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# The Effect of Hybrid Instruction on Students' Reading Comprehension in SMA 4 Kendari

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### ABSTRACT

Hybrid instruction is a learning model which combines face-to-face mode and online learning. The use of this method is highly compatible with the teaching of English in Indonesia. This study was set out to investigate the impact of hybrid instruction on students' reading ability. Results of data analysis showed that there was a significant difference between the gain score of students in the experimental class and that of their cohort in the control class. In addition, in regard to the students' motivation to learn using the hybrid instruction, it appeared that the students were highly motivated not only extrinsically but also intrinsically, which meant that both main elements of motivational types according to Self-determination Theory had been addressed.

### I. INTRODUCTION

The using of internet in teaching world has become an "explosion" in teaching world. It changes the way of language learning. Prensky (2001) states that "we are living in a world where our students are all native speakers of the digital language of computers, video games and the Internet". They are born with the emergence of technology as a tool of learning. Whether teachers like it or not, their students will keep using computers, iPhones, or iPads during classes because they enjoy doing learning activities that involve technology, even homework. In accordance with this recent change in students' profiles and the various online tools that technological advances provide, many language-teaching programs have begun to include course

that integrate online technology in order to engage students more effectively in the learning process.

Internet as a tool of technology, produce online learning and creating some LMSs which help the learner and teacher to elaborate the teaching and learning process. The LMS has potentials for generating closed rooms where students can collaborate without access to any other than the teacher and the selected number of students. These closed rooms or spaces are suitable for publishing portfolios, giving and receiving feedback from peers and for discussions.

In online learning, there are many LMS provided by internet to be applied. Some of well-known LMS in recent years are Edmodo, Blackboard, Schoology, Litmos LMS, and Moodle. The last name mentioned is considered the most appropriate LMS in University and School because the design of the platform. One of the fundamental reasons for this adoption is that there is little difference in function and characteristics between open source and commercial LMSs. Under this circumstance, higher education administrations institutes prefer open source LMSs because of cost and effectiveness (Machado & Thompson, 2005).

In addition, the integration of online learning has several weaknesses in it. It neglects the position of the teacher because it erases the present of the teacher like it has in face to face class. The most noticeable condemnation of e-Learning is the complete absence of vital personal interactions, not only between learners and instructors, but also among colleague learners (Young, 1997). It draws hybrid course come to the surface and makes hybrid courses appear to become one of the sophisticated method in teaching. In this thesis, the writer prefer to choose the term "hybrid instruction" than "hybrid course" so from this point forward the term would be placed as hybrid instruction.

Hybrid course are designed using the conveniences of complete online courses without the total loss of face-to-face interaction among students and faculty (Young, 2002). He also states that, "Hybrid courses and hybrid degree programs promise the best of both worlds, offering some of the convenience of all-online courses without the complete loss of face-to-face contact." It embraces the solution to the both of student and teacher factor in the classroom and the need of the technology in online courses. It takes advantage of all online courses provided and what face to face classroom provided. (Brown, 2001) stated that, "a course where the students can take advantage of all technical opportunities offered by an online environment, yet at the same time have to face-to-face contact with the professor and social involvement with classmates."

Hybrid instruction have been reported to be effective in foreign language classes; however, studies on hybrid instruction that target on PBL classroom for students reading comprehension not much been conducted especially in Indonesia. In addition, teachers realize the students always engaged with their gadgets but they somehow don't use the gadgets as a tool of learning especially in reading class. They unaware the benefits of hybrid instruction by maximize the potential which is the student have.

# 2. LITERATURE REVIEW

This section comprises four parts. The first part is Hybrid Instruction, the following discussion is Learning Management System, the next discussion is Instructional Design, and the last discussion is Media Theory.

# 2.1. Hybrid Instruction

Hybrid instruction or occasionally called blended learning emergence and apparently emerge as the most suitable learning environment for EFL learners. Hybrid instruction combined the best of the both from online and face to face classroom. However, Hybrid instruction can only combine the strength of both modes if, and only if, the learning activities appropriately match the mode of delivery (Alberth et al., 2015).

The hybrid instruction model encompasses a course in higher education that utilizes both online and face-to-face platforms for instruction. These courses incorporate the use of technology within the classroom setting and beyond, as in online lecture (Olapiriyakul & Scher, 2006). The hybrid course model is also not contained in the space and time constraints of the traditional course setting, which in the physical campus classroom (Dziuban, Moskal, & Hartman, 2005).

Hybrid instruction share three key distinguishing features: (a) online learning activities are used to complement in-person activities; (b) time in the classroom is reduced, but not eliminated; and (c) online and in-person instructional elements of the courses are designed to interact and benefit from the strengths of each (Center, 2014). Hybrid instruction potentially the more appropriate learning to be applied in Indonesia, it is the reason why the researcher choose hybrid than any other learning mode.

