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NURNIA¹, KAMALUDDIN², MILWAN³, HERMAN⁴

^{1, 2, 3, 4} Universitas Halu Oleo, Kendari, 93232, Southeast Sulawesi, Indonesia

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DEVELOPING STUDENTS' WRITING PROJECT BY MEANS OF A FLIPPED CLASSROOM

NURNIA^{1*}, KAMALUDDIN², MILWAN³, HERMAN⁴

^{1, 2, 3, 4} Universitas Halu Oleo, Kendari, 93232, Southeast Sulawesi, Indonesia

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Abstract. The use of flipped classroom as a new teaching mode has proliferated nowadays. This paper is aimed to discuss how to develop students ability to work on a writing project by means of a flipped classroom. The discussion addresses several issues related to flipped classroom, project based-learning, digital technology use and developing writing project. By integrating project in a flipped classroom which harnesses digital technologies such as the use of video and internet, it is expected that learners could be well-equipped with how to do a writing project. The inclusion of project issue has been to show that teaching should promote less teaching and more learning.

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INTRODUCTION

The use of flipped classroom has proliferated nowadays. As a new paradigm shift which is proposed to flip or reverse a class from the way traditional teaching does, the flipped classroom is evidently applicable in today's era and affects learning enhancement in many ways. Even, it is assumed that it could be considered as future educational standard (Overmyer, 2007). This flipped model is intended to leverage learning in classroom by which case teachers spend more time to directly interact with students and, instead, teacher's lectures are accessed outside of classroom through internet technology (Bergmann & Sams, 2012). Accordingly, technology constitutes one of the three interconnections which can enhance learning, in addition to pedagogy and content knowledge (Niess et al., 2009). The use of digital technologies has also widely supported the enhancement of language skills through Project-Based Learning. Students' working on a project to write letters, short stories or report, among the many activities teachers do to extend students capacity to learn, harnesses technology in order that they can search for resources or to publish their works online. Despite their broader use in many parts of the world, project-based learning and the flipped classroom are still considered novel ideas for teachers particularly those in developing countries. Both are not the sort of learning ways that teachers experienced in past time as students. Furthermore, the use of technology is not something that all teachers are familiar with and would like to exploit today to benefit from. Being aware of such advantages, teachers, however, would inevitably reconsider if they are to benefit with collection of innovative ideas to achieve

certain teaching goals. In this respect, it is worth discussing the integration of project development in a flipped classroom by harnessing the use of digital technologies.

METHODOLOGY

Flipped Classroom

A flipped classroom, also called inverted classroom, is a class where classroom session and homework session are flipped. In other words, all those exercises mostly done at home as homework are worked out during class time through group discussion and pair works with the help of teachers, friends or experts. Meanwhile, classroom lecture which is traditionally implemented by teachers during class time is recorded and provided in video format and given as homework including some reading assignments and other lecturing types such as articles, books, power point, or handout. The idea is that students who read or learn materials before class would be more prepared and able to involve in a discussion.

Flipped classroom constitutes a model of blended learning which harnesses technologies such as video and internet as media used for providing lesson instruction to be watched by students. As a 'blended learning' type, this model has taken benefits from both online and face-to-face classroom. Students who missed class time could be advantaged as well by searching video over the internet (Bergmann & Sams, 2012) and might address more queries online to teachers and other friends through asynchronous discussion boards or real-time chat in social media. The flipped classroom is quite appealing to use

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^{*}Corresponding Author: Nurnia

[†]Email: nurnia_68@yahoo.com

for numerous colleges and university instructors providing the proliferation of Internet Technology, virtual communications, and learning management systems (Berrett, 2012; Supratman, 2015).

In a flipped classroom, the whole classroom/homework paradigm is "flipped". It is aimed to exchange low with high order thinking skills. While the first is done individually outside of classtime, the latter is done with the assistance of teachers, other students or experts during classroom session. This has been for higher order thinking skills that require more attention and could be well-developed with the help of others. Thus, in class, students would receive more assistance to improve their knowledge and higher order thinking skills on how to work on various tasks. Bloom (1978) contends to say:

I find great emphasis on problem solving, applications of principles, analytical skills, and creativity. Such higher mental processes are emphasized because this type of learning enables the individual to relate his or her learning to the many problems he or she encounters in day-to-day living. These abilities are stressed because they are retained and utilized long after the individual has forgotten the detailed specifics of the subject matter taught in the schools. These abilities are regarded as one set of essential characteristics needed to continue learning and to cope with a rapidly changing world (Bloom, 1978).

