication among learners-learners, educators-learners and educators-educators.

There are three general types of communication models in which all other communication models are mostly categorized namely; linear, interactive, and transaction models. Yet, for the setting of online written interaction, interactive and transaction model of communication are the ones overlaps and frames the academic online written interaction's process respectively. It is essential to understand the communication models, so one can use them for enhancing effective communication for their teaching and learning session onto practice. Also, one could aware of the outcomes anticipated.

## 4. The Communication Processes in Online Written Interaction

Any communication process involves sender, encode, message, channel, receiver, decode, noise and feedback. The basic process of communication happens when a fact or idea is observed by one person. That person (the sender) may decide to translate the observation into a message, and then transmit the message through some communication medium to another person (the receiver). The receiver then must interpret the message and provide feedback to the sender indicating that the message has been understood and appropriate of the action taken. This communication process occurs in online written interaction as well. The communication connects people through the process of delivering messages, ideas, thoughts, facts or views in such way that could perceive by others, as to or from an individual or group of people. In the academic online interaction setting, the interaction between the students with the instructors and other learners are indicative of the degree of interactivity. This promotes the students to build and exchange their knowledge, in other words, the more interactive the process becomes the more active will students' role be.

In order to determine the types of effective communication model that exerts to effective interaction, it is important to evaluate the medium employed in the communication process on the context in which it operates. For instance, the communication takes place through face-to-face verbal interaction, over a phone call, through printed materials (letters, newspapers, etc.), or through visual media (television, photographs, etc.). Once these communication processes are charted in their context, it is easier to concede how to deliver or receive message in the socio-technical system that is the virtual

community. In this way, the socio-technical gap between community requirements and enabling technologies can be reduced (Ackerman, 2000).

Prominently, there are two main models that is referred in using communication technologies namely, interactive and transactional communication. Linear model of communication as in Figure 2, does not count in as it is considered as a one way communication process in which sender is the only one who sends message and receiver doesn't give feedback or response at all (Shannon & Weaver, 1949). Its major downside is that it assumes that there is a clear cut beginning and end to the communication process. It also displays no feedback from the receiver as television, radio or newspapers. It is any method in which there is no possible way for feedback even non-verbal way (Amudavalli, n.d).

Figure 2. Linear Model of Communication Process
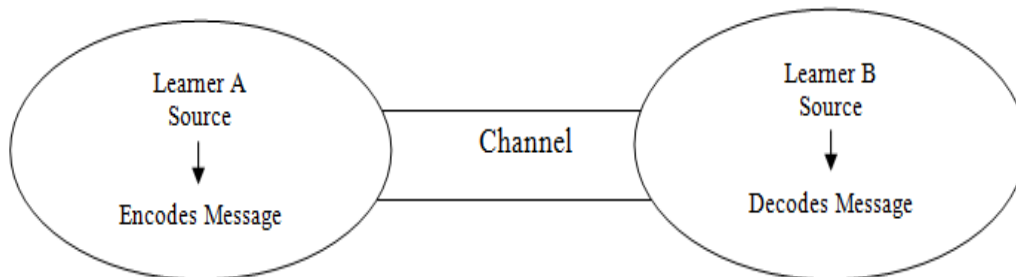
4.1 Interactive Model of Communication

As online written interaction is a platform of interaction, it is prominent to be concern on in an academic communication for learners. This is because learners need to write virtually that may lead them face various writing problems of their learning as linguistic, psychological, cognitive and pedagogical setbacks (Haider 2012; Hyland 2003 in Fareed, Ashraf, & Bilal 2016, p. 82) or known as noise. In regard to that, to develop online written interaction to be in an interactive process, they need to practice the language and academicians need to observe appropriate content matters in achieving educational objectives accordingly (Ndongko & Agu, 1985). Below is the Interactive Communication Model of learners' academic online written interaction.

All communication process in the online medium-employed in academic setting starts with a learner, that has a thought or information to pass on to other learners or classmates. In the interactive communication as in Figure 3 depicts that thought would first go through an element called the encoder, which will change our thought into codes. Schramm (1955) in Wood (2009) claimed that encoding is actually an act of translating specific thoughts into codes (message) that is then transferred to another person, which will decode the codes (message), and interpret the meaning. The second part of the communication is the feedback or response of the receiver that goes through the process of encoding, and then delivered back to the original sender as they decoded the message (Essays, UK, 2018). Thus, this communication model is a two-way process of interaction.

