

## INSTRUCTIONAL PRACTICES IN ONLINE LEARNING: REFLECTION FOR TEACHER PROFESSIONAL DEVELOPMENT

*Lasito<sup>1</sup>, Sausan Ayu Hidayat<sup>2</sup>, Magpika Handayani<sup>3</sup>*

*Universitas Negeri Jakarta<sup>1,2</sup>*

*Universitas Tonggak Equator<sup>3</sup>*

*lasito@unj.ac.id, sausan.hidayat@gmail.com, magpikahandayani@yahoo.com*

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**Abstract:** As online education is in a growing demands these days, however, shifting roles from face to face to online teaching is considerably problematic. This paper explores teachers' instructional practices in their efforts to assimilate with online teaching. Using questionnaires and interviews, this study elicited teachers' strategies to adjust their instructional practices in online learning. Pedagogical strategies to guide students' knowledge and scaffolding were becoming their main concern besides effective communication – through their lexical choices when giving instructions. This study also shed lights on teacher professional development they had received to prepare them for online learning and areas of professional development they expected to have to support their new roles in online educations. While most of the professional development groundwork was to do with technical issues, they also claimed that pedagogical and content knowledge were in needs for their continuous professional development.

**Keywords:** online education, instructional practice, pedagogical strategies, content knowledge, professional development

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### INTRODUCTION

Technology and internet have mediated all of human activities to offer conveniences. One of the activities that receives greater touch of technology is the field of education (Redmond, 2011). The field of education uses internet technology as a means of delivering information and assisting learning. Accordingly, learning today is not only conducted face-to-face but also online mediated with internet (Lin & Zheng, 2015). Online learning has made education affordable for people as it reduces much of the operational costs (Holmström&Pitkänen 2012). This cost efficiency has made many education institutions to offer distanced- education or online learning for their students besides the conventional one. To a particular instance, the pandemic of Covid 19 has also forced education institutions to conduct all their education services online. Even post Covid 19 restriction, when face-to face classroom is allowed, many teachers have been accustomed to engaging their teaching practices with technology.

While distanced-education with technology is promising, however, not many institutions can afford it. Many of them are hindered with poor infrastructure and access to necessary resources (i.e. internet access), poor technology skills, and many more (Holmström&Pitkänen 2012). Besides, there are still many teachers who have considerable doubts about the value of instructional practices in online learning. In addition, lack of preparation and readiness make it difficult for teachers to adjust their instructional practices in online learning (Baran, 2011). When online learning is adopted, teachers have to be able to design virtual learning material using communicative technology, so that it can be easily understood by students in online learning. It is, therefore, designing and adjusting instructional practices from offline learning to online learning is considered as problematic for many teachers.

Switching from face-to-face to online teaching obliges new roles and competencies for teachers. In implementing the changes from face to face to online teaching, it is essential that teachers are prepared with the knowledge, skills and qualifications to effectively assimilate into

and adapt to online technologies for teaching. Bates and Sangrà (2011) elaborates the resistance of teachers to embrace online learning due to the lack of fundamental understanding on pedagogies of online teaching. Teachers' Professional Development (PD) is fundamental at this matter to leverage their new roles and competencies in online teaching environments (Baran&Correia 2014). The way how teachers shape their understanding and actions are pretty much influenced by "teacher identity" and "teacher self" (White & Ding, 2009). When the teachers have determined shift in their role and competencies, these will be embraced by teachers along the way (Comas-Quinn, 2011) in their teaching practices. Morris (2002) highlighted some key competencies that online teachers should possess; technology skills, content knowledge, communicative and organizational skills, and enthusiasm for online teaching. Moreover, Black et al. (2009) suggested eight core competencies for online teachers to be successfully manage their online class. These includes; covering content/language specific knowledge, technology-based skills, online classroom management, effective communication with online students, organizing and structuring instructional content, strategies for accommodating different learning styles, finding and evaluating high-quality resources for online classes, and content-/language-based technology integration. These complexities of roles and competencies have made teachers struggle to adapt their teaching from face to face to online teaching.

