Improving Jakarta Historical Understanding Ability Through Inquiry Learning Model Assisted With ICT Among Junior High School Students

SUSWANDARI*[a], Laely ARMIYATI[b], Khoerul UMAM[c], Nur ASIAH, Eka Nana SUSANTI[d],

[a,b,d]*Social Studies, University of Muhammadiyah Prof DR HAMKA, Jakarta*
[d]*Mathematics Education, University of Muhammadiyah Prof DR HAMKA, Jakarta*

*suswandari@uhamka.ac.id

Abstract: The main purpose of this study is to improve students' understanding about Jakarta History and their wisdom local values by integrating Information and Communication Technology (ICT) with Inquiry Learning Model. This study was a quasi-experimental design. The samples of the study are 40 students for classroom experiments and 40 students for classroom control. The instruments employed in this study were pre-test and post-test. The instruments are made in essays forms which design to measure students understanding about Jakarta History and in questionnaire form which is design to measure students' preferences about their learning experiences. The data were analyzed by using descriptive and inferential statistics. Our finding has shown us that (1) Inquiry Learning model assisted with ICT had a positive impact on student's understanding about Jakarta History; (2) An experimental group has been chosen history about as students preference lesson because the learning process offers integrating ICT with Inquiry learning model; (3) there is a statistically significant mean difference in students' understanding ability about Jakarta History between experiment group and control group.

Keywords: Integrated Inquiry with ICT, Jakarta History, Betawi values.

1.   Introduction

Historical learning in a school commonly focus on students learning outcome but rarely many students skills ability have been forgotten in learning process such as students' understanding skill, students communication skill, and students' problem solving skills. This is mainly because many teachers only used a book as single learning recourses and using conventional teaching method for learning process. Learning innovation are compulsory to be initiated and implemented in learning process especially to accommodate other students' learning ability. Inquiry learning model offers some activity which is encouraged students to investigate some historical event around the world especially Jakarta History by using their own observation in a learning process (National Research Council 1996, p.123). Furthermore, using ICT media will give more advantages for improving many students' skills (Alim, Umam & Wijirahayu, 2016). This mainly because ICT offers more visualization about learning materials and interactive learning media which will make students to be involved in learning activity (Umam, 2016).

This study will choose Jakarta History for subject because Jakarta Local culture is growing slowly around local community and student's achievements for history is still not satisfactory (Suswandari & Astuti, 2016; Suswandari, 2017). Jakarta Local culture should be improved simultaneously both in a school and a local community. Real actions should be taken to conserve this valuable heritages by providing some exciting cultural events and accelerating both collaborative and integrative learning process about Jakarta History especially in a school. Teachers and researchers should collaboratively redesign an exciting learning activity which is provided more engaging activities and used more attractive learning media. To accommodate all of this, Integrating ICT and

inquiry learning model have become a new trend which has been shown when learning activities were brought via information technology (Ainley and Ainley, 2011). The study offers a collaborative and integrative learning design of ICT-assisted Integrated Inquiry Model which can assist students not only in shaping the character of local wisdom of Betawi culture but also in improving their understanding about Jakarta History, as well.

2.   Inquiry Learning Model Assisted with ICT

Inquiry Learning Model is chosen because this learning model not only provide more engaging activities but also encourage students to be more active in learning process. Inquiry Learning Model that is used in this research has five main steps, namely stimulation, exploration, scanning value, presentation, and reflection (Suswandari & Astuti, 2016). An overview of the implementation will be presented as follows;

2.1.   Stimulation

This step begins to focus on increasing students' interest for learning materials and exploring their previous knowledge. At this stage the teacher encourage students to some attractive situation by using movies, videos, stories, or pictures relating to Jakarta History and Betawi local wisdom values videos.

2.2.   Exploration

The main purposes of this stages is to hone students' ability in concluding and analyzing the values contained in Jakarta local wisdom values and Jakarta History. The exploration phase is linked to the learner's previous knowledge so that students can be more engaging to their new knowledge. An exploration process need to improve simultaneously during the entire learning process.

