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Proceding

International Conference on Lesson Study

"Professional Learning Community through Lesson Study for Promoting Student Learning"

14th 16th September 2017 Lombok, West Nusa Tenggara, Indonesia













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PROCEEDING 8th ICLS INTERNATIONAL CONFERENCE ON LESSON STUDY

"Professional Learning Community Trough Lesson Study for Promoting Student Learning"

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INTRODUCTION

September 11, 2017

The theme of the 8th ICLS is "Professional Learning Community through Lesson Study for promoting student learning" is appropriate to respond the current issues in education, especially the issue related to the quality improvement through teaching and learning process.

This theme is expected to assisst/contribute towards the quality improvement through the inclusivity of teaching and learning process that can be gained from many studies of researchers, practioners, workers in education professional learning, school improvement, curriiculum development and other fields that can help to promote its goals.

The ICLS is the annual meeting at Hamzanwadi University in East Lombok West Nusa Tenggara from september 13-16, 2017. This conference is organised by Hamzanwadi University in cooperation with Indonesian Association of Lesson Study (ICLS) and the Ministery of Research, Technology and Higher Education.

We proudly announce that we have invited some experts: Prof. Manabu Sato, Gakushuin Uni, Japa, prof. Petter Duddly (President of WALS UK), Prof. Cristin Lee (NU), Prof. Siriripaane Swanmonka - Chulalongkorn University Thailand., Carly Klein, Windesheim University of Nedherland and Prof. Sumar Hendayana, Ph.D (President of ICLS Indonesia).

We would like to say thank you to all invited speakers and participants who share their ideas to complete the agendas in this conderence, we also provide you to visit some schools as our partners in this Lesson Study.

It is a great honor for us and all committee to be the host at the 8th ICLS 2017. Welcome to Lombok, have a nice conference and get ready to be inspired and challenged. Thank you.

Khirjan Nahdi

The vice Rector of Academic Division Hamzanwady University



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"4c's Characters" On The Implementation Of Learning "Basic Concept Of Assessment"Through Lesson Study

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Abstract

Among the characteristics of the 21st century generation are multitasking, multimedia, and online info searching. Multitasking is the real performance of an individual who handles more than one task at the same time. Multimedia is a media that combines the two elements or more integrated. Social media (social networking) is an online media where its users can easily participate. The characteristics of the 21st century above requires some skills (skills) that must be owned by the students. Students must have digital skills, Agile thinking abilities, interpersonal and communication skills, global skills. The characteristics and demands of the 21st century above, resulted in four 21st century learning characters: (1). Critical Thinking and Problem Solving; (2) Creativity and Innovation; (3) Communication; (4) Collaboration. The four characters in the above can be achieved through lesson study activities. The four characters are analyzed at each stage of the lesson study, on the "basic concept of assessment" material in the Learning Evaluation course. The analysis results obtained data that: the four characters of the 21st century, there is at every stage of lesson study, both on the plan, do and see.

Keywords: Character 4C, the basic concept of the assessment, lesson study

A. INTRODUCTION

Among the characteristics of the 21st century generation are multitasking, multimedia, and online info searching. Multitasking is an information technology term that refers to a method where many jobs are also known as processes that are processed using the same CPU resources. Multitasking for humans is a real performance by an individual who handles more than one task at the same time unit.

Multimedia is media that combines the two elements or more media which consists of text, graphs, pictures, photos, audio and integrated animation. Social Media (*social networking*) is an online media where its users can easily participate, share and create content including blogs, social network or social networking, wikis, forum and virtual world. *Search Engine Optimization* (SEO Chairman) is a technique that is used in the world of blogs to get a good position in the *search engine search page*. The most popular search engine or that a number of *Google*.

The characteristics of Cirri 21 century above requires some skills (*skill*) that must be owned by the student. Students must have a *digital skills* (know and control the digital world), *Agile thinking ability* (able to think a lot of the scenario), *interpersonal and communication skills* (expertise communicate so brave buffalo opinion), *global skills* (skills include foreign language ability, can be united with the stranger that different culture, and have sensitivity cultural value).

