Fieldstudy Assessment in Geography at Teacher’s College in Indonesia

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Abstract. Fieldstudy in geography is specific because the laboratorium of geography itself is the nature. Fieldstudy that is done outdoor requires a different kind of assessment. This article is aimed to compare the assessment of fieldstudy at four teacher’s colleges: Indonesia Education University or Universitas Pendidikan Indonesia (UPI), State University of Jakarta or Universitas Negeri Jakarta (UNI), State University of Yogyakarta or Universitas Negeri Yogyakarta (UNY), and State University of Semarang or Universitas Negeri Semarang (UNES). Study of the document is obtained from Academic Guideline Book (BPA), SOP (Standard Operational Procedure), results of the studies and other documents. The result of the study is intended to figure out the similarity and the difference of the fieldstudy in each study program. There is a diverse variation of fieldstudy assessments, but if observed through the fieldstudy's operation mechanism, there are similarities in the following aspects: pre-activity, in term of planning/debriefing (which demands participation, involvement, discipline and teamwork); activity (which demands involvement and participation); and post-activity, in term of report and presentation/exposure. The difference between assessments is on the kind of product or activity they yield, that are articles, leaflets, and papers (Geography Study Program in UPI). The assignment of the assessment for Geography Program of UNES is different because the 3 (three) supervisors have different assignments while there is no such different assignment for the other colleges.

1. Introduction
One of the universities that graduates workers in education is an ex-LPTK university, which outcame educational workers. One of the study programs/departments of this university is Geography study program. The competence of its graduates can be observed and explained through its governing curriculum. The main curriculum structures that is observed are teachers, students, and assessments. Curriculum review becomes the strategic key for the university in order to guarantee its graduates with assessment profile proof which may informs the stakeholder need. One of the activities that has become the uniqueness of Geography Education study program is its fieldstudy (PKL).

Fieldstudy in geography is unique because the laboratory of geography is the nature itself. Fieldstudy has a close meaning to fieldwork. Fieldwork by many geographists is considered as the heart of geography
Recently, the geography well teaching and learning should include fieldwork [2]. Fieldwork must be included in all level of education.

Fieldwork is unique because students are obliged to get involved directly to observe the phenomenon according to the theme studied. Students may apply theory from their class in the field. Fieldwork gives students an opportunity to learn directly, not only as through models in the lesson, but it may improve their understanding of the geographic concept and appearance and develop a specific set of skills [3]. Another research correlates fieldwork and students' drive of studying which gives a benefit in an education. There is an effective relationship between the student responses in the matter of emotion/feeling and deeper value of learning when fieldstudy is being done [4].

Based on a research result of fieldstudy in term of Kuliah Kerja Lapangan I Jurusan Geografi in Universitas Negeri Semarang by Sri Mulyantar [5], it is concluded that this activity can be one of contextual learnings because it already fulfills seven components of contextual learning although it still needs to improve the component of inquiry and the component of authentic assessment.

As the importance of using authentic assessment that was stated by Sher Azim [6], authentic assessment may be applied not only to one level of skill or invention process, but also it may improve high-order thinking skills. High-order thinking skills include the development of asking, interviewing, data collecting, informing, analyzing and communicating to the person's group.

Assessment has a strong relevance in scientific approach. This assessment can describe the improvement of students' capability, in term of observing, reasoning, experimenting, communicating, and others. Assessment tends to focus on complex or contextual tasks, allowing the students to perform their competence in a more authentic setting. The executions of fieldstudy in some teacher’s colleges have both similarities and differences in the assessment. This article is intended to investigate the execution of fieldstudy in four teacher’s colleges.

2. Methods
Research method used here is through document study (literature study) from research results, academic guideline books, standard operational procedure and other documents. The result from documents collection are used to analyze the similarities and the differences between assessments in four teacher’s colleges, which are Indonesia Education University (UPI) in Bandung, State University of Jakarta (UNJ) in Jakarta, State University of Yogyakarta (UNY) in Yogyakarta, and State University of Semarang (UNES) in Semarang. The aspects that are used as references that is related to fieldstudy assessment are: naming, definition, course credit (semestral credit system), mechanism of the activity, topic/theme of the study, duration, ratio between advisors and students, products, scoring, data collection process, and report format.

