

The Impact of Scientific Based Learning Management on Hindu's Higher Educational Institutions

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ARTICLE HISTORY	ABSTRACT
Accepted : October 18 th ,2018 Revised : October 30 th , 2018 Published : November 5 th , 2018	This research has a purpose of comparing the implementation of scientific learning management with the implementation of speech variation learning management and its impact towards students inside to class learning process on the Hindu religious education study program Institut Agama Hindu Negeri Tampung Penyang Palangka Raya. The approach used in this research is qualitative with the descriptive design. Research is conducted in Hindu religious education study program Institut Agama Hindu Negeri Tampung Penyang Palangka Raya Indonesia. The researcher collected a huge range of information on two variables by interview and observation with 12 university students and 8 lecturers. Data analysis of interview results used interactive analysis model from Miles and Huberman while data analysis of observation used checklist method. On planning, implementation and supervision process of scientific learning, several findings were found, such as the more active students' role during the study process, and lecturer becomes a facilitator and guides the students who faced difficulty in their study and follow up on students' development evaluation results. Scientific learning in higher educational institutions in Indonesia has only been effective since 2017. Therefore, this research is hopefully able to provide knowledge particularly on the effect of scientific learning on students' active role during the study process.
KEYWORDS learning management scientific learning	

INTRODUCTION

Since the year 1960 in the United States and 1970 in England, a new curriculum with scientific learning had just started to be designed (Hodson, 1996). Whilst in

Indonesia the learning process from the elementary level up to junior high had started to use scientific learning inside the curriculum in 2013 (Said, Sutadji, & Sugandi, 2016). Moreover, for higher education in Indonesia, scientific learning is effectively mandatory to be applied on 2017 according to Permenristekdikti No 44 Tahun 2015 on National Standard of Higher Education.

Scientific learning is a process to enhance students' active role, where during learning students construct certain concept through observation, identification, hypotheses formulation, data collection with various techniques, data analysis, conclusion extraction and communication (Deden, 2015). Scientific learning offers a significant advancement in improving learning quality by inviting students to conduct knowledge searching process regarding learning material with various science process activities in doing scientific research to discover by themselves various facts, build concept and new values needed (Ine, 2015). However, there are still some obstacles faced by education force in Indonesia which based on research results from Zaim (2017), English teachers in state high schools still face difficulty in applying scientific learning, therefore to improve understanding of teachers in the application of scientific learning observation function and supervision are necessarily needed. Further research by Supratman, Ryane & Rustina (2016) stated that high school teachers in Ciamis Indonesia had not received training related to scientific learning application, which makes less optimal application of scientific learning. Hence, better planning of scientific learning application is needed.

Scientific learning can be applied effectively when supported by effective management (Manullang, 2014). It is because, without management, the learning process is not able to be realized optimally, effectively, and efficiently (Rukayah&Ismanto, 2016). The application of scientific learning management is supported by management functions which are a step which oversees how scientific learning management is run. Hence it can determine the direction in which management process will be going (Suwito, Harun, & Ibrahim, 2017). Management function consists of planning, organization, implementation and supervision (Terry, 2012). The four management functions will be interrelated; the even organizational function will closely be linked to planning, implementation, and supervision function. These functions are basic elements that will always exist and tied together in the learning management

process which acts as reference material for the teacher to achieve the goal of learning (Slamet, 2007).

Scientific learning management is related to the issue of students' interaction with lecturers and the source of learning in a certain learning condition which guided by curriculum containing set of plans and arrangement on goal, content and material of learning and the methods used as guideline to achieve the goal of particular education (Nirwana, 2014). Management is an integral component and unable to be separated from the process of scientific learning as a whole. In this condition, the awareness for the importance of scientific learning management to plan, organize, supervise, be responsible, arrange, lead the resources to help the commencement of the learning based on the goal of the learning will be achieved (Rukayah&Ismanto, 2016). Those conditions tickle the researcher's attention to conducting some research on the impact of scientific learning management implementation on the Hindu religious education study program Institut Agama Hindu Negeri Tampung Penyang (IAHN-TP) Palangka Raya.

METHODS

The research approach used in this research is qualitative approach with a descriptive design which is conducted in Institut Agama Hindu Negeri Tampung Penyang Palangka Raya Indonesia on the Hindu religious education study program. The researcher will collect information on those two variables, a group of courses with scientific learning management and groups of courses with speech variation learning management. Next, the researcher will analyze those two learning management variables to collect the impact description from the application of scientific learning management in higher education.