2.3.   Scanning Value

Scanning value is the main activity in Inquiry Learning model which is developed by (Suswandari, 2016). This is because this stage learners will be asked to investigate what values are contained in the material being studied by observing some ICT media that has been prepared to complement the learning materials. ICT media offers a beneficial tools for students to investigate main values in Jakarta's culture and History which is sharpening students' sensitivity and students' analysis from what they see, hear, and do. At this stage, the teachers have provides a worksheet that has been formed to sharpen students' understanding about Jakarta History and their local culture values.

2.4.   Presentation

At this stage, the teacher asks each group to submit the results of their analysis, then ask a representative students from each different groups to perform their investigation and analysis about Jakarta History and local culture values by using ICT media as well. After presenting their analysis, others students need to ask and give a feedback from their own perspectives.

2.5.   Reflection

The reflection stage is the last process in Inquir learning Model. At this stage, the teacher reflects on students' performance and give some appreciation for their collaborative work during learning process. Some students will be chosen to represent their group to conclude learning material for this meeting.

3.   Methods

The research method used is a quasi-experimental design. In the quasi-experimental, the researchers are not allowed to take the subjects randomly, however researchers will be permitted to use an existing subjects who have been formed in the previous class. Population in this study are all students of class VII which is approximately about 80 students of Junior High School Jakarta in the second semester of academic year 2016/2017. In this study, we employed two instruments namely Jakarta Historical Understanding Instruments and Favourite lesson instruments. Firstly, the Jakarta Historical Understanding instruments are made in essays forms which design to measure students' understanding about Jakarta history and local culture values. The instruments was developed through a series of several historical events in Jakarta and instructed students to investigate appropriately some question that is need deep analysis for some given problems. Secondly, a favourite lesson instruments used a questionnaire which is included 20 items, some open, some half-open (in which students have an opportunity to chose their preferences choice from a number possible choices), and other items were closed. The items were closely related to three main themes: students' response about teaching method (e.g. in your opinion, how do you feel your experience learning in your class), learning media used during a historical learning process (e.g. How good are learning media to help you understand the history lesson), and students' perception about academics achievements in learning history.

In the experimental class, teachers were embodied the Betawi local wisdom values with various ICT media. The teacher uses a social learning video that has incorporated the values of Betawi cultural wisdom and Jakarta historical event as well. After watching various instructional videos presented in the classroom, the students were asked not only to explore the Jakarta local wisdom values from video but also to provide the arguments which is closely related to Jakarta History. The purpose of this activity is to sharpen students understanding about Jakarta History. The last activity is to present their exploratory results in front of the whole class using a power point which have been made in groups.

In control class, the teacher presents various images of Betawi culture by adding a few paragraphs of narration to provide some information related to the images provided. Students in the control class are also asked to explore the Betawi local wisdom and Jakarta History in the pictures provided.

4.   Results

In this article, we focus to analysis the results from two different instruments. The first instruments had been designed to elicit students' understanding about Jakarta History and Betawi local wisdom values while other instruments was carefully design to obtain students' preference about their learning experiences.

4.1.   Results of students understanding skills

The results showed that an experimental class which is used Inquiry Learning model assisted with ICT learning media have a better understanding about Jakarta History than control class which is used historical pictures. Data was closely related into four different categories; the conceptual of historical understanding, chronological historical events, the prominent figures in Jakarta historical events, and creatives arguments for given problems. The overview of students understanding skills about Jakarta History from experimental group and control group is shown as follows;

Table 1: The means result of student understanding skills about Jakarta History of between experimental and control class

Understanding Factors	Experimental group		Control group	
	Pre-test	Post-test	Pre-test	Post-test
The conceptual of historical understanding	60	85	60	70

Chronological Historical Events	64	79	64	64
The prominent figures in Jakarta historical events	59	67	59	65
Creatives Arguments for given problems	56	87	56	67

The above data have given us the useful information about means of students learning outcomes both in experimental and control group. In experimental group, there is a significant improvements especially in students' conceptual of historical understanding and students' creatives arguments for given problems. Reasons for some improvements factors because students in Junior high school were prefer to learn a history lesson through watching educative film which make them more enjoyable learning process.