3. Results and Discussion
As mentioned previously, fieldstudy activity in four teacher’s colleges is taken from document investigation of academic guideline books, SOP (Standard Operational Procedure), research results and other documents. The results of document investigation can be extended as follow:

3.1. Naming of fieldstudy
Research shows that there are differences of the naming of fieldstudy in a few universities, which are being adjusted to the governing curriculum. Fieldstudy in UNY has had several names: PLG in 1984 Curriculum, KKL in 1994 Curriculum, and PKL in 2000 and 2002 Curriculum. Fieldstudy in the four colleges/universities were done three times with names that differ slightly. The three field studies were named as follow: PKL Geografi Dasar, PKL Geografi Sosial Ekonomi, and PKL Geografi Terapan.
The different way of naming was done only by UNES which uses KKL (Kuliah Kerja Lapangan). In UNES, PKL itself is defined as a curricular activity that is done by students of non-education study programs and students of some particular education study programs, as is demanded by the curriculum as a way for students to apply the theories that has been learned, in order to give working experience to the students according to their field. As a comparison, a similar activity in geography study in Geography Faculty at Gajah Mada University (UGM) was named KKL, which consists of three KKL activities (UGM, 2010). Fieldstudy is mandatory for all students in Faculty of Geography at UGM.

In general, the result of document survey in four universities that conduct fieldstudy shows that they give the activity a name with similar characteristic, with the word ‘lapangan’ or field; PKL and KKL both use the word ‘lapangan’ or field for the name of fieldstudy activity. The word “lapangan” has an equivalence ‘field’ in English. The word “lapangan” refers to activity that is held outside the class/outdoor. Outside the room/class is the place of the activity/course in the teaching-learning process.

3.2. Definition of fieldstudy
PKL in UPI is defined as an academic program that is held in the field (outside the class) to learn and understand geographical aspects directly in the context of space (spatial association) as an integral course that is done inside the class [7]. PKL of geography in UNY is divided to three names with their definitions that are adjusted with their names. Praktik Kuliah Lapangan (PKL) or fieldstudy, in which some refers it as outdoor study in geography, is one of the learning strategies in addition to indoor study [8]. PKL Geografi Terpadu (PKL of Intergrated Geography) is a course that is done in a particular geographic environment in the form of experiment and application of the concept from geography theory, both physical geography and human geography, to understand the relationship between physical phenomenon and human phenomenon as one unity [9].

Fieldstudy in UNES is named Kuliah Kerja Lapangan (KKL). KKL in UNES is defined as an activity that supports the development of the course material in the class, which plays a quite important and strategic role. As the courses in Social Faculty (Fakultas Ilmu Sosial) requires a lot of studies in the field, it is not adequate if they only happen inside the classroom [5].

The definition of fieldstudy from a few study program/department/faculty in a few universities can be generalized as an academic activity that is done outside the room or class/outdoor to learn physical and social phenomenon and its interaction that can enrich the concepts and theories that have been received inside the class. A different way of naming of fieldstudy only happens in UNES, which names it as KKL while the others uses the similar name of PKL, although the definition is almost similar.

3.3. Credits of fieldstudy
Credits of fieldstudy in each study program differs for each level. The course credit is determined by adjusting it with the amount of time needed to achieve the competence or study goals. The total sum of course credit for fieldstudy varies from 2 credits (UPI), 3 credits (UNY) and 4 credits (UNJ) (table 1). The variance of course credits is influenced by many factors: activity duration, submitted assignments, and total hours of meeting/faceto-face meeting in the class. Fieldstudy needs time allocation for pre-activity, activity, and post-activity. Fieldstudy needs a fix preparation, so it requires a pre-activity to check and prepare everything in order to have the activity run well. Pre-activity and post-activity are usually done inside the class. Pre-activity is in term of in-class interaction (face to face meeting) that includes the presentation of initial location by the advance team and technical and non-technical preparation. Therefore, each university has its own credits for their fieldstudy activity.
Table 1. Course credit (SKS) of fieldstudy in geography education study program.

| No | Fieldstudy | UNY (SKS) | UPI (SKS) | UNJ (SKS) |
|----|------------|-----------|-----------|-----------|
| 1  | I          | 1         | 0,5       | 1         |
| 2  | II         | 1         | 0,5       | 1         |
| 3  | III        | 1         | 1         | 2         |
| Sum| 3          | 2         | 4         |

3.4. Mechanism of fieldstudy
Fieldstudy mechanism in four geography study programs has three similarities, which are preparation/pre-activity, activity/execution and exposure/scoring, as the details can be seen in the table 2 below:

Table 2. Mechanism of fieldstudy in 4 study programs of geography education.