The first data source of the research came from the informant, who is not other than 12 students and 8 lecturers to gain data on condition, weakness, and strength of scientific learning management and speech variation learning management. The second source was from observation process towards the commencement of learning management in class, to draw a big picture from the implementation of both two learning management.

The first data collection technique was from a non-structural interview on two variables, which are courses that used scientific learning management and courses that used speech variation learning management. Meanwhile, the sampling technique used is

purposive sampling on four lecturers with different courses to teach. This is because they are considered the best in understanding what the researcher hoped for. Further, interview with active students was with snowball sampling, in which the interview was done to gain saturated data or data obtained the same. The second data collection technique was covered observation to gain insight from the implementation of both learning management, while results data analysis technique of interview with lecturers and students used field data analysis with interactive models from Miles and Huberman and observation results data analysis used checklist method.

RESULTS AND DISCUSSIONS

Results

This research examines the perceptions of lecturers and students on groups of courses with the management of scientific learning and groups of courses with the management of speech variation learning on the Hindu religious education study program institute agama Hindu Negeri tamping pen yang Palangka Raya. The findings of those two courses are explained as follow:

Learning Planning

To prepare the best planning is the first mandatory task for the lecturers. The benefit of learning planning is to make the preparation of learning easier, and also the easier way to develop the active, creative, effective, and fun learning process (Maria & Sedyono, 2017). Based on interview results with the lectures on the Hindu religious education study program, several activities were found during this preparation stage. Those activities can be found in table 1.

Table 1. Learning Planning Activities

Speech Variation Learning	Scientific Learning
Lecturers make semester learning planning (RPS)	Lecturers make semester learning planning (RPS)
Lecturers make learning material	Lecturers make learning material
Lecturers arrange learning devices and learning contract	Lecturers make learning devices (guidance book for students and lecturers) and learning contract
Lecturers make assessment instruments	Lecturers make assessment instruments (attitude, knowledge and skills)
Lecturers report on RPS to be evaluated by study program	Lecturers report on RPS and learning devices to be evaluated by study program

Learning Implementation

Learning implementation is an implementation from learning planning (Rusman, 2017), which has been made by lecturers (Novalita, 2014). According to interview results with lecturers on the Hindu religious education study program and triangulated by source towards interview results with students and field observation results, several activities during learning are found and can be seen on table 2.

Table 2. Learning Commencement Activities

Speech Variation Study	Scientific Study
Lecturers present RPS & learning contract to students	Lecturers present the content of RPS & learning contract
Lecturers explain the study material, learning approach and marking format to the students	Lecturers will distribute learning guidebook and explain the learning stage with scientific approach and learning method with problems based
-	Lecturers will communicate the type of observation objects that will be used, and students are given freedom to choose
-	Creation of the study group evenly
Lecturers give motivation to the students	Lecturers give motivation to the students
Lecturers present the material based on an existing theme	Lecturers will present the introductory material on the theme that is going to be discussed, then lecturers will formulate a problem (problem-based learning), and students start to solve that problem with their group based on learning guidelines (observe, ask, collect information, process information & communicate)
lectures give a chance to the students for a question and answer session	During the study process, lectures act as a facilitator
In one semester lecturers will give at least two group assignments to discuss	Give independent structured task with theme related to the next week meeting
Lecturers provide authentic assessment during the learning commencement	Lecturers provide authentic assessment during the learning commencement

Learning Supervision

Learning supervision is a checking process on whether the learning commenced according to plan, the instruction is given out and the principles determined (Sagala, 2011). Based on the interview with lecturers on the Hindu religious education study program which is triangulated by source towards the interview results with students and

field observation results, several activities during supervision were found. Some of those activities can be seen in table 3.