# 2.2. Language Management Systems (LMSs)

LMS is the infrastructure that delivers and manages instructional content, identifies and assesses individual and organizational learning or training goals, tracks the progress towards meeting those goals, and collects and presents data for supervising the learning process of organization as a whole (Szabo & Flesher, 2002). LMS delivers content but also handles registering for courses, course administration, skills gap analysis, tracking, and reporting (Gilhooly, 2001). So, LMS provides the need of the students and provide space for the teacher to fill the content.

LMS can be categorized into two types; open source LMS and commercial LMS. Both type of LMS should conducted and provided the learners need. Open source LMS gives much advantage for high school both for the learners and for the teacher. According to Syamsuddin and Alimin (2014), there are 3 reasons why open source LMS could be the first option in LMS: (1) Open source LMS provide effective solutions to the customer satisfaction problems that permeate the LMS market; (2) It also offers credible substitutes to commercial LMS; and (3) In a market where innovation is at high value, Open Source LMS can provide greater value than its commercial counterparts.

LMS as explained above is suitable in EFL atmosphere especially open source LMS. In this research, the researcher choose Moodle as LMS to be applied in the classroom.

### 2.3. Instructional Design

Instructional design emerges as a solution over the ubiquitous of internet which create a dispute in learning process. The instructional design provides the instruction for the teacher in teaching with technology especially in hybrid instruction. As stated by Martin (2011), instructional design can be defined as the science of creating detailed specifications for the design, development, evaluation, and maintenance of instructional material that facilitates learning and performance. It arranges the delivering of materials especially LMS in hybrid instruction.

Instructional design helps in creating and developing effective instructional materials within a supportive environment. In the applying of instructional design it has to follow the terms which has been arranged before. There are several instructional designs which may be applied in hybrid instructional group. As explained by İŞMAN, ÇAĞLAR, DABAJ, and ERSÖZLÜ (2005) "One model can be used for an entire course of instruction or elements from multiple models can be combined. There are total 13 instructional design models. Each of them focuses on different assumptions of instructional design".

In selecting the appropriate instructional design, ADDIE model emerges as the most suitable instructional design for teaching and learning process in the school. ADDIE model is an approach that helps instructional designers, any content's developer, or even teachers to create an efficient, effective teaching design by applying the processes of the ADDIE model on any instructional product. In fact, the elements made by following the ADDIE model can be used in any environment as online or face-to-face (Aldoobie, 2015). ADDIE stands for Analysis, Design, Development, Implementation, and Evaluation. These are steps which related to each other and have to be followed in a sequence.



Figure 1 The Design of ADDIE Model

The first phase of ADDIE model is analysis phase. In the analysis phase, the teacher or developer has to analyze the learners need and analyze the goals of learning process. In the next phase of ADDIE model is design phase. In this phase, the teacher creates and designs the learning process which will be conducted in the classroom. The third phase of ADDIE model is development phase. In this phase the teacher plans how to integrate the technology and plan for additional backup plan. The next phase of ADDIE model is implementation phase. In this phase, the teacher executes all the design and the plan. The last phase of ADDIE model is evaluation phase. In this phase, the teacher evaluates the result of each phase.

### 2.4. Media Theory

Media theory explains how media affect and influence in communication. It is about how media applied in learning processes and affect the students learning process, in term of benefit or disadvantage. There are two mayor cruxes of media theory related to the integrating of hybrid instruction in learning process; media richness theory and media synchronicity theory.

### 2.4.1. Media Richness Theory

Media richness theory was developed by Daft, Lengel, & Trevino is the information needs for performing a task should be matched with the medium's richness or "capacity to facilitate shared meaning" (Daft, Lengel, & Trevino, 1987). In addition, richness defined as the "ability of information to change understanding within a time interval (Daft & Lengel, 1986). Media richness theory postulates that in choosing the media it should be match with the task which would be given to the students. Media richness theory assumes that each medium has a different degree of richness in that, there are media which are [+rich] and there also media which are [-rich] (Alberth et al., 2015).

There are two mayors factor that influence information processing which is uncertainty and equivocality. Uncertainty is the condition of obscured information by the lack of information. Daft and Lengel (1986) defined uncertainty as "the absence of answers to explicit questions", the communication between people are obscured because the lack of information. High uncertainty needs [-rich media] to reduce the uncertainty. However, equivocality is the ambiguity of the information which becomes the barrier of communication.

In language learning, media richness theory provides which media should be used in the class. Face to face, telephone, written (addressed documents), and unaddressed documents are the media which proposed by Daft, Lengel, and Trevino in 1987. In sequence, face to face is the most [+rich] media to the unaddressed documents. Its' ability to convey message in various ways considered face to face as the best to cover equivocality and written text in (in this research text in Moodle) as the best to reduce uncertainty.