Brame (2013) affirms that flipped classroom applies Bloom's Taxonomy as revised by Anderson, Krathwohl and Bloom, (2001) where students apply lower order thinking skills (remembering and comprehending) outside the class and give more emphasis on higher order thinking skills (applying, analyzing, evaluating, and creating) during class time.

Flipped classroom is well-rooted from student-centered learning as of Piaget (1968) and Vygotsky (1978). Theory underpinning this concept is constructivism and collaborative learning as Piaget's (1968) 'cognitive conflict' and Vygotsky's (1978) 'zone of proximal development'. Topping and Ehly (1998) scrutinize that both theories could be accommodated through learning with peers or adults. Vygotsky (1978) asserts that when students are situated in the ZPD, by providing them with appropriate assistance or scaffolding, for a certain task, they will be well-supported to complete the task. The scaffolding could be removed when students have been able to work on the task individually. Vygotsky (1978) also maintains that interactions with peers entail an effective way to develop learning strategies and skills. Thus, as he suggests further, students should be provided with cooperative learning-based exercises where low capable ones can develop their ability through peers' assistance in ZPD (McLeod, 2010). Coherently, flipped classroom philosophy and the online video sustain the constructivism theory which puts forward cooperative works among students during class time to do inquiry-based learning (Brandt, 1997). Thus, the flipped model should facilitate students to construct new knowledge through collaborative, interactive and creative activities (Kim & Bonk, 2006).

Project-Based Learning

Project-Based Learning (PBL) is mostly defined as "an instructional approach that contextualizes learning by presenting learners with problems to solve or products to develop" (Moss & Van Duzer, 1998). It is considered as one way to get rid of the students from discontented condition into something as fun by playing as teachers or observers or creators without necessarily being aware that they are learning; whereas having to learn something could occasionally cause students' boredom. By producing some works showcasing their ability and skills, they could reinforce their learning. With projects, students demonstrate their abilities in planning, managing, and completing projects through their knowledge on contents and language skills (Kloppenborg & Baucus, 2004).

As of the flipped classroom, the project-based learning approach is also developed from a Vygotsky's constructivism learning theory which sees learners as active makers of meanings as they construct their own knowledge through learning environment. Given his theory of Zone of Proximal Development (Vygotsky, 1978), it is believed that the students would learn better when they are working in collaboration with adults; however, it is not the adults teaching them how to perform the task but the process of engagement with the adults which facilitates them in developing their thinking or performance. In the ZPD, the students are categorized as 'can do with help' in constructing meaning (Atherton, 2011). By this respect, the involvement of teachers, other students or community can raise much more active involvement on the part of students being in a joint enterprise in creating (constructing) new meanings and thus, foster more learning.

Team-up with communities is emphasized in PBL to achieve a certain goal. Gaer (1998) gives some examples such as students can work with media specialist to analyze events, and learners of English in a family literacy program can team up with a class at the middle school to develop a joint project. In this respect, the students can convene to discuss, debate and exchange with a learning community. Boss and Krauss (2007) maintain that the students can have changing experience by engaging in real-world projects.

Having these examples, PBL is a strategy which turns traditional classrooms upside down. PBL differs from traditional instruction since they have contradictory learning emphasis; while the first emphasizes learning through student-centered, interdisciplinary, and integrated activities in real world situa-



tions (Solomon, 2003; Willie, 2001), the latter is vice verse. The PBL suggests a shift in the part of teacher's and students' roles. While teachers are not the content expert any longer, the students' role has also changed from recipients of knowledge transfer into trailing their own question to create their own meaning. In the traditional instruction, teachers master the tasks but in PBL, they facilitate the students to do tasks. Kavaliauskiene (2003) suggests two activities on this merit such as checking and correcting homework and student-produced tests. By this respect, students function as teachers, whereas teachers as coaches. By playing as teachers, students are fostered to be autonomous learners as well. The changing in roles, as well as parent and community involvement, will increase students participation.