Several studies highlighted online instructional practices and associated with Teachers' Professional Development have been conducted from various foci (Black, et. al., 2009; Corry et. al, 2014; DiPietro, 2010; Lin and Zheng, 2015). DiPietro (2010), for example, explored the perceptions of virtual school teachers for their instructional roles to gain insight into the instructional strategies on pedagogy, technology and content. The findings yielded the relationship between the participants' beliefs, goals, and practices related to virtual school teaching. The study also informed teachers' best- practices they had implemented in their virtual classes. During the program, teachers claimed that they had demonstrated some meaningful instructional practices such as classroom management strategies, pedagogical strategies (engaging students with content, making course meaningful for students, providing support, communication and community engagement) and wise technology adoption. A more recent study by Lin and Zheng (2015) investigated K-12 language teachers' teaching practices, their adjustments toward online teaching and professional development (PD). Results showed that online teachers generally used more non-content-related teaching practices than content- related teaching practices in online language courses. The study also sheds light on teachers' adjustment to the online environment, which impacts their management, social, and pedagogical roles. This study illuminates the need for teachers' professional development in the areas of online-course design and content-related technology integration.

This study reports on a survey of teachers' readiness to embrace instructional practices in online learning and elicit information on teachers' professional development aspects which need to be concerned for education institutions if they conducted online learning. Thus, two research questions were set out to guide the study:

1. What instructional practices did the teachers employ in online courses?
2. What kinds of professional development had the teachers received and expected to receive?

This study is particularly significant for reflection for teachers and education institutions during or before the implementation of online learning services to their students. It elaborates online teachers' instructional practices, and the professional development (PD) that they received and expected to receive for their future professional development.

## **METHOD**

### *Description of Context*

This study was conducted in one of a private university in Indonesia which implements online learning as part of their learning activities. The university has been developing it's e- learning

website in which they embed their learning management system (LMS). The LMS aims at facilitating students to understand learning materials, to learn and discuss the learning materials, and to administer assessment (e.g. quizzes, projects, midterm test, final tests, and other assignments).

The LMS platform comprises some basic features in online learning, that include module collections (they name it as “initiation” folder) which students can download anytime, discussion forum for students-teacher or student-student mode of interaction to discuss the learning materials. It also provides links and supplementary material as reference. Moreover, it features quiz/test section, and video conference features (was still on the work when data was collected). In this LMS, students are required to be active in discussion forums in order to answer teachers’ questions (threads), or respond to other students’ opinions/questions, and submit the assignments. Teachers is also required to be active in responding students’ questions or correct students misunderstanding during the learning process. Teachers is prohibited to respond with yes or no only but respond with elaboration to build sense of engagement and interactiveness. Thus, teachers and students are required to build mutual engagement in online learning environment.

### *Participants*

The researchers were intentionally selected teachers from English Literature department as this study is part of a big project on exploration of online instructional practices in language skill classes which accommodates teachers and students’ engagement in community of inquiry learning. Twenty teachers of English Literature department participated in the study by submitting the questionnaires online and 6 of them were randomly selected for interview to gain more elaborations and insights of their responses. The participants were mostly from the range of age 30-39 with 3-5 years of experience as teachers/lecturers and 1-2 years of experience in teaching online classes.

### *Data*

The data of this study was the result of questionnaires and the transcripts of the interview. The interview was used to gain more depth information of teachers’ perceptions on online instructional practices and the professional development they had received and expected to receive.

### *Instruments and Analysis*

In collecting the data, the researcher utilized two instruments, Questionnaire and Interview. The questionnaire was composed based on closed-ended questions which indicate five range of Likert Scale (Strongly Disagree = SD, Disagree = D, Neutral = N, Agree = A, Strongly Agree = SA). The questionnaire was formulated in Bahasa Indonesia to make ease of the respondent in responding the questions and to avoid misunderstanding. It composed of 52 total of statements and was divided into three parts.

The first part of questionnaire consists of demographic questions. The second part was designed in 35 statements in order to answer research question number one which was about instructional practice the language instructors use in online course. The instructional practice section is adapted from Lin and Zheng (2015, p. 300-301) study of instructional practices in K12 Virtual learning, which they modified from DiPietro (2010, p. 333-349) and contains eight instructional practices in two factors. They were content-related- teaching practices (guiding students’ knowledge, promoting individual learning, engaging students with content, meeting students’ needs, scaffolding) and non-content-related teaching practices (maintaining academic integrity, keeping the course a safe place, and communication effectively).