Figure 3. Interactive Model of Communication Process
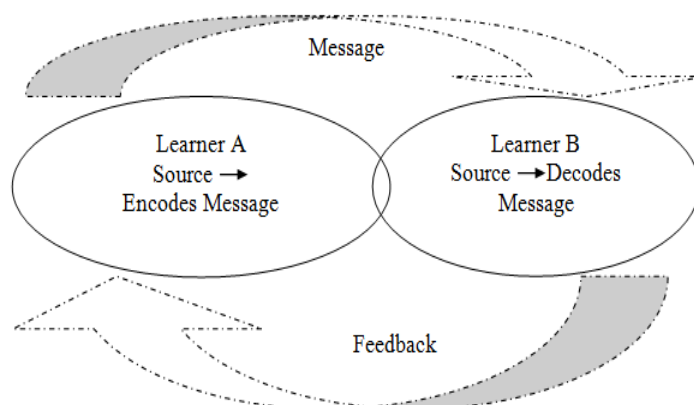
In this communication model, both the sender and the receiver take turns to speak and listen to each other. As a result, the feedback its feedback is given (encode or decode) either verbally or nonverbally, or in both ways. This model also illustrates that the sender and receiver communicate better if they have common fields of experience which includes their cultural background or general personal experiences that overlaps in their interaction. However, the drawback in the interactive communication model is that it does not indicate that communicators can both send and receive messages simultaneously. This model also fails to show that communication is a dynamic process which changes over time.

According to Bajracharya (2018), this communication process can take place between humans or machines as example instant messaging system or electronic mail (e-mail). Internet can be taken as the best way of interactive communication example as receiver that can give feedback even in newspapers and books. This is where online written interaction submerges in the category of Interactive Communication Model. Especially, the use of Internet in the interaction has increased the opportunity of interactive communication between learners and it is evolving. In particular, this communication model perceives human-computer interaction is also now considered as interactive communication as the model is circular where the senders interchange every time. Social media, interactive marketing and user generated contents, auto-teller machines (ATM), online shopping, and chat rooms, are other examples of interactive communication model as well.

However in academic setting, this model also deals with noise and barriers to communications like language or network problems which affects the communication process. There is an open distorted line of communication in this interactive communication model of online written interaction. Furthermore, in this communication model, it has no engagement of sender and receiver in communication which in academic setting it is important to develop such soft skills to gain intellectual connection. Also, the communication between learners can be linear if the receiver (regardless human or computer) does not respond. Even it is a relatively new model of communication for new technologies; yet, being instant or synchronous interactive is taken to be a very important aspect in building effective communication in academic setting.

4.2 Transactional Model of Communication

It is basically a shared understanding of the information expressed and exchanged in reaching mutual meaning regardless among human-human or human-computer interaction. It is a continuous process which the roles of sender, receiver and the message in the interaction unfold. This model describes *'transaction'* as the ongoing and continuously changing process of communication that is on sending and receiving messages is reciprocal (Barnlund 1962) as in Figure 4. The communicators (the sender and receiver) are responsible of the effect and effectiveness of the communication that they need to build a shared meaning of the message as each communicator act as both sender and receiver simultaneously.

Besides that, in this model namely; both of verbal and non-verbal behavioral cues, communication environment and noise are parts of the message. Each communicator reacts depending on the factors of their background, prior experiences, attitudes, cultural beliefs and self-esteem (Amudavalli n.d). According to Ashman (2016), she claimed that this model denotes people communicate to create relationship, form intercultural alliances, shape their self-concepts and engage with others in dialogue to create communities. In short, this model considers on how social, relational and cultural contexts frame or influence the communication process as well.