# 2.4.2. Media Synchronicity Theory

Media Synchronicity Theory is an extension of Media Richness Theory (Alberth et al., 2015). It focuses on the ability of media to support synchronicity, a shared pattern of coordinated behavior among individuals as they work together (Dennis, Valacich, & Fuller, 2008). Communication process and the capability of media is the source of the effectiveness in communication.

Based on the theory of media synchronicity there are two major types of communication namely conveyance and convergence. John (2014) postulates that conveyance is the distribution of as much relevant information as possible to aid understanding. While, convergence seeks understanding each individual's interpretation of information – not the information itself. The differences between conveyance and convergence processes indicate that they have different

requirements for information transmission, information processing, and, consequently, synchronicity (Dennis et al., 2008).

Media synchronicity theory based on the work of Dennis et al., (2008) states that there are five media capabilities in communication process; Immediacy of Feedback, Symbol of Variety, Parallelism, Rehearsability, and Reprocessability (1) Immediacy of feedback is the degree to which the medium supports rapid response to the communications received (2) Symbol variety is the way or ways through which the medium can communicate information (3) Parallelism is the ability of the medium to support multiple conversations simultaneously (4) Rehearsability is the extent to which the medium enables the senders to fine-tune their messages before sending them (5) Reprocessability is the extent to which a message can be reexamined within the context of the communication event (John, 2014).

# **3. METHODS**

In this section, research method will be discussed. This includes research question, subject of the study, instrumentation, research procedure, data collection, and data analysis.

# 3.1. Research Question

The question guiding this study were: (1) To what extent does hybrid instruction affect the students' reading comprehension?; and (2) How are the students' motivations in reading comprehension by using hybrid instruction?

# 3.2. Subjects

27 students of XI MIA 1 were chosen to be taught under hybrid instruction in SMA 4 Kendari who enrolled in academic year 2016/2017. However, 30 students of XI MIA 2 were chosen to be taught under task based learning. These participants were recruited using purposive sampling technique.

# 3.3. Instrumentation

A brief questionnaire was developed to capture student motivations in hybrid instruction classroom. In relation with learning activities the teacher gave some activities such teaching, group discussion, quizzes, assignment submission, and consultation with the teacher. The using of questionnaire is expected to provide a more comprehensive picture of student motivation in learning with hybrid instruction.

# 3.4. Procedure

Participants were divided into two cohorts. The first cohort attended hybrid instructional learning while the second group attended task based learning.

In hybrid instructional group the teacher used Moodle as LMs and the teacher help the students to familiarize with it for those who felt needed training to properly function the Moodle.

# 3.4.1. Data Collection

The data in this present study derived from two different instruments: reading assignment and questionnaire. Reading assignment was given to identify how hybrid instruction affect the students reading comprehension in experimental group and while questionnaire was given to identify student motivation based on Self Determination Theory.

### 3.4.2. Data Analysis

Data obtained from the instruments were analyzed by using descriptive statistics and inferential statistics.

The researcher was used descriptive statistic in calculating and determining the maximum and minimum score, range, mean, and standard deviation. While, the inferential statistic was used to test the hypothesis of the research and it used paired sample t-test and independent sample t-test.

### 4. FINDINGS AND DISCUSSION

#### 4.1. Findings

As stated earlier, the main objective of the present study was to examine students' reading comprehension and to identify the students' motivation in hybrid instructional group. Based on the result of data analysis, it can be seen that hybrid instruction in experimental group gives a significant effect on students' reading comprehension. However, the students' motivation based on Self Determination Theory in hybrid instructional group categorized in 8 different construct, namely: amotivation, external regulation, IM-knowledge, IM-accomplishment, and IM-stimulation.

Furthermore, the differences of students' result in control group and experimental group can be seen in the tables below.

Students' Score	Post-Test	Pre-Test	Gain Score
Mean	74,23	67,25	6,98
Std. Deviation	7,27	5,35	1,92
Minimum	62,5	55	7,5
Maximum	87,5	77,5	10

Table 1 Descriptive Analysis of Students' Pre-Test and Post Test in Task Based Group

The table above shows that there was a difference of the score after students was taught by the teacher. As comparison , the mean score in pre-test was 67,25 while in post-test was 74,23, in which the gain score was 6,98; the std. deviation in post test was 7,27 and in pre test was 5,35, in which the gain score was 1,92; Then, the maximum score in pre-test 77,5, while in post-test 87,5 with the gain score was 10; and the minimum score in pre-test was 55, while in post-test was 62,5, in which the gain score of minimum score -was 7,5. The differences on the gain score both in pre and post-test indicates that there was a change on students' reading performance before and after been taught.