The third part was designed in 11 statements in order to answer research question number two which was about professional development that the respondents received and also they felt they need to have in the future. The questions in this section was adapted from Black et al. (2009, p. 4) which constitutes a total of eight categories; covering content/language specific knowledge,

technology-based skills, online classroom management, effective communication with online student, organizing and structuring instructional content, strategies for accommodating different learning styles, finding and evaluating high-quality resources for online classes and content-/language-based technology integration.

The interview was conducted in Bahasa Indonesia and employed individually on participants agreed time and place. It was developed to gain more depth information on teachers' attitudes towards online language teaching; their communication and interaction in online environments; and their professional development they had experienced and they expected to receive.

The questioner is analyzed by tallying the respondents' responses and then plotted to SPSS 21 for descriptive analysis of mean, frequency, percentage and standard deviations for each question. Results of the descriptive analysis are presented in charts and tables to see the distributed responses in each of the elements of instructional practices. Interpretation is made from this results. As for the interview, all of the respondents' speech was transcribed verbatim and analyzed using thematic analysis. The themes include classroom management, course preparation, material explanation, and communication. As for the professional development agenda, responses were classified to reflection on what teachers have received and expected to receive in regards with their instructional practice development.

## FINDING AND DISCUSSION

This section presents findings on investigation of online language teachers' instructional practices and the professional development (PD) that teachers received and expected to receive. The findings are presented and discussed following the research questions:

### *What instructional practices did the teachers employ in online courses?*

Research question number one was to investigate what instructional practices the teachers employ in online courses. The data was gathered through several statements in the questionnaire. There were 35 statements in questionnaire comprised of eight parts of teaching strategies. The summary of the result was calculated using Likert as follow:

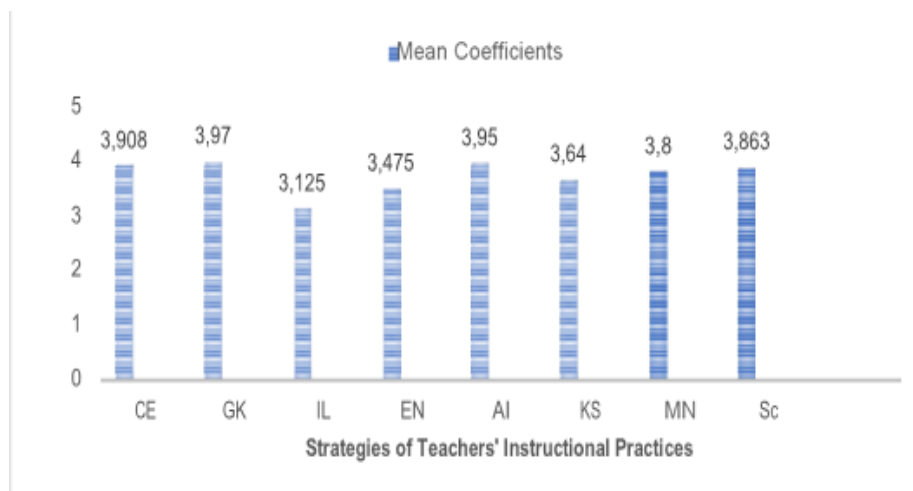


Chart 1. Teachers' Instructional Practices in Online Learning

From Chart 1, it can be seen that the horizontal line was the eight strategies of teacher's instructional practices in teaching online and the vertical line was the mean coefficient of the result from the questionnaire section 1. The top five highest percentage in teachers' teaching practice in online learning was Guiding Students' Knowledge construction/GK

(M = 3,97), Academic Integrity/AI (M = 3,95), Communicating Effectively/CE (M = 3,908), Scaffolding/Sc (3,863), Meeting the Students' Needs/MN (3,8). Keeping the course as a safe place/KS and engaging students with content/EN were moderate at 3,64 point and 3,475 point respectively.

As been presented in the findings, the highest mean coefficient in teacher's instructional practice was Guiding Students' Knowledge Construction (M = 3,97). The result of the highest statement in guiding students' knowledge construction was 70% of teachers provided opportunities for students to use the target language in authentic situations and facilitated students' ability to construct knowledge on how the target language is used.