The explanation above requires a change in the learning approach. Teaching and learning activities directed to optimize the condition of the children and the

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environment. Social behavior of students who are accustomed to working independently directed at learning that reflects the communication and collaboration. The environment was created with styling elements that can change the behavior of the students. The progress of information technology used optimally for the development of creativity and innovation students. The demands of the period more competitive supports learning terimplementasinya critical thinking and the readiness of the complete various forms of problems through communication and collaboration. The characteristics and the demands of the 21st century above, resulted in four 21st century learning characters: (1). Critical Thinking and Problem Solving; (2) Creativity and Innovation; (3) Communication; (4) Collaboration, (Vanroekel, D. 2008). The four characters above can be achieved through lesson study activities. The four characters were analyzed at each stage of the lesson study. Activities are carried out on learning the basic concepts of assessment materials in the course of the Evaluation courses. Lesson Study is a professional practice where teachers collaborate to plan, observe, and improve a lesson, (Northwest Regional Educational Laboratory, 2004). The four characters implemented at each stage of Plan-Do-Check-Act (PDCA) are see, hear and analyzed. The purpose of this research is the analysis of 4C character at each stage of lesson study, on the implementation of learning basic concept of assessment for Learning Evaluation Course.

B. RESEARCH METHOD.

This research was conducted on 5th semester students, S1 Chemistry Education, Faculty of Mathematics and Natural Sciences, University of Muhammadiyah Semarang (UNIMUS). Data were obtained through document analysis, observation, portfolio, field notes, video, and student work. Data were analyzed qualitatively through analytical descriptive approach. The data obtained as an attempt to describe and interpret the object of what is, and and reflects the reality that there is a. The material that is learned on the Basic Concept of Assessment on the Learning Evaluation course, which is done by the model lecturer and several lecturers as the observer.

Data obtained in the process plan, do and see from the lesson study stage, were analyzed. The results of the analysis associated with the four characters learning 21 century. The value of the character that is expected to appear or occur both on the students or lecturers. The lesson study phase is analyzed only until the third stage, because the fourth stage of the Act, has not been done by the researcher.

C. THE DISCUSSION.

The characteristics and the demands of the 21st century above, resulted in four 21st century learning characters: (1). Critical Thinking and Problem Solving; (2) Creativity and Innovation; (3) Communication; (4) Collaboration. One by one will be analyzed whether the four characters above implemented in each stage of lesson study. The four characters above is the answer to the demands of the situation of the 21st century. Teachers are required to implementing it in learning, with hope can occur increasing the quality of learning.



Implementation of Learning "Basic Concept of Assessment" through Lesson Study.

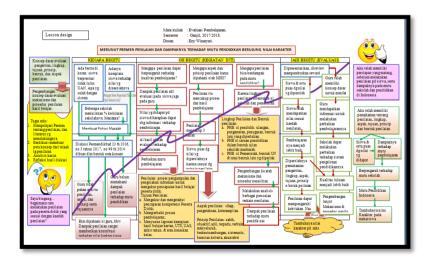
Implementation done by lecturers on learning evaluation course, for basic concept of the assessment. One of lecturer as a model lecturer, while other lecturers act as observers, and dosn outside the team. All the lecturers are involved at all stages of the lesson study. Stages of lesson study conducted are:

1. Plan (compile chapter design and lesson design).

In the planning phase, the lecturers who joined in *lessons Study collaborate to arrange* The planning started with begins with activities to analyze the needs and problems encountered in learning, such as about: basic competence, how to learn, methods or media used, how to overcome the lack of existing facilities and infrastructure, identify the gap between the reality of learning ability and the understanding of the students with the hope that the lecturer to the ability of students, and so on. The purpose is to know the real conditions that will be used for the benefit of learning and then search for the solution. This activity produced chapter design and lesson design of the material the basic concept of the assessment of the learning evaluation course, S1 Chemistry Education, Unimus.

