

Affective Domain (Taxonomy Krathwohl) and Interpersonal Communication of Students in e-Learning Activities

Heni Cahya Ramdani¹, Rizal Fahmi², Aisha Nadya³, Iin Indahsari⁴
{hcramdani@unis.ac.id¹, rfahmi@unis.ac.id², aishanadya@unis.ac.id³,
180501004@students.unis.ac.id⁴}

Universitas Islam Syekh-Yusuf, Tangerang^{1,2,3,4}

Abstract. Emerging of Covid-19 pandemic generated the education system shifting its activities. The e-learning offers new dimension that opens-up further opportunities. E-learning allows access to convenient learning activities anywhere and anytime. However, the e-learning implementation emerges various challenges which has been possibly mistreating certain aspects related to the affective and interpersonal communication. To achieve educational goals, competence and proficiency in mastering the know-how gained from the teaching-learning activities is essential. Digital education has become essential for a successful study therefore examining on how its influences to the affective domain and interpersonal communication of student using learning management system (LMS) is required. In facilitating these statement, a quantitative study on higher education students has been applied and resulted that online learning using LMS influenced students' affective domain and interpersonal communication.

Keywords: Affective Domain; Interpersonal Communication; e-Learning

1 Introduction

The Covid-19 outbreak emerged in December 2019. (1) It has rapidly spread and continued to grow until it declared as pandemic. (2) Tools to prevent are isolation and quarantine. Quarantine is restriction of persons who are presumed to have been exposed to a contagious disease but are not ill, either because they did not become infected or because they are still in the incubation period, social distancing and community containment. (3) Unprecedented policies were put in place in slowing the spread of the virus lethargically, i.e. preventing social contact by closing schools, shops, restaurants, banning public events, and working from home. (4) Social distancing has been applied in various countries to reduce human interaction in the wider community (3). The pandemic has brought many challenges. In response to the outbreak, schools have now to shift its teaching-learning activities to digital (6) as well as higher education not only in terms of teaching-learning and also other activities such as research and institutional governance (5). Online learning became of great demand in the world of education in the last few years. Internet-based learning or what is often referred to

as e-Learning is one form of innovation from the use of technology in education (7). In addition to utilizing technology, the benefit of online learning is that it reduces space and time problems that are often faced by conventional education. (8) Teachers and students are physically in different places for all or most of the time of teaching, learning, and interacting (10). Students free to learn and go through the courses wherever there is an access to the Internet, allowing eager and competent students to complete studies at a faster pace. Online learning can be done combining with face-to-face learning in industry and academia which showed positive results (9).

Online learning can be the beginning of the creation of a higher education model with a modern learning environment considering that all learning processes carried out are online-based (11). However, several challenges need to be faced in the implementation of learning. One of the challenges is the difficulty of making an online-based learning model, given the urgent nature of this pandemic, even though online learning requires interactive dialogue between educators and students. (12) The need for information technology-based learning concepts and mechanism is inevitable (13). Technology adoption in learning practices has given new opportunities for the learners and practitioners to improvise various learning resources as well as accessing learning easily by the connectivity of wireless and Internet connection. Adaptation is needed for both educators and students to switch model of learning. Regardless of the several advantages i.e. increasing access to education and quality of learning, costs reduction and effectiveness, retains students in online platforms is a major challenge faced by educators (14). Despite the shortcomings of technological and industrial advances, their application is very important in education also this is a requirement that is intended for students to have competence and skills in understanding future challenges (15)

The readiness of students is a critical part to be studied further when designing an online learning education system. Psychological, interactive learning literacy, and technology application are the elements to assess students' readiness (16). Several strategies can be carried out by educators, such as briefings and providing feedback on the platform used to present student involvement (17). Discipline of students in online learning is also very crucial (18). To keep students actively involved in online teaching-learning activities is a challenging task because the educator's personal touch tends to be lost or limited. (19) That is why, it is necessary to develop prescriptions to increase affective factors and interaction of educator and learner (10). Communication of students in learning takes place through video conferencing with various challenges that may be faced in the communication aspect and students did not turn on their cameras during online discussion activities. This makes students unable to see each other's facial expressions when communicating with each other, thus limiting their involvement with each other as in conventional learning.(20) Communication is an act that shows a sense of pleasure in talking, associating and collaborating (21). Variety of learning with technology is able to support the success of knowledge delivery and penetrate outcome achievements for the particular course. The satisfaction includes learning impression and activities which had shown positive significant as well as the students' performances in continuous and final assessments.