The second highest mean coefficient in teacher's instructional practice was Academic Integrity (M = 3,95). The result of the highest statement associated with this category was 4,5 mean coefficients and linked with alignment of the course content with *Kerangka Kualifikasi Nasional Indonesia/KKNI* (Indonesian National Qualification Framework). It indicated that the teachers agreed to align their content to the national curriculum. The finding confirmed Di Pietro et. al (2008) that claimed aligning online program with the curriculum would provide students best opportunity for learning.

The third highest mean coefficient in teacher's instructional practice was Communicating Effectively (M = 3,908). It is also supported with the interview result that teachers communicate with understandable dictions. The result of the highest pool to this statement was 4,5 mean coefficients that the teachers self-monitor their communication practices to avoid miscommunication with students. This finding was linked to DiPietro (2010) who argue that to compensate for the lack of immediate non-verbal cues in online courses, teachers used clear communication including concise writing to express care and concern as well as to demonstrate their interest in building relationship with students.

[So, I have to know which sentences sound ambiguous when they are used. I have to be more detail in writing, particularly instruction, it must be clear]  
(Lecturer 6)

The lowest mean coefficient in teacher's teaching practice was Individual Learning (M = 3,125). The result of the lowest statements in this section was 2,6 mean coefficients. It showed that the teachers did not provide individualized instruction and the teachers did not use different practices based on student needs. Such tailored-individual learning was a massive work for teachers as it will give additional workload pressure for teachers (Swan, 2017) despite the prevailing claim that technology can enhance learning through the enhancement of learning experience (Kirkwood & Price, 2014). The obstacles of teachers to accommodate students' individual in online learning is illuminating Orlando and Attard (2015) claim that "teaching with technology is not a one size fits all approach as it depends on the types of technology in use at the time and also the curriculum content being taught" (p. 119).

### ***What kinds of professional development had the teachers received and expected to receive?***

Research question number two was to understand kinds of professional development that the teachers received, and how these differ from what they expected to receive. To answer this research question, the data was obtained through two questions in

questionnaire and also teachers' interview transcripts. In the first question on "Training and Support Section," the respondents were asked for rating to ten kinds of support and training in online learning that they had received. Below is the final result of the responses calculated using Likert:

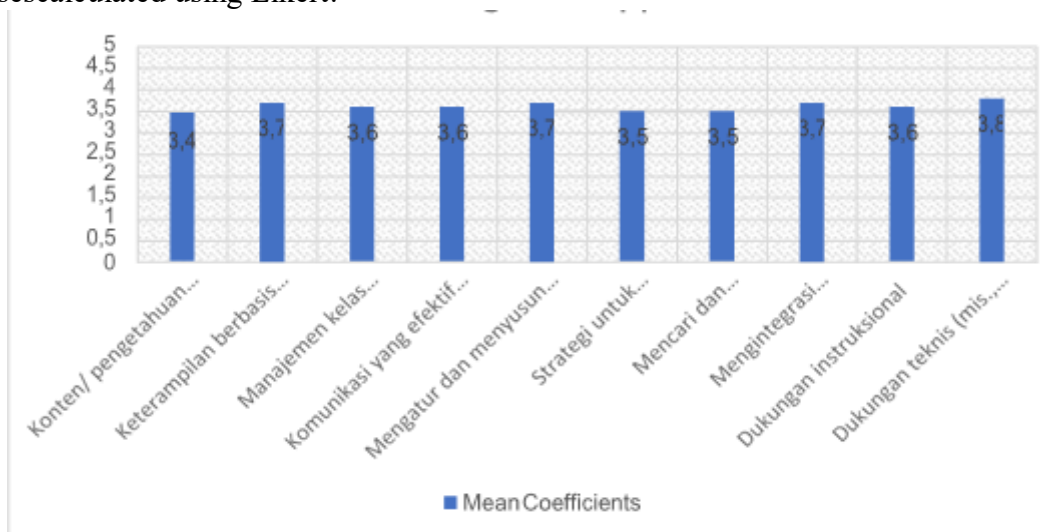


Chart 2. Supports and Trainings Received

The horizontal line in Chart 2 was the supports and trainings that the teachers received and the vertical line was the mean of the result from the questionnaire. The supports and trainings asked in the questionnaire include professional development on: content-language specific knowledge, technology-based skills, online classroom management, effective communication with online students, organizing and structuring instructional and content, accommodating different learning styles, finding and evaluating quality resources for my online classes, content-/language-based technology integration, instructional support, and technical support. The top highest mean from the chart above was professional development on "Training and Support on Technical Issue" (M = 3,8). There were 45% teachers rated technical support that they received was on average, 30% teachers rated on above average and 20% teachers rated excellent on technical support that they had received. This result was also confirmed with the interview result that many teachers said the university has provided good technical support. Below are examples of teachers' responses on that question from the interview transcript.