| | UNY | UPI | UNJ | UNES |
|---|-----|-----|-----|------|
| a. Fieldstudy design | a. Preparation: explanation of the research steps in the field, preparation of research materials and equipments, and organization of research operation | b. Preparation (forming management team or committee, proposal writing, instrument preparation) | c. Preparation | a. Preparation stage |
|   | b. Field operation including all observations, measurement, analysis, and field data processing | d. Operation In-fieldstudy according to the condition of the location |  | Activities in preparation stage are planning activities that includes: management team or committee preparation, object selection, topic selection. After the topic is selected, each group formulates a problem and writes a proposal to be investigated in the field. Preparation stage is ended by debriefing. |
| c. Doing field work that includes activities: collecting data, preparing field notebook, data sheet and outdoor equipments | c. Report writing through advanced data processing and report writing | e. Report writing | b. Operation Stage |
|   | d. Exposure is a reporting activity in the front of a forum or public to publicize the result | f. Presentation |  | In this stage, the activity is done to answer the question that has been formulated in the proposal. |
| d. analisis data dan presentasi hasil kerja lapangan; dan data analysis and presentation of the result of fieldwork, and | | | c. Final Stage |
|   | e. assessment | | | The final activity is done by writing reports, doing an evaluation, and ended with a final seminar. |

The similarity of fieldstudy mechanism is firstly found in the preparation process, including the formation of the management team or committee and the determination of the location with the consideration made during the creation of the proposal for the activity. The second activity is the operation in the field through studying with data collection through observation, questionnaire, and secondary data collection. The third activity is a report writing by tabulating the data to be analyzed accordingly to the given topic. The fieldstudy is ended with evaluating of the report and exposing or giving a presentation about it.

3.5. Course material of fieldstudy
There are differences of course material in each geography education study program. In UNY and UNJ they have a similarity for the course material of fieldstudy. Fieldstudy I studies a physical aspect, fieldstudy II
studies a social-economic aspect and fieldstudy III studies the integration between physical reality and humans. Geography program in UPI has a different course material for fieldstudy, which includes (table 3):

| Stages     | Identification (%) | Classification (%) | Analysis (%) | Problem Solving (%) | Percentage total (%) |
|------------|--------------------|--------------------|--------------|---------------------|----------------------|
| Fieldstudy I | 60                 | 20                 | 15           | 5                   | 100                  |
| Fieldstudy II | 50                 | 20                 | 15           | 15                  | 100                  |
| Fieldstudy III | 20                 | 20                 | 25           | 35                  | 100                  |

There is a difference of course material for the object, the process, and the demanded product of fieldstudy. Geography education program in UNY and UNJ focuses on the object of the fieldstudy, but geography education program in UPI focuses on the process, the course credit, and the result of fieldstudy.

3.6. Duration of fieldstudy
The duration of fieldstudy depends on the course credit, but, in average, fieldstudy of each study program is done for 4-5 days. Fieldstudy includes departure from each study program, journey to the location of fieldstudy, in-fieldstudy, and trip back to each study program. The trip to the location depends on the mode of the transportation: overland, oversea, or by air. For overland trips, university students are already considered as senior pupils, so the distance can be from 5 to 15 miles or even more [2]. The duration of fieldstudy in a few study programs in Indonesia varies a lot depending on the level and the task compared to other field studies in a few universities in Southeast Asia. In average, fieldstudy duration in a few Southeast Asian universities is a week.

3.7. Ratio of an advisor (lecturer) to students
Fieldstudy requires guidance from lecturers as advisors throughout the whole activity, from planning, execution, to post-activity in the field. The advisor of the fieldstudy is assigned accordingly to the characteristic of each fieldstudy. The distribution of the advisors can be done through the appointment in the lecturer council meeting or adjustment to the course of the respective advisors/lecturers and their characteristic of the fieldstudy. The assessment process requires an advisor or a lecturer that is able to monitor the students’ activity in the fieldstudy.

The ratio of the lecturer as an advisor of fieldstudy and the students varies. The ratio is 1:15 for Geography education study program in UPI and UNY while it is 1:20 for UNJ. Data is unavailable for UNES. The ratio of the advisors and students for field activity must at least be 1:20 [2]. Field activity requires monitoring and assessment from the advisors in order to make sure that the program is done accordingly to the goals. The participants can receive a decent guidance, so the process in the field can be organized easily. The difficulty in a few universities is to provide the advisors sufficiently for the number of student’s due to teaching needs/tasks and other reasons. The solution is having the fieldstudy in the holiday(s) or weekends.