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Students' Score	Post-Test	Pre-Test	Gain Score
Mean	76,94	63,52	13,42
Std. Deviation	7,05	6,73	0,32
Minimum	62,5	50	12,5
Maximum	90	75	15

Table 2 The Comparison of Students' Pre-Test and Post-Test Score of Students'

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<b>Reading Comprehension</b>	in Tr	eatment	Group
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The table above shows that there was a significant different score after students was taught through hybrid instruction which used Moodle as LMS. As a comparison, the mean score in pre-test was 63,52 while in post-test was 76,94, in which the gain score was 13,42; Then, the maximum score in pre-test was 75 while in post-test was 90, in which the gain score was 15. The minimum score in pre-test was 50 and in post-test was 62,5 so we can get the gain score 12,5. The differences of the students' gain score both in pre-test and post-test indicates that there was a different impact on students' reading comprehension before and after the treatment. It was clear that there was an improvement on students reading comprehension after being given treatment under Hybrid Instruction with using Moodle as LMS.

Table 3 The Result of Independent Sample T-Test from Group Statistics

Group Statistics							
class		Ν	Mean	Std. Deviation	Std. Error Mean		
score	control	30	,2200	,15434	,02818		
	experiment	27	,3800	,09911	,01907		

The result of Independent t-test indicates that the data was not equal because there was differences mean score between control group and treatment group. The result of independent t-test draws the conclusion that there was a significant difference between control class and treatment class, where the p-value was lower than standard (0,000 < 0,05).

# 4.2. Discussion

Based on participants' responses to both questionnaires and reading assignment, it is clear that creating hybrid instructional group which is mixed students activity in online and offline learning may give a better result in their study. Understanding the effectiveness of each learning activity relative to the mode of delivery is critical if we are to develop robust hybrid instruction. Furthermore, it is worth emphasizing here that the choice of online or face-to-face does not depend exclusively on the types of learning activities alone.

Referring the mean score comparison of this study, it is evidently shows that the students got the higher score on post-test than the pre-test for both control and experimental class. Therefore, it might be assumed that Hybrid Instruction was more effective compared to conventional reading strategy for teaching reading.

Finally, it is worth re-stating that, strictly speaking, it is not a combination of face-toface and online that makes hybrid instruction 'the best of both worlds' as commonly implied in the literature-it is an appropriate combination that does. In fact, a mismatch between mode of delivery and the learning activities could potentially turn hybrid instruction to the worst of both worlds. Throughout this paper, we have argued that robust hybrid instruction can only be developed with sound understanding of the strengths and weaknesses of both online and face-to-face formats (Alberth et al., 2015).

### **5. CONCLUSION**

Based on the result of data analysis, the researcher comes up with conclusion that there is significant difference of students' reading comprehension between the students who learn English based on Hybrid Instruction and the students' who learn in conventional classroom at grade 11 of SMAN 4 Kendari who were registered in academic year of 2016/2017.

The result of N-Gain comparison between the experimental and control class was (sig. alpha, 0.000 < 0.05). It indicates that the score of reading comprehension were significantly different. It means that H<sub>0</sub> was rejected and H<sub>1</sub> was accepted. Furthermore, the result of questionnaire reveals that students' responded positively on the Hybrid Instruction during and after the treatment rather than students who attended conventional strategy.

As described in the previous part of the chapters, the students were found to have a good response to the administered questionnaire, in this case Motivation questionaire, and so it determines the students' motivation in terms of the ease of use of Hybrid Instruction to assist reading with and activate their English skill, particularly in reading. Based on the descriptions, most of the students stated that the use of Hybrid Instruction was appropriate to assist EFL reading.

Furthermore, the students agreed that Hybrid Instruction provides them an enjoyable atmosphere of learning so they did not feel under a pressure because as we have already realized that reading was the most difficult skill for young learner to achieve. They would like to have or to experience such kind of technique, Hybrid Instruction in the future learning, they stated like that. And at least, the questionnaire found all of these responds as that most of these students showed positive and high motivation (intrinsic and extrinsic motivation) towards the employment of using Hybrid Instruction of reading instruction. Of a fundamental importance, the motivation questionaire that provided by the researcher, was administered to the students. It functioned as the reinforcment of the score data which was obviously we hope to be related with their motivation, in the end.

To sum up, the findings have answered the research questions. Students become well-motivated on the using of Hybrid Instruction as they find it very interesting, fun and knwoledgable. It also helps them to be outstanding with their reading especially for hortatory exposition, which requires critical thinking related to the issues of the given topics of reading. A few of them feel motivated because they have several factors, those are external factors, as they can get high mark on reading, they want to get a good attention from their teacher or friends, they do not want to lose their collage. They do not want to get punishment, and so on. Overall, this present study confirmed that students are better reading based on Hybrid Instruction compared with the conventional strategy.

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