Numerious studies have been conducted to prove the effect of project-based learning on learning enhancement. Stoller (1997) found that integrating language skills authentically and processing information from different sources can increase language skills, and this portrays real-life tasks. Accordingly, Willie (2001) attests that students could integrate language skills and content knowledge through project completion in a PBL classroom. Similarly, Srikrai (2008) and Simpson (2011) observe that activities done through project making can increase students language skills.

Using Digital Technologies

Modern technology and online learning which are recently on a rapid raise offer a great opportunity for teachers to design courses that engage students through the use of technology. Dean (2010) scrutinizes that the advent of digital technologies such as internet and streaming-video enables teachers to provide multi-media of educational resources from which the students can severely learn. Peterson and Horn (2016) assert that computer is powerful to enhance learning when it is used properly as it can support students to learn more effectively with the presence of teachers to assist and supplement. This implies that the students can be fostered to engage actively in the learning process through the appropriate use of technology. Revere and Koach (2011) preserve that technology has many benefits such as decreasing attrition, improving learning outcomes, and increasing students' satisfaction.

A point of contention regarding technology use in educational institutions both in blended-learning environments and for project-based learning - has been for the length of time students should spend learning on a computer. Peterson and Horn (2016) observe from a study they conducted that the share of students should be spent receiving instruction independently through or on a computer about 30% of instructional time. This shows

that an increasing number of people seem to concur that digital learning is becoming more important to be implemented in classrooms nowadays. Thus, the chants of "teachers not technology" and "laptops for layoffs" appear to be past relics (Peterson & Horn, 2016).

Project-based learning and flipped classroom identically harness the use of modern technologies. Boss and Krauss (2007) assert that project-based learning which is harnessed by modern technologies constitutes a strategy which turns traditional classrooms into a new way of teaching. It is a fact that the teacher may still design framework for learning, but students may use technology to directly access and analyze information from all parts of the globe. Technology as one component of PBL needs to be maximized to reach essential learning goals. Bowen (2006) affirms that technology serves as a greatest gift to release teachers from the tyranny of content and can create more class time. By this, teachers can prevail over the traditional classroom limitation. Meanwhile, Boss and Krauss (2007) believe that technology can be used as discovery, collaboration and communication tools and can assist teachers to attain essential learning goals in new ways.

In a Flipped Classroom, technology and social media work hand-in-hand. The tools of the flipped model are becoming more ubiquitous each year, both in and out of the classroom. Dean (2010) states that most college students recently carry a smart phone and many of them are more favorable to receive information via smartphone or internet. Given this condition, teachers are on the right track to use various technologies to create videos of learning materials which are afterward uploaded to social media sites like YouTube. In fact, delivering learning content through video has become more and more attractive for content subject educators of science, math and engineering. Franciszkowicz (2008) maintains that teaching multi-steps problem-solving is critical to use visual media since the video can provide scaffolding for students through problems by modeling expert problem-solving strategies. Furthermore, technology and social media have given teachers broader opportunities to meet the students' needs. Therefore, educational institution and educators must be prepared for the interconnection among schools, learning and technology. Bonk (2009) contends to say that web technology is not arguable but revolutionizing education. It is a fact that internet technologies have not been simply a fashion but are now part of the standard online learning terms, including streaming video, synchronous chats and asynchronous discussion forums. Bonk (2009) claims, 'Such technologies impact education in a major way today and will continue to do so throughout this century; it is just a matter of figuring out exactly where, when, and how.' Nowadays, an



extensive number of course materials is accessed by millions of users around the globe and such a reality entails a sign of a learning revolution.

Developing Writing Project in a Flipped Classroom

Before discussing how to develop project in a flipped classroom, let us summarize some basic concepts underlying the flipped classroom model, PBL and digital technology use from the aforementioned discussion. The flipped model is characterized by video making of lesson instruction, reading assignment, and other lecturing types such as articles, books, power point, or handout, discussion boards which are all done outside the class. Whereas activities done inside the class are group discussion, pair work, completing assignments, teacher's direct access to students' assignments in class and corrective materials to be posted online. The PBL is characterized by issues related to time management, team work collaboration, progress assessment, maximization of learning experience through product making, adults' participation or team-up with communities, playing teachers, observers or creators (role changing) and exhibiting works. Technology use includes video, smartphone, computer, internet, social media for real-time chat and asynchronous discussion board. All these issues can be integrated in order to produce an overall attempt to maximize students' potential to learn (Kongmanus, 2016).