3.8. Assessment of the fieldstudy
The scoring or grading of the fieldstudy is determined differently in one study program to another, as it depends one the characteristics of the topic/material and the goal of the fieldstudy. The difference usage of the assessment criteria can be seen in the table 4 below:
## Table 4. Assessment of Fieldstudy in Geography Education Study Program.

| UNY | UPI | UNJ | UNES |
|-----|-----|-----|------|
| **Social economical fieldstudy** | | | |
| a. Involvement or participation during debriefing (5%) | a. Affective and psychomotor cognitive | a. Presence during lectures and debriefing = 10% | a. First grade, related to the understanding of the student of the topic (the advisor 1). |
| b. Teamwork (10%) | b. Presence during preparation, at least three times | b. Participation and involvement = 60% | b. Second grade, related to the fieldstudy group report (the advisor 2), |
| c. Involvement or participation in the field (25%) | c. Presence in the field, presence and appearance during exposure | c. Group report = 30% | c. Third grade, related to the participation during the fieldstudy (the advisor 3) |
| d. Report (15%) | d. Paper | | |
| e. Final exam (45%) | e. Article | | |
| f. Activity during fieldstudy, from during debriefing to the execution in the field that includes: involvement, discipline, teamwork, involvement during a scientific discussion, | f. Leaflet | | |
| g. Presentation | g. Report | | |
| h. Final report. | | | |
| **Physical fieldstudy** | | | |
| | | | |
| **Integrated fieldstudy** | | | |
| a. Activity during fieldstudy, from during debriefing to the execution in the field that includes: involvement, discipline, teamwork, involvement during a scientific discussion, | | | |
| b. Presentation | | | |
| c. Final report. | | | |
| **Physical fieldstudy** | | | |
| a. Presence during lectures and debriefing = 10% | b. Participation and involvement = 60% | c. Group report = 30% | |
| **Sosokta and integrated fieldstudy** | | | |
| a. Fieldstudy execution = 60% | b. Fieldstudy presentation = 10% | c. Fieldstudy report = 30% | |

The assessment of fieldstudy does vary, but if seen from the aspect of the fieldstudy mechanism, there are similarities, which are: pre-activity, in term of planning/provisioning (which demands participation, involvement, discipline and teamwork); activity (which demands involvement and participation); and post-activity, in term of report and presentation/exposure. The difference between assessments is on the kind of product or activity they yield, that are articles, leaflets, and papers. The assignment of the assessment for geography program of UNES is different because the three advisors have different task assignments while there is no such different assignment for the other programs. Every advisor has the right to assess every activity/product of the fieldstudy.

The result from the fieldstudy activity is accumulated to be converted to the final score. Document study (literature study) did not find all the documents that are related to the calculation process and conversion task in the fieldstudy which has given the credit to each activity and product of the fieldstudy. Documents from two universities gave no similar credits, which is for the ones in UNY and UNJ. Therefore, there is a need to create a credit formula for the products and activities produced in the fieldstudy. The result of that credit then is converted to the final assessment of the fieldstudy.

Evaluation process must be done within two week after the fieldstudy is being held [4]. The need to evaluate the activity is to see how close the success of the program is to the goal and to know the limitation and obstacle of the fieldstudy. It is also to assess the product and the tasks given to the participants. The assessment process here is meant to give the criteria or measurement of success of the program from the perspective of the process and the products. The assessment of the product can be in term of reports, observation papers or others, so scores or grades can be given to the participants.

### 4. Conclusions

There are similarities and differences of the fieldstudy assessments in four teacher’s colleges or universities. The related aspects of the assessments include: naming, definition, number of credits, ratio of advisor and students, assessment, activity mechanism. The similarities are the naming of the activity (course), by using the word ‘lapangan’ or field and the adequate ratio of the advisors and students for the assessment process.
in the field. The assessment of field study does vary, but if seen from the aspect of the field study mechanism, there are similarities, which are: pre-activity, activity, and post-activity. The differences of the assessments are in the kind of the activity, in term of participation/presence, involvement, discipline, and teamwork. The product of the assessment can be in term of articles, leaflets, papers, or reports. There is a need of crediting for each activity and products of the field study. Referring to the activity mechanism of the four universities, there are similarities, which are pre-activity, activity, and post-activity, so the crediting of the assessment can be formulated and agreed together.

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