Type of Instructions Performed in Online Teaching and Learning

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Abstract---Teaching and learning has changed and performed new challenge to provide attracting instruct for students to be active in online learning. The way to run the process of teaching and learning are modified. The use of technology in communicating the teaching-learning material is challenging. Different types of instructions motivate different to students to follow the online class activities. The communication delivered through the instructions becomes a key to guide the process of online teaching and learning. How the instructions performed by the teacher create interesting interaction in online learning. So, it is interesting to analyze further how the instructions work to activate the students' involvement in online teaching-learning. This research is to describe how the types of instructions performed in online teaching and learning based on the implementation of teaching model. The data is collected from documents of lesson instruction design. This research uses qualitative approach to analyze the data. The result of the research is analyzed related to the types of instructions used in processing the learning activites through instructions provided by the teacher. The conclusion found three types of appropriate instructions to motivate and activate students in the process of online teaching and learning.

Keywords---21st competencies, high order thinking, motivating interaction, online instruction, teacher role, teaching-learning model.

Introduction

Nowadays era, performing teaching and learning activities are not always face to face coming into the class by being presence. Teaching and learning are not always by writing such materials on the board. Teaching and learning is now very possible to be different. Certain needs and also situation demand people, especially teacher and students to perform teaching and learning activities through online learning.

As it is happening to other countries, Indonesia take a regulation on education by formulating online learning to those regions that are not save to do offline class activities because of COVID-19 pandemic. The regulation for which the situation now is too dangerous to work in offline study, so all schools, including teachers and students, should adapt for a new use or way to do teaching and learning activities.

This phenomena is coming fast, not many people or education institution get ready to face it and struggle for it. For specific competencies, however, teachers needs more enough information, guidance and drilling to overcome this kind of problems related to online learning. This is, of course, very likely to give rise to some barriers for implementing online teaching and learning, for both teachers and students. This is supported by Muilenberg research result. He reported eight factors found in a research about students' barriers to online learning. Those were (a) administrative issues, (b) social interaction, (c) academic skills, (d) technical skills, (e) learner motivation, (f) time and support to study, (g) cost and access to the internet, and (h) technical problems (Muilenberg & Berge, 2005).

Online teaching and learning acquires preparation as well as the offline. Some important course development should be prepared to guide the online activities to run as it is expected in the instructional design. Course syllabus, lesson plan, media, students' worksheets, and also assessment instrument are those course development called course information or course requirement which are important to construct by teachers to bring the students to succeed in online class (Ko & Rossen, 2017).

In term of course development, defining learning objectives is really fundamental to focus on. What students need to master and achieve through online learning activities are what teachers should keep attention to the instructions provided in online learning. The defined objectives as goal of learning can be understood well by students through clear, attracting, and challenging instructions. It is commonly first-time online instructions to provide too little detail in the online course syllabi (Ko & Rossen, 2017; Burgess et al., 2010; Silver & Nickel, 2005).

The type of instructions delivered to students in online learning will influence much how they involve working with the instruction. Appropriate instruction with interesting way of communicating, the teacher will ensure students to be motivated to involve in online learning process (Xu et al., 2020; Lunenberg et al., 2007). In the contrary, students will be probably demotivated for getting unclear and not attracting instruction in their online learning. So, students' perceived barriers to online learning may affect much on their learning outcomes (Muilenberg & Berge, 2005).

For some reasons above, the roles of instructions in online learning take big influences as the teachers could not control all the students' attention and activities at the same time along the learning process. The most attention the students do in online learning is to teacher instruction (Shomirzayev, 2021; Lukman et al., 2016). Instructions are really important not only to reduce error, but also to guide students' performance and ensure them to do all the tasks well (Eiriksdottir & Catrambone, 2011). When the instructions are not proper to lead

students' activities to elaborate their knowledge and competencies through meaningful activities, do the objectives will possibly not be achieved? The question is actually bringing guidance to the importance of investigating the types of instructions performed by those teachers who are conditioned by COVID-19 to proceed with online learning. Whether the instructions are delivered in synchronous or asynchronous, the types of instructions really become key attention for students to respond to (Maddison & Kumaran, 2016).

Therefore, doing a research to know the types of instructions provided by the teachers on students learning outcomes through online learning is really important. It reflects a phenomenon of online learning in COVID-19 situation. So, this research present research question: how the types of instructions performed in online teaching and learning during COVID-19 pandemic?

Type of Instructions reflect to what teachers provide information for students to get learning experiences to achieve the learning goals. Different pedagogical goals the teachers plan will demand different importance in instructions (Eiriksdottir & Catrambone, 2011). Teacher should design proper instruction which really able to motivate students to encourage themselves in processing learning experiences through task accomplishment. The types of instructions refers to what kind of information conveyed in the form of procedures (task-oriented instruction), principles (system-oriented instruction), or examples (instance-oriented instruction).

Those three types of instructions mean different levels (measure) of representational qualities and type of information. Procedural instructions is to come up with task by mentioning and explaining every actual step of an action or activity (Eiriksdottir & Catrambone, 2011). This kind of instructions come with information about criteria of rules for leading students to do the task procedurally. Procedure instructions focus on describing guidance for students to complete the task. This type is most often used by guiding students to perform or to process actions through correct order.

Principles or system-oriented instructions is for informing how a structure is arrange and how it works (Eiriksdottir & Catrambone, 2011). This type informs components of the structure or elements and how every of them connects to each other. It happens like cause-and-effect tasks. The information is to explain some criteria of the structure being used.