2 Literature Review

2.1 Online Learning

Online learning as a subset of all distance education has always been concerned with provision of access to educational experience. It offers flexibility in time and space. It will enhance the critical function of education interaction in multiple formats and styles. These interactions could possibly happen with the support by autonomous agents and the aggregated contribution of other users as described on Figure 1 (22).

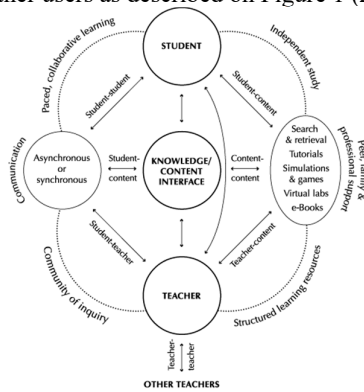


Fig. 1. Model of online learning

Taking an online learning is challenging for student, course designer and the university. Challenging but indeed it gives benefits. For the students, online learning known as no time zones. Location and distance are not an issue as well. For the lecturers, tutorials can be done anytime, anywhere and materials updating immediately. (23) Online social presence might be useful concept in the design of online environments (10) and small teaching approach could help to achieve success in designing an online course. (24) In designing the course a model developed by Piciano (25) can be used as a reference.

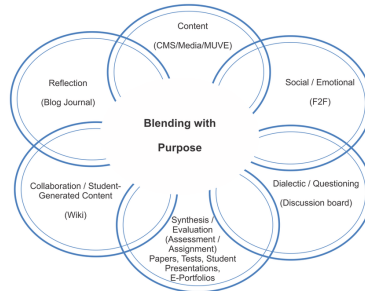


Fig. 2. Blending with purpose: the multimodal model

2.2 Affective Domain of Krathwohl Taxonomy

The cognitive domain is still the main reference in evaluating learning outcomes but affective aspects have also a role in the assessment process. Affective is required to facilitate development in the values, ethics, aesthetics, and feelings of social work students. It is arguably the most complicated type of teaching as it integrates cognition, behaviour, and feelings (26). This domain forms a hierarchical structure and is arranged from simpler feelings to those that are more complex. Learning involves attitudes, behaviors, and physical skills and

so the affective domain involves feelings, values, appreciation, enthusiasms, motivations, and attitudes (27). Affective describes learning objectives emphasize feelings, emotions, and degree of acceptance or rejection. It senses vary. Ranges from simple to complex commitment and attention that internally consistent with qualities of character and conscience: 1) Receiving: awareness of feelings, emotions, and the ability to utilize selected attention, 2) Responding: active participation, 3) Valuing: ability to see the value particular object, phenomenon, behaviour, or piece of information. 4) Organization: ability to prioritize value and create unique system, and 5) Characterization: ability to internalize values to control behaviour (27).

2.3 Interpersonal Communication

Communication is the sharing of information and interpersonal communication as a transactional process in which each person serves as both speaker and listener. (28) Interpersonal communication is a process of delivering and receiving messages between the sender and the recipient directly or indirectly. Directly can be implemented without media and indirect communication can be implemented if certain media are used in the process (29). Interpersonal communication as receiving and delivering messages has logical consequences in the form of impacts and opportunities (30). Interpersonal communication is an extremely practical art since it depends largely on interpersonal skills (31). Interpersonal communication is more effective in obtaining information (29). Communication is an inevitability necessity that is needed by everyone, which is not only intended as a way of delivering and receiving messages, but also to meet the basic needs of individuals, such as giving and getting affection, showing a desire to be part of a group, and the need to influence others. The sustainable interpersonal relationships depend on how good the communication is. This is associated with the following three basic needs: 1) Affection: the desire to give and receive affection, 2) Inclusiveness: the desire to belong to a certain social group, and 3) Control: the need to influence people or events. (32) and the principles of interpersonal communication (33):