4.2. *Favorite and Least Favorite*

The favorite instruments made in a questionnaire. Questionnaires items were made closely related to three main themes: students' response about teaching method (e.g. in your opinion, how do you feel your experience learning in your class), learning media used during a historical learning process (e.g. How good are learning media to help you understand the history lesson), and students' perception about academics achievements in learning history. For students' responses about teaching and learning, we made different forms of question between experimental group and control group. For example, students in experimental group has been asked "does Inquiry Learning Model assisted with ICT have encourage them to make history as favorite lesson while students in control group have been asked "does learning method which is used many pictures have made them to make history as their favorite lesson or least favorite. For these following questions, results were presented in Table 2.

Table 2: Favorite and least favorite classes in Junior high school for an experimental group (EG) students and control group (CG) students

Classes	Gr	N	Total number of responses	%
History as favourite	EG	40	23	58%
	CG	40	10	25%
History as least favourite	EG	40	17	43%
	CG	40	30	75%

From the table above for positive/negative experiences, reasons for the preferences were highly influenced by their new experiences in learning history lesson especially in experimental group which is promoting historical understanding through Inquiry Learning model assisted with ICT. This results in line with (Septiany, Purwanto, & Umam, 2015) that an integrating ICT with learning process will give some improvements for students' skills.

4.3. *T-Test Results*

This research use T-test to examine the difference of students learning outcomes between experimental and control group. Data have given us that students who taught using Inquiry learning model assisted with ICT has a higher academic achievements than a control group which is used some pictorial as learning media. The overview of students academics achievements which is examine about Jakarta History and Betawi local culture values from experimental group and control group is shown as follows;

Table 3: Result of t-test from students academics achievement between experimental group (EG) and control group (CG)

	N	M	SD	t-value
Experimental Group	40	4.2	1.3	2.79
Control Group	40	2.2	0.84	

There was a significant difference in the students understanding about Jakarta History in experimental group (M=4.2, SD=1.3) and control group (M=2.2, SD=0.84). The conditions; t (40) = 2.79, p>0.05. These results can be concluded that there is a statistically significant mean difference in students' understanding ability about Jakarta History between experiment group and control group.

5.   Conclusion

Our experiment with an experimental group has shown significant improvement on students' academics performances and students' understanding about Historical Jakarta which indicates the positive effect of using Inquiry Learning Model Assisted with ICT. In experimental group, there is a significant improvements especially in students' conceptual of historical understanding and students' creatives arguments for given problems. Furthermore, some students have been chosen a history for their preference lesson. This is mainly because their preferences were highly influenced by their new experiences in experimental group learning process. On the other hand, a control group reminds the low improvement as their previous results even the treatment has been given.

References

Ainley, M., & Ainley, J. (2011). Student engagement with science in early adolescence: the contribution of enjoyment to students' continuing interest in learning about science. Contemporary Educational Psychology, 36(1), 4–12.

Alim, E. S., Umam, K., & Rohim, S. (2015). *Integration of Reciprocal Teaching-ICT Model To Improve Students' Mathematics Critical Thinking Ability.* Proceedings of the 23rd International Conference on Computers in Education ICCE (pp 483-487).

Alim, E. S., Umam, K., & Wijirahayu, S. (2016). *The Implementation of Blended Learning Instruction by Utilizing WeChat Application.* Proceedings of the 24th International Conference on Computers in Education ICCE (pp 100-107).

National Research Council. (1996). National science education standards. Washington: National Academy Press.

Septiany, S., Purwanto, S. E., & Umam, K. (2015*). Influence of Learning on Realistic Mathematics ICT-Assisted Mathematical Problem Solving Skills Students.* Proceedings of the 23rd International Conference on Computers in Education ICCE (pp 29-31).

Suswandari & Astuti, S. (2016). Pengembangan Model Pembelajaran Berkarakter Melalui Integrasi Nilai Kearifan Lokal Etnik Betawi.

Suswandari. (2017). Kearifan Lokal Etnik Betawi Miping Sosio Kultur Masyarakat Asli Jakarta. Yogyakarta: Pustaka Pelajar.

Umam, K. (2016). Pengaruh Menggunakan Software Macromedia Flash 8 Terhadap Hasil Belajar Matematika Siswa Kelas VIII. *KALAMATIKA Jurnal Pendidikan Matematika*, *1*(1), 84-92.