Figure 4. Transactional Model of Communication Process
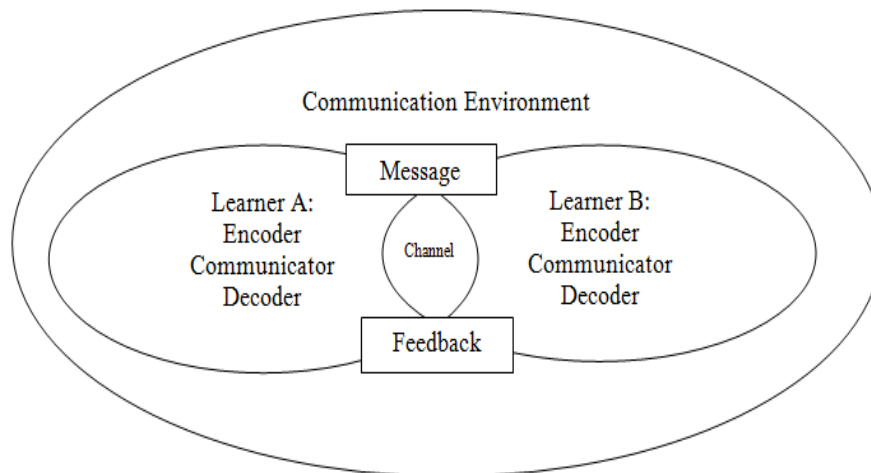
The difference of this model in comparison to the aforementioned ones, is that the transactional model acknowledges the circular nature of communication that is endless in which the sender and receiver, vice versa continuously or simultaneously changes their role depending on the communication. This helps to improve the understanding of communication between two parties rather than a one way linear model that does not represent the nature of communication in real life. This is vital in such online written interaction context especially it is in an academic setting. It is a dynamic model that shows of how a situation can change which reflects communication is not generally one sided merely.

This model also does not separate between sender and receiver, as both sender and receiver is the same person that it is an essential part of communication. This is due to the fact of communication moves in a circular manner (Essays, UK, 2018), especially in the context of online written interaction. It is a more active communication models rather than the linear model that its receivers are assumed passive. This is because Transactional Model emphasizes on the feedback feature to be central of the

communication model. In particular, in this model the relationship between sender and receiver governs the communication model such as they construct meaning that leads to develop relationship. However, at times the context is a combination of the channel and noise during the communication that turns into a major influence as how distortion the message would be received and the response given.

As example, while Learner A is interacting, Learner B is constantly giving feedback on what she or he thinks through virtual or textual expression (or verbal feedback in face-to-face interaction) without necessarily stopping Learner A from interacting. Such context and the different combinations that may occur combined with the different types of noise that play a subtle role in influencing communication that would lead to miscommunication or distorted message's content. It shows that the elements in this model of communication are interdependent as in online written interaction, learners would keep exchanging messages with other learners and every elements of a communication process (sender, encode, message, channel, receiver, decode, noise and feedback) which would affect their interaction.

This reflects that this continuous two-way process of communication, Transactional Model, is parallel with the process of online written interaction in academic setting, as it is in line with the asynchronous concept and active communication between communicators, the learners (senders and receivers). Yet, as this communication is instant and continuous, this communication model is a meaning centered model. Both sender and receiver (learners) must understand the codes sent by the other in order to achieve effective communication in which they shared meaning that leads to a significant teaching and learning session among them.

5. A Conceptual Model of Communication Process in Online Written Interaction

The context of interacting or communicating ideas in a communication may influence the process as McLean claimed "*...it involves the setting, scene, and expectations of the individuals involved*" (McLean, 2005). For example, an academic communication context as in online written interaction medium may involve academic suits (environmental cues) as directly or indirectly influence the learners, to which the environment is formal or informal from the medium used. As a result, as it is in an academic setting and medium, learners are required to build the context on academic structures mutually.

Figure 5 is a conceptual model of communication process in online written interaction as known as, Confer Model of Communication Process, in which this article discusses and provides with such objectives. This communication process focuses on negotiated meaning or common ground, when communicators are trying to describe communication (Pearce & Cronen, 1980; Praeger, Cronen, & Pearce, 1982) among them, which are the learners or educators. This process of communication is as well a two-way process and continuous communication in which they are the combination of Interactive and Transactional Model of communication processes. These two models of communication process were integrated as its circle of communication processes overlaps and frames the messages sent. It fits with the academic setting in fulfilling such teaching and learning approach in employing online written interaction among learners along or educators; synchronous and asynchronous setting.