The purpose of the lesson design of the basic concept of the assessment is that students can find solutions related to the problem of assessment comprehensively. Students will have the ability to above, when they have complete understanding as a result of discussion related to permendikbud no 3 year 2017, no 23 year 2016, and no49 year 2014. Goal from this discussion, will be obtained image of the impact of assessments in the classroom against the demands of the assessment by the government. Some of the issues related to the discussion discussed were: the existence of outstanding

students who did not pass UAN, several schools competed to write on their graduation percentage banner to the public, the students complain about the value they got. The products of this activity was chapter design and lessons design



materials the basic concept of the assessment of the Learning Evaluation courses.

2. Do (carry out learning, and other lecturers observe).

At this stage, there are two main activities, namely: (1) learning activities conducted by one of the model lecturers, and (2) the activities observation or observation activities conducted by team from S1 of Chemistry Education plus lecturer

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outside planning team with the hope of providing inputs for improved learning, and outside advisers. Model lecturers conduct learning fairly. Observers observe student behavior in the learning process, through the activities to see and hear that acquired in various ways, as noted, mount the photos, record through the video camera for the purpose of the documentation as material for further analysis. The Observer collects data on the behavior identified, whether there is a gap between planning expectations and the realities of implementation. For example about the comments or discussions of students concerned, the construction process of understanding students through student learning activities, communication emerging either among students, students-environment, students-teachers, etc.

Students have initial knowledge with the task given by lecturers, so that students read permendikbud no 3 of 2017, no 23 of 2016, no 53 of 2015, and no 49 in 2014. In the learning process, lecturers assign tasks to the group of students to memnyusun map the concept based on the permendikbud he has read, and presented it.

The lecturer gives the task of the group in the form of settlement of the issues of the assessment. Goal from this stage is the students have an understanding of understanding, scope, aspects, objectives, principles and forms of assessment. The jumping of this learning is the assessment mechanism and procedure. The task of sticking paper on the root of the problem (issues to be addressed), the cause of the problem (the trunk), the solution to be taken (lushness of twigs and leaves), goals (decisions, suggestions, policies, etc) illustrated as the fruit of the tree.

One of the student activities is: Student issues that complain with the value obtained. The reason is because lecturers do not apply the principles of assessment such as: valid, objective, fair, integrated open, comprehensive, sustainable development, systematically, baracian criteria, Accountable is accompanied by an explanation. The solution is a lecturer receive input and give the explanation of the process it produces a value. Our goal produced is necessary to the existence of the guidelines drawn up by the prodi that underlies the principle of assessment. Students present the results of the analysis through the tree of success.

Jumping (jump to critical tinking and problem resoursces' and creativity and innovation), is a lecturer gave the task of the development of the basic concept of the evaluation related to the mechanism and procedures assessment of learning results. Form of jumping is a task that should be completed the student based on the knowledge base of the assessment that has been possesses.

3. Check (do reflection).

At this stage the whole team met to do the reflection in the form of discussion. This stage is a very important step as an effort to improve the learning process. The success of this stage depends on the sharpness of the observer's analysis. The discussion begins with the delivery of the impression, difficulties and obstacles of the model lecturer who have practiced the lesson.



All observers submitted their responses or suggestions wisely toward the learning process that had been implemented by the model lecturers, supported by the evidence obtained from the observations. The various discussions developed in the discussion can be used as feedback for all participants to improve or improve the learning process. All participants are expected to have a record of the discussions that took place in the discussion.

