



## THE SINERGY BETWEEN THE LABORATORIUM AND THE CURRICULUM IN SOCIAL SCIENCE EDUCATION STUDY PROGRAM, UNIVERSITAS NEGERI MALANG

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**Abstract :** This paper is intended to trigger and spur the existence and role of the Social Sciences Laboratory as the implementation of the Social Science Education Program Curriculum in Faculty of Social Science (FIS), Universitas Negeri Malang. In the year 2018 Universitas Negeri Malang, with 58 study programs and or majors, implements a new curriculum (K-18) namely The Curriculum of 2018. Since a long time, the Social Sciences Laboratory of Social Science Education Program (P. IPS) has not received sufficient attention, either from the technical rules, procurement and development itself. This research was conducted by involving 35 students to explore their point of view about the laboratory itself. The method used is FGD, interviews and scientific studies. Based on the results of the FGD, the research proposes to build a life laboratory in support of the curriculum development being carried out by Malang State University. The curriculum (K-18), which one of its characteristics is based on life, on the one hand requires the role of the Laboratory and also contributes meaningfully to the existence and development of the Laboratory.

**Keywords :** social science education laboratory, based-life, competence, capability

### I. INTRODUCTION

Laboratories in the world of science are like kitchens and workshops. Second is a workplace as well as a place of learning, a place to improve but can also be a place to create everything. One thing is certain, the laboratory becomes a playground to experiment and find answers. In natural sciences, laboratories are an inseparable place. However, in the social sciences that are often considered more searchable, the laboratory has not become one of the things that are considered important to develop.

Laboratory of social science education in its journey had been through constraints as efforts to realize laboratory ideas. The first idea is the premise that social science education can manifest campus as the facility and laboratory for social science education all at once. Steps are already passed by trying to document campus as a laboratory. The current laboratory is a room that is used for simulation and supports the teaching process. Furthermore, Social Science Education Program start to use university life as their social science laboratory. Students, individual or group are describing situation and reality condition on the campus. It begins from the gate, parking lot, registration bureau, classroom, café, canteen, library and so forth. The reality on campus becomes a learning situation for students; it is a mirror of social life in society with its meaning. But, does the development of this kind laboratory is enough to support the new curriculum?



### ***Life-based Learning and Increasing Competence to Capability***

The development of capability through life-based learning is become the characteristic of curriculum development operated by social science study program. The development of this curriculum is not only as part of the program in Social Science Faculty but also being the curriculum direction in the State University of Malang. Recently, the development of the curriculum is focused on the approach of capability development through its life-based learning and comprehensive and transdisciplinary approach.

Comprehensive part is manifested in organizing curriculum that is able to develop learning achievement to describe personal integrity with profession capability and/or current scholarly. The wholeness is reflected in the profile design and learning achievement also curriculum structure of the study program. Meanwhile, transdisciplinary is a curriculum management system that gives chance to students for equipping themselves with required knowledge in the study program, cross-study program, cross-faculty or cross-university.

The characteristics of curriculum with capability approach are first, oriented on students' need and interest. Second, it is oriented on creating independence. Third, provide with some choices inside and outside study program to create the wholeness of the desired scholarly profession. Fourth, it creates learning capabilities to obtain and to utilize knowledge in life. The fifth characteristic is developing adaptation capability toward the change of knowledge and technology, the students are prepared to learn developing their expertise.

The development of capability is conducted by, first, encouraging the individu to have awareness toward their life goals. Second, it is constructing the goals as the direction to determine the capability development. Third, the study program needs to provide the development capability service through primary and optional courses list. Fourth, CP formulation is manifested as the direction of study program's capability development. Fifth, transdisciplinary management is needed in teaching-learning process.

The expected output of graduation profile is described in the performance of graduation personality and their independence with multi-dimensional capabilities and multi-modalities in current expertise. Likewise, the description of capability profile shows the reflection of capability scope and talents in current occupation where it is also needed in performing a profession or live with life choice as their expertise. Therefore, the development of curriculum can be depicted as follow:

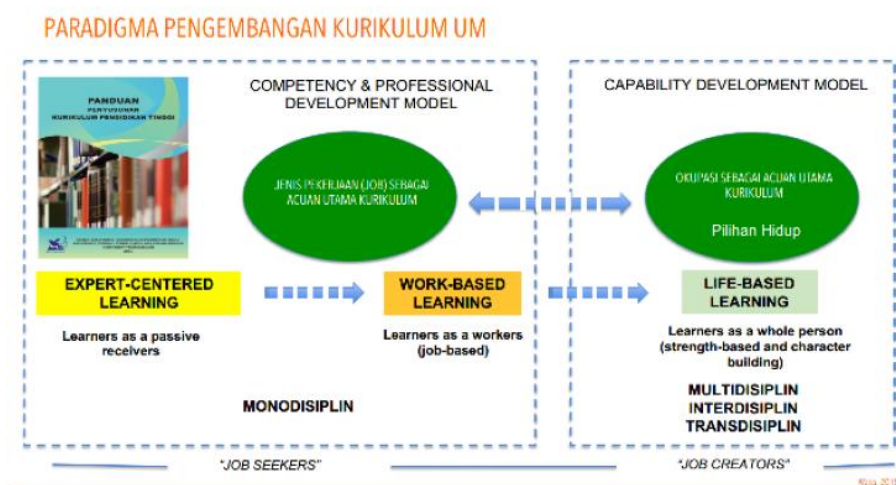


Figure 1 Paradigm on Curriculum Development begins from *expert-centered learning* (1)→ *work-based learning* (2)---→*life-based learning* (3) Learners as a whole person (strength-based and character building)