[We have been updating the technology for several times. In the beginning of online learning, the program was still simple. But now, it is getting improved. Yeah, every time there was an update, the university conducted training on it] (Lecturer 4)

[The online learning has been updated several times. In the beginning, we experienced some troubles. For example, the discussion forum was constrained with time and number of characters typed, and the server capacity. So when we tried to log into the server at almost at the same time, we couldn't make it. We couldn't access some important contents despite we need them badly. If we could access them, the time was also restricted. But today, thank God everything is fine] (Lecturer 5)

The second top highest mean was at 3,7 point of mean coefficient occupied by three measures, namely professional development on 'Training and support on technology-based skills', 'Organizing and structuring instructional and content', and 'Content-/language-based technology integration'. Evidence on these matters were recounted in the

interview. For example, support on technology-based skills were elicited by respondents as follows:

[In terms of online learning, at the beginning we didn't know at all about it. After receiving training from IT personnel, gradually we became informed about it and able to develop our contents independently] (Lecturer 3)

[Regularly, there were trainings on online learning every semester, especially for the new lecturers. If there was no formal session on this training, sometimes we inserted session for online learning during lecturers' meeting at the beginning of the semester. So every lecturer must have received such a training] (Lecturer 4)

Evidence on 'organizing and structuring instructional and content' was also expressed by some lecturers. They claimed that during the training they were taught how to make contents and conduct the instruction (teaching) with those contents using clear instructional language which impose students' critical thinking. This can be seen from the following extract.

[Yes, we received a training on how to use instructional words to write instructions. We are required to use operational words which entail higher order thinking, like the ones in Bloom Taxonomy. It is hoped that students will engage in critical thinking and not just confirm with *yes* and *good*] (Lecturer 6)

The third rank were at 3,6 point of mean coefficient on 'Types of Professional Development in online classroom management', 'effective communication with online students', and 'instructional support'. Meanwhile, the three lowest Professional Development received were under 3,6 point of mean coefficient. Those were PD in 'finding and evaluating quality resources for online classes' (M = 3,5), PD in 'strategies for accommodating different learning styles' (M = 3,5) and PD in 'content/language-specific knowledge' (M 3,4)

In the second question of Trainings and Supports Section in the questionnaire, the respondents were asked for choosing three types of support and training in online learning that they expected to receive. According to the teachers' survey responses in Chart.3, the top three most-needed on additional training were 1) Finding high quality resources (20%), 2) Strategies for accommodating different learning styles (18,3%), 3) and Language-based technology integration (16,7%).