Table 3. Learning Supervision Activities

Speech Variation Study	Scientific Study
Lecturers observe students' development on knowledge aspect, attitude, also creativity based on the goals of the learning	Lecturers observe students' development on knowledge aspect, attitude, also creativity based on the goals of the learning
Lecturers provide assessment towards students' development	Lecturers provide assessment towards students' development
-	Lecturers provide guidance to students who faced any obstacles during learning
Lecturers create a learning process report	Lecturers create a learning process report
-	Lecturers provide follow up in the form of strengthening and appreciation to the students who fulfil or exceed the standard

Discussion

Learning Planning

One of the differences between speech variation learning planning method and scientific learning on the Hindu religious education study program IAHN-TP Palangka Raya is emphasized on the preparation of learning guidebook for students and lecturers. On scientific learning, lecturers prepare some learning guideline for students and lecturers with the purpose of providing guidance during the learning process. Therefore, with learning guidance planning it is hoped that lecturers and students know the things to be done to ensure the learning process commenced according to the goals. Scientific learning needs a guideline in the form of documents containing basic principles, and it also acts as main documents that cloak and become a guideline for its user (Soemohadiwidjojo, 2014). The impact of scientific learning planning that prepares to learn manuals for students is to make the students involved actively during the learning process by firstly understand the method and stages of the learning process that they will go through. Learning that involves students actively will have a positive impact, such as abundant learning experience for the students (Sidek&Yunus, 2012).

Learning planning is at the utmost importance because it is a guideline and standard in the effort of goals achievement process (Rayuni, 2010), also acts as a

guideline tool for education force in the commencement of learning process. For that reason, planning must be complete, systematic, easy to be applied yet flexible and accountable (Abidin, 2016). Learning planning is a systematic process done by lecturers in guiding, helping and directing students to possess certain learning experience, also to achieve learning goals determined with stages in the creation of learning material, learning media utilization, and learning method and assessment in certain time allocation which will be exercised in the certain period (Sabirin, 2012).

Learning Implementation

The difference between speech variation learning method and scientific learning on the Hindu religious education study program IAHN-TP Palangka Raya lies in different active roles of the lecturers and students. In speech variation method, lecturers have a more active role than students, while in scientific learning students are more active during the learning process. Learning implementation is heavily related with creation of condition which enables the student to learn actively. In the effort to create a conducive learning environment, class management skill is needed (Rahayu, 2015). That creativity is lecturer's ability to create, nurture, and control the optimum learning condition (Hasibuan&Moedjiono, 2010). Thus, learning implementation is related to the ability to influence students. Therefore lecturers as learning executor must be able to motivate students to learn (Manullang, 2014). Therefore, lecturer's leadership skill has a very important role in driving students to learn (Sagala, 2011).

The impact of implementing scientific learning can be seen from lecturer's action as a learning facilitator will trigger student's active role to discover and solve problems by themselves. Students' active role in the learning process to experience the materials learned themselves had become an important part of scientific learning (Hardianti, Nurhayati, & Yan, 2015). Students can learn properly with their active role when collecting information, conducting an experiment to solve problems which they will eventually find their own concept. With that method, students are wished to able to understand the concept in their own language (Bruner inside Dahar, 2011).

Learning Supervision

The difference between speech variation study method and scientific learning on the Hindu religious education study program IAHN-TP Palangka Raya lies on the

process of guiding students or following up on student's development evaluation results which are done on scientific learning. On the other hand, in speech variation learning process only the assessment of the learning process is done. Supervision is to measure and make a correction for each student's activity to ensure that goals and design created is truly materialized (Kurniadin&Machali, 2012).

The impact of scientific learning supervision can be seen from the process of guiding students or following up on the results of evaluating student development conducted in the scientific learning process. Learning supervision is a process to guarantee the learning experience is according to the initial plan, in which lecturers are required to discover the problem occurred in the learning, and then solve that problem. One way is to guide the students before the problems become more major and evaluate them (Slamet, 2007). The supervision can involve several elements such as: (1) to determine the goal achievement standard, (2) to measure the learning achievement standard, (3) to compare the learning achievement with goal achievement standard, (4) to take corrective measure when the deviation is detected (Tim DosenAdministrasiPendidikan UPI, 2012)

CONCLUSIONS

Scientific learning management on the Hindu religious education study program IAHN-TP Palangka Raya has an impact on students' activity during the learning process, which can be seen from research findings. Some of those findings are Scientific learning planning, in which lecturers prepare to learn guidebook for the students in order to make them involved actively during the learning process, with understanding the method and stages of the learning process that they will be going through beforehand. Meanwhile, in speech variation learning planning lecturers merely prepare the learning program, materials, and learning tools. In scientific learning implementation, students' role during learning process is to become more active while lecturers become facilitator because it will make the students more active during the learning process in order to find and solve the problems, while in speech variation learning application lecturers are more active than the students. In scientific learning supervision, lecturers guide the students or follow up on the students' development evaluation results, while in speech variation study process the lecturers merely provide an assessment on the learning process.

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