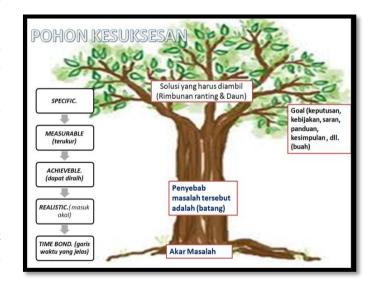
Analysis of the data obtained during the learning process: how the reaction of students during the lesson, view where the students less understand the concept, why; the possibility of what strategies so that the students can understand; how much time spent by lecturers or students to complete, what the solution to the learning was donations smoothly.

At this stage the findings of the need to tilt the power when the students to find the cause and the solution. Two groups of 4 (four) groups need tilt the power from the lecturers so that the discussion be focused. The initial understanding about permendikbud be the key to solve the problems given lecturers. The existence of

the transfer of knowledge from the students who have mastered the material to the less. The atmosphere of the discussion becomes more live when all students involved

4. Follow-up stage (Act).

A number of new knowledge or important decisions to improve and increase the learning process. From the results of



reflection obtained a number of new knowledge or important decisions to improve and increase the learning process. Various) and input presented at the time of the discussion in the stages of reflection (check), as inputs for the improvement of learning toward better. In addition to the impact on the improvement of the lecturer of a model, also affect managerial as defining the policy. From the results of reflection, sometimes produced the decision to demand the role of managerial leadership..

4C Character at Lesson Study Stage

The four 21st century learning characters are: (1). Critical Thinking and Problem Solving; (2) Creativity and Innovation; (3) Communication; (4) Collaboration. The four characters are expected to be achieved through lesson study activities. The four characters were analyzed at each stage of the lesson study. In this research only 3 (three) stage lessons study: *Plan-Do-Check. The purpose of this research is the analysis of the characters 4C on each of the* three phases of lesson



study on the implementation of learning the basic concept of assessment for Evaluation Learning courses.

Lesson Study is a collaborative process in which a group of lecturers identifies instructional problems, plans a lesson, teaches lessons (one member teaches lessons while others observe), evaluates and revises lessons, teaches revised lessons, again evaluates lessons, and share the results with other lecturers. This research only reached the third stage. Analysis is done on the process of planning, observing, and analyzing. The following will be discussed gradually based on the field analysis that occurred.

1. Critical thinking and problem resoursces'

This character is more toward the characters students who seek to provide a coherent logic in understand and make choices that complicated, understand the interconnection between the system.

a) Plan.

Planning the demands of field goal and jumps in lessons design. The Goals is: in long-term value characters like students if applying properly assessment. Jumping is expected to appear is the development of the mechanisms and procedures assessment. The question that must be there is: "What must be owned by the student" not "what must be a lecturer teaching".

b) Do.

The problem in this research are resoursces' students were asked to solve problems given lecturer, through the tree of success must be completed. Jumping which must be completed students is the task of the mechanisms and procedures assessment. Students will search for other supporting literature to solve problems related to the tasks that require the mastery of the mechanisms and procedures assessment. The formative test done a lecturer at when students mengerajakan group tasks. The formative Penialian more directed to test critical thinking and the problem of student resoursces'.

c) See.

When on discussion diary of a question of its achievements from the field goal and jumping. The form of the task given is a lecturer divided learning Psychomotor taxonomy literature, cognitively intact, and Affective which contains the understanding level, ilusrasi verb, and example. Students asked to create their own example dihubunngkan with chemical materials that have been determined.

2. Creativity and innovation.

This character led to the formation of student characters in order to have the ability to develop and implement, and convey the ideas of baru to another, being open and responsive to a new perspective is different. On the level of the lessons study, character is present on:

a. Plan

It produces chapter design and lessons design can not be removed from the skill and pour the linked art mastering about assessment, and transfer permendikbud about ratings into chapter design and lessons design.

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b. Do

In this stage of lecturers using concept mapping methods and troubleshooting (problem resoursces') using the "tree success" to measure student understanding related to permendikbud he mastered and solve the problems assigned.

c. See.