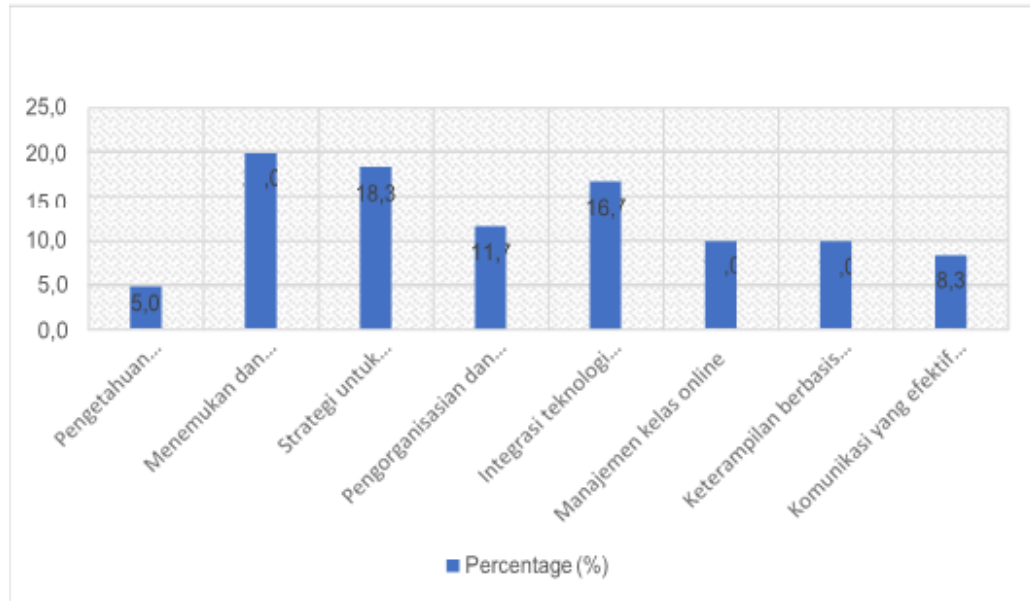


Chart 3. Professional Development Needed

Meanwhile, the three lowest mean coefficients of training and support were PD on strategies for accommodating learning styles ( $M = 3,5$ ), PD on finding and evaluating quality resources for their online classes ( $M = 3,5$ ) and PD on content/specific knowledge ( $M = 3,4$ ). This study revealed that accommodating different learning styles and finding and evaluating high-quality resources were the two areas in which the teachers received the least Professional Development, but wished to receive more.

The findings also highlighted that PD on content/specific knowledge ( $M = 3,4$ ) was the lowest. Nevertheless, the teachers did not state that they have problem in creating contents for their online classes. The finding was in line with the study from Dawley et al. (2010) that the teachers received little PD in content knowledge, and that such PD was also very low on the list of what they wished to receive. Online instructors are likely to have extensive face-to-face teaching experience and therefore may feel that their content knowledge is already sufficient. Teachers enunciated that the university also conducted training on language-based technology integration. For example, they received training on instructional design for online learning by which they were trained to give instruction in online learning – how to use verbs that stimulates higher level of thinking. The findings also showed that although the teachers received PD in language-based technology integration, they still wished to receive more.

[we also received a training on how to use instructional verbs which reflect higher order thinking – like the one in Bloom Taxonomy, so that students will not only respond but also use their critical thinking (when responding). We also learned how to respond students' comments, so we will not only confirm 'ok' and 'good' to students' comments] (lecturer 6)

The finding on technology integration, however, was contradictive to Mishra and Koehler (2006) which claimed “training teachers to use specific software packages not only makes their knowledge too specific to be applied broadly, but it also becomes quickly outdated (p. 1032)”. In the interview session, most of teachers said they received regular training and always updated with the new version or features in the platform.

Some of them also said that once they were familiar with the platform, they could explore and develop the content without supervision from IT personnel, but still maintained generic rules from the university.

## CONCLUSION

Institutions of higher education have increasingly incorporated online education. Subsequently, the number of students enrolled in distanced/online education programs is rapidly increasing in colleges and universities. In response to these changes in enrollment demands, many higher education institutions have been working on strategic plans to implement online education. At the same time, challenges related to the difficulty of teaching and learning online, technologies available to support online instruction, and the support needed for high-quality instructors are becoming key measures in shaping accountable online education. Findings from this study highlighted that technology support and teachers' readiness in adopting the technology are very crucial. More importantly, teachers must be able to conduct instructions effectively by keeping good work on content selection and delivery. Contents should be well structured to scaffold students' knowledge on the subjects. Effective communication in delivering the content and building students-teachers' rapport is also off importance. The fact that accommodating students' differences was the main obstacles for the teachers to cope with should illuminate a trigger for exploration of teachers' best practice in conducting online instruction and examination of further study.

Finally, teachers are the front liners in educational system who hold control in education services. Teachers' conceptions on accountable online instruction influence what teachers do in their teaching practices. It is, therefore, teacher Professional Development (PD) in conducting online learning is necessary. PD may be a trigger toward improving an area needs to be improved for potential benefits of online instructional practices. Finding from this study suggests although teachers have sufficient amount of experience in teaching, PD on content-related issue is needed in Professional development plans. This might include integration content in subject matter and pedagogical content knowledge to attune students with teaching presence and cognitive presence in online education.

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