Improving students' writing is a relevant topic to benefit from project making issues in a flipped classroom. For example, students are assigned to write a short story. In the teaching instruction, students will be introduced to the basic principles of writing fiction (a short story). The students, then, will participate in a group writing project through which they apply the knowledge they gained from both the project and other course content to produce a short story individually. For this to happen, the teacher will have to make some videos, where teachers explain about the lesson and what is required in order to do the project. The lesson could include an explanation of, for example, what a short story is, what makes a good short story work, basic principles of writing fiction, how to dramatize a story, dialogue style, how to do editing & revising and how to judge a short story.

In addition, the video could include explanation and examples of how to do a writing project or steps in working out a project, for example,

- Identifying problem they meet (in this case, 'how to write a short story' is the problem),
- Identifying what they know, need to know, and need to do relating to the problem,
- Defining the problem by listing tasks to be completed

and factors for successful completion in writing the short story,

- Gathering information; they plan how to gather information from multiple and varied resources - such as videos, readings, power point, or handout prepared by teachers, discussion boards, social media and other sources on the internet.
- Sharing information; they share information they have gathered with their group and discuss its relevance to the problem.
- Generating possible solution; they synthesize information to generate several possible solutions.
- Determine best fit solution: they develop a graphic organizer to find a solution which fits the factors in their problem statement.
- Debrief the presentation; they debrief the presentation to emphasize learning from other groups' presentations which can be done online or offline.

All the videos are posted online to be watched by students outside the class. Reading materials and other lecturing types can also be posted online either in the blog or blackboard. A few questions which require students to respond or to provide comments should be attached to each video or reading materials and are treated as part of students' assignments. The responses and comments should be posted in the discussion board or social media before class. Here, issue of time management i.e. task deadline, is of importance and becomes part of assessment criteria. The students, hence, are compelled to perform as required.

In the classroom, as flipped model proposed, the teacher can review the video or assigned reading, facilitate students to work either in pair or in group to discuss the topic of the lesson (corresponding to video or readings) and assist them with their assigned tasks. Here, the teachers can formatively access students' assignments' deficiencies immediately in class. Subsequently, all corrective materials which have been discussed with friends, teachers or other adults are to be posted online. At the end of the project, the students can exhibit the product online or offline either in classroom or in a more public area. Here, issue of celebration raises students' enjoyment in learning. Meanwhile, during pair work and group discussion, issue such as 'playing teachers' can also be developed where students can explain or review the video content to other students.

Another critical issue is related to self-assessment and peer assessment. While the first is done through reflecting their own group project, the latter is done during product or short story's exhibition where they observe other groups' works and provide their assessment. As for the group and individual final project,



the projects can be scored for collaborative work, project completion, project content (short story writing quality) and presentation method. All the assessment rubrics should be made available to students beforehand in order that they know how to perform the writing project.

CONCLUDING REMARKS

The use of flipped classroom as a new paradigm in teaching which reverses class session and homework session has gained remarkable attention from educational institutions. By harnessing the use of digital technology, the flipped model has been found to maximize students' potential to learn. It has been for its principal concepts that consider higher order thinking skills should be developed with the assistance of teachers, other students or experts in the learning environment, thus, to be done in classroom session. Whereas, low order thinking skills could be developed individually without much assistance, so as, presentation of lesson content requiring students to memorize and comprehend could be recorded in video to be watched before class or to be used for future review. Similar to the flipped model, the issue of project making in a Project-based learning harnesses the use of digital technology for searching information and materials. Integrating the way the flipped model reverses the class and principles underlying project-based learning entails a joint concept that complements each other. Teaching principles found respectively in both the flipped model and PBL such as individual video watching and time management, classroom discussion and team work collaboration, pair work and playing teachers, teachers' direct access to students' tasks in class and progress assessment are among the many integral issues which can be enhanced to achieve better learning goals.

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- This article does not have any appendix. -