- a) Communication is fundamental
- b) Interpersonal Communication is permanent
- c) Interpersonal communication is an integral part of ethics
- d) Interpersonal communication is irreversible. It will indirectly affect senders and receivers considered with ethics (34).
- e) Interpersonal communication is within human. Human beings play important role in creating meaning when communication takes place and its interpretation emerge through interpersonal communication.
- f) Metacommunication impacts on meaning. Metacommunication could improve understanding of message sent verbally and non-verbal communication.
- g) Interpersonal communication requires reciprocal relationships
- h) Interpersonal communication improve relationship.
- i) Communication can't solve everything.
- j) Interpersonal communication can be learned.

Communication skills can be developed. Communication occurs in all aspects and segments of human life. Interpersonal communication can be effectively applied when the message delivered is well-received by the recipient. In spite of that, interpersonal communication will improve interpersonal relationships as well (35).

3 Research Design and Method

3.1 Challenge to Participative Method

This study aims to investigate, to what extent, affective domain and interpersonal communication characteristics are being influenced in the distance learning process using e-Learning Platform. There are a number of challenge linkage to participative which have not been mentioned yet. The uncertain situation has triggered that the study and its activities done virtually. The questionnaires were possibly distributed via social media only: E-mail, Facebook and Instagram. This barrier has also resulted that the planned interview or interactive forum were not possibly executed and timely reach the respondents. Indeed, this was quite uncomfortable due to the uncertain situation.

3.2 Research design and methods

The distributed questionnaires has been designed to consist of e-learning platform used actively in teaching-learning activities, affective domain (Taxonomy Krathwohl), and interpersonal communication. It collected 161 respondents from four private universities across Tangerang City, West Java, Indonesia. The respondents were students from Universitas Islam Syekh-Yusuf (UNIS), Universitas Muhamadiyah Tangerang (UMT), Sekolah Tinggi Ekonomi Rahardja (STIE Raharja), and Sekolah Tinggi Islam Asy-Syukuriah (STIA).

Tabel 1. Respondent classification

University		Percentage
UNIS	73	43,5%
UMT	34	21%
STIE Raharja	32	20%
STIA	25	15,5%
Total	161	100%

Source: Data taken and calculated in 2021

4 Result and Discussion

4.1 Online Learning

The online teaching-learning activities applied in four selected universities since the beginning of pandemic. The platform used in facilitating students varies due to the facilities the universities able to provide. Learning management system (LMS), Zoom, Google Meet, and combination of those platforms were and are still actively in use. Table 2. below shows how those platforms ease its activities. LMS is the platform that mostly used at Universitas Islam Syekh-Yusuf including Google Meet and combination of those mentioned platforms than others.

Tabel 2. E-learning Platform used

University	Platform	Percentage
UNIS	LMS	81,25%
	Zoom	2,7%
	GMeet	40%
	Combination	43%
UMT	LMS	4,2%

University	Platform	Percentage
STIE Rahardja	Zoom	62,2%
	GMeet	10,3%
	Combination	28,6%
	LMS	12,5%
STIA	Zoom	32,4%
	GMeet	19,1%
	Combination	0%
	LMS	0%
	Zoom	2,7%
Total	GMeet	31%
	Combination	0%
Total		100%

Source: Data taken and calculated in 2021

4.2 Affective and Interpersonal Communication

The investigation reveals that online learning influences affective domain and interpersonal communication, as indicated in Table 3. Wald value obtained on the Affective variable is 0.001 (sig, 0.975) and the Interpersonal Communication variable is 0.819 (sig, 0.365) with significance value of $0.000 < 0.05$. The result indicates the hypothesis proposed is accepted that e-learning effectively affects the variables affective domain and interpersonal communication on teaching-learning activities.