Figure 5. Confer Model of Communication Process
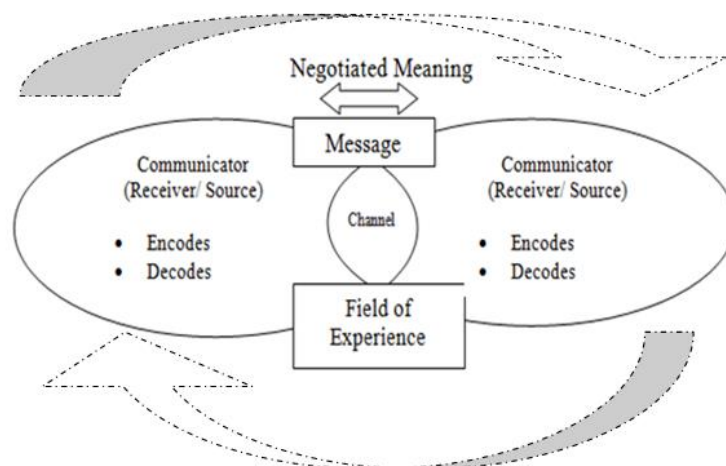
Yet, it depends on which kind of medium do the lesson employed as videoconferencing, LMS, e-mail or forum as well as it depends on the educational objectives of the lesson would be. In addition, in order to communicate, they must each realize and aware of the terms or messages means to the other communicators, and establish common ground, in order to fully understand the request and provide answers or responds in the interaction. This is because they need to negotiate meaning of the interaction occurred among them to retrieve the common ground of their lesson. Especially, both communicators are the receiver and source of the communication.

Furthermore, both communicators play their role in encoding and decoding the message and feedback respectively. Besides that, this model focuses on few perspectives in mind on how it affects the interaction among learners or instructors that planned to achieve the aimed educational outcomes of employing the online setting approach in the lessons. Particularly, it discusses onto human interaction by using the communication technologies by the absent of face-to-face as follows.

5.1 The Psychological Perspectives

This focuses on what the sender and receiver are (communicators) thinking when they are in the communication act. It describes the circular nature of the communication in which it is not only an online written interaction from one to another but rather as a union. Thus, it defines success as when the sender knows that the receiver completely understands the message and vice versa. Especially, due to various cultural and experiential differences among the communicators (this is not often the case with messages). However, the "noise" (the differences of field of experience as cultural and experiential differences) could actually affect on how the communicators encode or decode the messages. If this happens, a meaningful lesson would be impossible to achieve.

5.2 The Social Perspectives

This model would reflect that in the online setting, the communicators experience the interaction not as individuals only, rather as groups of people who are designated of beliefs, culture, or similar ties. As a result, this model does not address inter-personal communication merely; yet, it is a discussion of multiple senders and/or multiple receivers (communicators) continuously as possible as well. The model of communication processes would affect the communicators through and within the bounds of the cultural norm, which may not be the case if the cultural norm is something that is oppressive. There is a need of awareness and observation on such online written interaction activities especially by the educators if the online social ambience does show any offensive or inconvenience manners among the communicators.

5.3 The Practical (or Pragmatic) Perspectives

This model views on the patterns and interdependent behaviors that occur in the communication act among the communicators. The communicants would be interdependent because one writing influences the response of the other. For example, in many models view this form of communication as after a game such as chess, where an opponent's move is directly influenced by the other's prior move. Nonetheless, this model would be used to view patterns in communication and analyze unhealthy actions that occurred in the online written interaction. Besides that, this model would disregard the personal and cultural aspects of communicators as the aim is on the educational outcomes of the lesson learned as well as on the efficiency of the approach (online setting) employ in the teaching and learning session organized.

6. Conclusion

Identifying and knowing a communication model would help educators mainly to differentiate between the types of communication outcomes and how manipulative variables change its efficiency of the communication process using the right medium. Any version of model of communication processes would reflect or emphasize different components, but basically the elements are the same. By introducing or referring Confer Model of Communication, it would be beneficial for learners' participation that leads to a meaningful learning session as it boosts learners' self-confidence and motivation among them.

Besides that, by knowing the communication models, it would also clarify one especially among educators on the complex understanding of communication into a more disciplined, order and simple form of communication for educational purpose in an academic setting. The models would provide educators a powerful pedagogical tool for teaching learners to understand that communication is a complex process in which many factors could, go wrong. Thus, the educators would be aware and prepare on any unexpected educational outcomes or situation occurred. For example, learners misunderstand of the task given; the online medium employed in the lesson does not receive much respond by the learners as delayed, and to name a few.

Especially by utilizing such communication technologies, it offers new approaches of online learning environments that enhance interaction activities which may distort or not the lesson. Thus, it is essential to understand on any of the communication models, so one can use them for enhancing effective communication for their teaching and learning session onto practice on different skills at different points in the communication process for learners to become more effective communicators as could accommodate both group and individualized learning respectively.

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