Examples means a template of task. This instruction is to draw how task is able to be done like a model presented as an example. The way to complete the task is the same way the model shows. The model helps the users to understand how to do the task by following the model. So, the function of the example is to demonstrate certain action to be followed.

Research Method

This is descriptive qualitative research. It aims to describe a phenomenon without giving any special treatment to the object of research and its characteristics. It describes the naturalistic data. Creswell stated that it is a study to understand

human or social issues by creating a thorough and complex picture presented in words, reporting a detailed view obtained from sources of information, and done in a natural setting (Cresswell, 2012). Data of this research are types of instructions used by 15 teachers who have no experiences in processing instructions in online learning. Data were obtained from teachers' lesson instructions (lesson plans) as source document of the data (Donald et al., 2010). The data were analyzed through (a) data condensation, (b) data display, (c) conclusion drawing or verification (Miles et al., 2014). The data was performed with specific codes. Then, the data were verified by triangulation (Cresswell, 2012).

This research did not describe an analysis to distinguish between instructions that are provided in online learning and face-to-face or offline learning. This descriptive analysis is focusing on the use of instructions offered in online learning for those schools that no have choice to online learning because of COVID-19 pandemic. The instructions were collected as the data to perform the types used by the teachers.

Result and Discussion

Teaching online is not simple as offline teaching, but it is little bit more complex. The access in online teaching to control all instructions responded by students brings teachers to be creative and selective in designing core learning activities to convey them to achieve the main goals of the learning (Haenen, 2001; Tiberghien, 1994). The possible access for the teacher to interact with the students is through attractive instructions offered in online class to enhance the quality of students' learning outcomes. So, the instructions play very fundamental roles in performing online teaching and learning as the remote to control the activities (Bartley & Golek, 2004).

The data presented three types of instructions used by 15 English teachers from 15 different schools that proceed the online teaching and learning by COVID-19 pandemic conditioning. The three types are procedural instructions, principle instructions, and example instructions. Each type has different frequency usage in performing instructions in online teaching and learning. The data is as follow.

> "(TI-A1) diskusikan bersama kelompok tentang struktur teks, unsur kebahasaan personal letter dalam slide, dan kemudian bandingkan dengan materi video pembelajaran yang ada di google classroom, lalu tuangkan hasil diskusi melalui fitur comment".

The data is performed in procedural type of instruction. It leads the students to do collaborative work in certain topic, and continued by some procedural activities. The data also showed HOTs instruction for encouraging students to think critically in comparing two examples given (Poplavskyi, 2021). This type of instruction is formulating 21st competency which teacher should facilitate the students to proceed themselves with those (Chu et al., 2016; Teo, 2019; Pineida, 2011). The complete data is described in the following table.

Table 1
Data of instruction type frequency usage

Type	HOTS	21st competencies			
		Communi-cation	Collabo-ration	Critical Thinking	Creativity
Procedural (12 instruction)	✓ (7= 58%)	✓	✓	✓	✓
Principal (5 instruction)	✓ 3 (60%)	✓	✓	✓	✓
Example (7 instruction)	✓ (5=71%)	✓	✓	✓	✓

The procedural instructions are most often used to provide instructions. This instruction is often used because of assumption that students commonly read the procedural instruction before starting their works (Eiriksdottir & Catrambone, 2011). Procedural instruction has often used for such kind of familiar devices or products which are being learning materials in the class level. So that is why, this type is the most frequently preference to use rather than principles and examples.

The students were predicted to be easier to follow the procedural instructions, so that they can do the task confidently without any doubt to do mistake, and they are motivated to complete the task through some communicative and interactive efforts as posted in the instruction (Widana et al., 2020). This is also as a way to lead the students' commitment to their meaningful process of learning (Weiner, 2003).

The other important data is about HOTs instruction. No one type of those three instructions represent 100% High Order Thinking requirement (Khan & Masood, 2015; Pilten, 2010). The most fulfillment criteria is example instruction. For some reasons, students are guided to observe and analyze the example given through the example instructions (Diachenko et al., 2021). In short, all types of instructions activate the students to cognitively encourage their competency and skills in English. Through some activities designed by the teachers, students also learned much how to interact communicatively with their partner or group to do the tasks, even though they were not in the same place for face-to-face collaboration. Here is what Garrison, Anderson, and Archer talked about the effective online learning is by involving cognitive presence, social presence, and teacher presence (Anderson, 2008; Learning, 2014; Sharma, 2011; Sanderson, 2002; Saavedra & Opfer, 2012).

This HOTs requirements were approximately reach because of the presence of teachers' roles to encourage students through interactive and interesting activities. Teachers are good in performing online teaching through fulfilling the critical roles of teacher (Anderson, 2008; Saavedra & Opfer, 2012). He mentioned are three critical roles. The first is the design and learning experience organization for students to do, both before and during the learning activities. The second, planning and applying activities to encourage communication between and among students, and between the teacher and the student. The third, presiding over the learning experiences through the instructions given.

Conclusion

Teachers used three types of instruction performed in their online learning. Those are procedural instruction, principle instruction, and example instruction. The most common used among three was procedural instruction. The use of those three types of instructions has already fulfilling the requirement of High Order Thinking activities. The highest percentage of High Order Thinking instruction was in example instructions. The example instructions convey the students to do such critical thinking activities through observation and analysis action in the learning process.

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