Table 3. Variable in the Equation

	B	S.E.	Wald	df	Sig.	Exp (B)	95% C.I for EXP (B)	
							Lower	Upper
Step 1a Affective	-.001	.048	.001	1	.975	.999	.910	1.096
Interpersonal Communication	-.016	.018	.819	1	.365	.984	.950	1.019
Constant	.184	.765	.058	1	.809	1.202		

Source: Data taken and calculated in 2021

The above result appears that in general students concern to the characters of affective domain and interpersonal communication. Through questionnaires distribution, the result from Affective can be summarised that Receiving, the average of 49.4% means students listen, show respect and actively involve during online learning discussion. Responding, 44.9% students respond by finalising the assignments individually and/or in group and confirm by delivering questions using LMS and combination of other platform during online teaching-learning activities. Valuing, 40.68% students believe in institutions programme as stated in curriculum and response positively to other campus activities. Organising, 46.6% students able to evaluate the characters, shows responsibility and obedience, and solving problem. Characterising, 40.62% students able to shows their characteristics of independency, objective and committed during online teaching-learning activities using LMS and other portals during online teaching-learning activities.

In spite of Affective, also students behavior on Interpersonal Communication showed some improvement, 46.1% students manage to show self-confidence and communicate interpersonally, responsive postively to bring the arguments during discussion, exchange role, giving feedback, show openness, empathy, be supportive, think positively, interactive, communicate verbally and non-verbal, orientation to others, solve problem productively and

objectively, flexible, and concern on culture during online teaching learning. Learning has the essence of planning or design as an effort to teach students. That is why students not only interact with lecturers but they also need to interact with all peers to achieve the desired learning objectives. Efforts to improve learning are carried out with assumptions aimed at improving the quality of learning that begins with planning and designing. (36)

Some obstacles found in the implementation of online learning activities that commonly occur are the limitations of students participation where they are geographically in different locations. It is very difficult to physically face to face with the teacher or instructor or with fellow students. Another obstacle is financial limitations, discipline and decreasing of motivation (37). Education and technology experts suggest several things need to be considered before choosing medium for learning activities in order to optimize the process. (38) suggesting to do: a) Analysing. In the early stages, one thing to consider whether e-learning is necessary. This question cannot be answered, it is based solely on estimation or on the advice of others. Each institution need to determine its learning technology that is different from one another. For this reason, an analysis that includes technical, economic, and social feasibility studies is needed carried out, b) Instructional design containing content, topics, credits, teaching materials/curriculum, and c) Evaluation. Through group discussion.

The use of electronics, especially the internet, reveals some problems includes a) lack of interaction between educators and students as well as amongs students in the teaching-learning process, b) tendency to ignore academic and social aspects, c) learning process tends to training instead to educate, d) literacy of educators focused more on technology changes, e) Students with less learning motivation tend to fail, f) the limitation of internet facilities, g) lack of knowledge and understanding related to skills in using the internet among teachers, and h) illiterate of computer language of educators. (39) In dealing with those problems, it is important to coordinate the material by prioritizing affective elements and interpersonal communication as explained by Mulyasa (40) on his book that the ability to organize learning material consists of two stages, selecting and compiling. When learning takes place face-to-face, it can be said that teachers accustomed to organizing learning. Problem may occurs when learning activities take place online. In order to avoid misconception between teachers, students and parents, the online learning material must be carefully selected and teachers do reviews on the achievement of basic competencies of students.

5 Conclusion

This study resulted that affective domain and interpersonal communication in the distance learning are influenced by the use of e-learning platform. Statistically, it has been calculated that the result does not show satisfactory but hypothetically, it has been given some influences. This occurrence come out to surface due to the level of technology literacy, used in teaching-learning activities, of students and lecturers is no more an issue. Lecturers and students are already accustomed to for more than 1.5 years of time now. Ostacles may appears in some teaching-learning activities i.e. online, offline even blended learning. Therefore, it may be necessity that lecturers and students to always prepare for such any circumstances. Lecturers design instructions model to be more meet the needs of students and students show more trust on lecturers. This attitude shall be positively upgrading the affective domain and interpersonal communication skills.

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