The entire team plus lecturers outside the teams to provide feedback includes strategies and how associated with the gap between the planned the implementation. There is one group that miss conception when charging each item tree problem. This is because the early understanding about permendikbud that less complete, visible from the map the concept that the Anti-monopoly. The proposed strategy is the existence of small formative at will and is the group discussions to draw up a map of concepts.

3. Communication

Image of characters is communication students and teachers are required to understand, manage and create effective communication in various forms and contents orally, writing and multimedia. At each stage lessons study this can be borne as follows:

a. Plan

The entire team of lecturers were given the opportunity to use its ability to express the idea of a.i. especially during the discussion draft chapter design and lessons design. Academic communication built in between those who practice the lessons Study. The academic transfer from senior with junior, and between members of the team.

b. Do.

The success of group discussion activity on students required the ability to communication between students, students of lecturers and students of the environment. Diary are also required to have the skills of change from verbal communication to written communication. The ability to catch every behavior that appears on the students when in the process of learning, to enshrined in a video based learning media, lesson materials, or as a video learning. Diary must have the skill to catch a signal behavior to note the field. Writing skills are very pending for the diary of a. The Existence of ethics for the diary not to assess and oriented on dosennya, but which was seen and heard is the behavior of students during the lesson. This gives the impression that the stage do in lessons study advancing the value of togetherness, responsibility, concern, empathy, sympathy, etc.

c. See

The reflection of the open the opportunity for the lecturer to accept criticism and suggestions from other lecturers who became the observer. At the same time, observer can give constructive criticism and suggestions that naturally will create the academic atmosphere in the team. The reflection of life whereas all members have a discussion forum for one purpose the improvement of the



quality of learning. The decision of the ideas and suggestions from this discussion should be compiled into a report written.

4. Collaboration

The Collaboration provides an overview of where students demonstrate their ability in teamwork and leadership, adapt in roles and responsibilities, work productively with others, place empathy in place, respect for different perspectives. The lessonstudy stage is illustrated in:

a. Plan

Lesson Study builds academic communication and control. The product generated in the plan phase, the better when all team members have the same responsibility that leads to the quality of learning. In the United States, after lesson study, 65% of high school teachers expressed that collaborative opportunities have a major impact on their ability, and effectively address the learning needs of individual students. Whereas previous data only 22% of teachers who delivered about the benefits of collaboration, (MetLife 2009)

b. Do

Observer will observe depending on the interest and focus to be observed, according to their abilities and interests. Observer will be better if coming from a diverse background. This diversity will have a more detailed and detailed interest and focus. Each observer will have a wealth of observations and data results that give each other reinforcement and experience.

"Through the process of improving lessons and sharing with colleagues the knowledge they acquire, something remarkable happens to teachers: they begin viewing themselves as true professionals. They see themselves as contributing to the knowledge base that defines the profession. Stuffler & Hiebert, 1999, pp. 126-127

c. See

This activity at this stage is permitted to engage an outside advisor (knowledgeable other). The point is that collaboration between multiple parties very important. In this reflection activity there should be facilitators, minutes and advisors All the reflection participants sit together and discuss The facilitator needs to select some topics that will be the focus of discussion, then open discussion for all participants All members have the opportunity to express their views on the learning process of the students, the difficulties it faces, the decisions taken that deviate from the planning, and other important issues to be discussed. Advisors are tasked with summarizing the results of the discussion and providing helpful suggestions on what can be learned. illustrates that the product is prepared, not out of the collaboration of all participants premises n different roles and capacities.

D. THE CONCLUSION AND SUGGESTIONS

1. Conclusion

a. The four characters in the twentieth century 21 called with character 4C, consisting of: (1). Critical thinking and problem resoursces'; (2) Creativity



- and innovation; (3) Communication; (4) Collaboratio. The four characters 4C above there at every stage of the lessons study, both on the stage plan, do and see.
- b. That Learning through lesson study can answer the needs and the demands of the characteristics and problems of the twentieth century 21.

2. Suggestions

Implementation of lessons activities study on all courses.

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