The first standard process for Life-based Learning is obtaining knowledge. The second is widening and refinement of science and the third is implementing the knowledge. In the first step, there is an arrangement process for knowledge pattern by elaboration and exploration, reading and reviewing, discussion and dialogue, and so forth. Meanwhile, the second step is analyzing cases by comparing, classifying, inducting, analyzing error, abstracting, and analyzing perspective. It is continued on the third level of PBL and/or PBIL, which includes deciding, defining findings and discoveries, the history of the discovery, future projection, and the discovery of the experience.

BBK can also be described as efforts to get closer with existing basic knowledge and understood by students, and learners including college students. Considering knowledge is so fundamental and it occurs in daily life, this situation put knowledge as if not considered, perceived, and actualized as meaningful and useful for life and in learners' life.

Three type capabilities of learning experience required is skills in cognitive and personal – social – or even psychomotor training to use knowledge and its feedback. The second is *vicarious learning* and involvement in activity full of values followed by positive feedback. The third is knowledge and understanding that requires reviewing learning activity with its feedback.

## II. METHOD

This study used qualitative approach. It is aimed to reveal contextual holistic symptom through data collection from natural background by utilizing researcher self as key instrument. Data collection procedure is conducted through three main techniques, 1) Focus Group Discussion (FGD), 2) interview, and 3) document review. FGD was conducted with 35 students from the second year that join Social Studies Class. Data analysis in this study is using qualitative data analysis technique. It is interactive model of analysis (Miles & Hubberman, 1994). It is used three steps: (a) digging data, (b) data reduction, (c) data presentation, and (d) deduction and data verification.



### III. DISCUSSIONS

The FGD results show how the perception of Social Sciences Education Program students in seeing the laboratory as a room. In this case, the laboratory is still seen as a place to conduct scientific experiments, such as laboratories in their previous school experiences. Their experience in school became a determinant of their perspective on the laboratory. How they interpret the laboratory, is also influenced by their experience, both positive and negative.

*"Ya ruangan, mungkin ada tabung-tabung gitu yah..baunya enggak enak.."*

"Yes, the room, maybe there are tubes like that ... it smells bad ... "(W3)

*"Kayak jaman SMA, ada ruangan trus murid-murid berpasangan buat eksperimen, gurunya didepan."* Like in high school, there is a room and student's pair up for experiments, the teacher in front. (W11)

When asked about laboratories and social sciences, the association they imagined was like a map, a globe or a simulation of nature, a kind of simulation of erupting mountains. Not many have experience with social science laboratories during their schooling, making them look more at laboratories with their own imagination. The imagination is interpreted by what they then seek through the internet or social media such as assignments in the courses they follow.

*"Kalo di sekolah saya dulu, gak ada laboratorium IPS. Paling gurunya bawa atlas ajah."*

If in my previous school, there was no IPS laboratory. Mostly teachers only bring atlas. (W8) verification.

The students understand, although they are still limited contextually about the role of the laboratory in supporting their learning process. Through the lectures they feel, they also get an overview of what support the laboratory provides for the development of their education. How they as students contribute to the development of social science laboratories are displayed by providing various tools that can be teaching tools. Develop teaching aids that can support them in the teaching and learning process.

#### 3.1 Urgency on Life Laboratory for Social Science Education: An Innovation

The characteristic of scientific social science education is not only required by the 2013 curriculum, but also as science, it should be always based on surrounding reality, spread off, and expand to mondial. It should be also fulfilling the demand that social science education should come from concrete things to abstracts ones. In achieving the purposes, State University of Malang initiates transdisciplinary curriculum based on life. It is encouraged by the real need that students/learners obtain the whole experience. What has been initiated by a new curriculum that is not only determining competence as output but also learners' capability? Curriculum development carried out by UM shows that the laboratory as a support for the teaching and learning process of students is not only limited to a room or teaching aids. With the demands of students to be able to function fully with their ability to deal with life demands they do not view the laboratory as contextual. But furthermore, it is demanded to develop more sustainably by using life as the basis for the development of their laboratory. This description shows how urgency on laboratory of life



is as soon as possible being implemented and realized. This laboratory will be functioned as kitchen, workshop or even creation place to abstract concrete things in life reality. Social science education laboratory can be prepared and/or used for indoor and outdoor. Indoor usage is inside the room or deposited into current class in a room, while outdoor is as living in society.

### 3.2 Indoor laboratory

For social science study program, the indoor laboratory is needed as a center in learning and teaching context where between both of them – laboratory or teaching-learning – are completing and supporting each other. It means that when an indoor laboratory has no facility as media, the teaching-learning process can produce learning media required. As vice versa, after laboratory has media facility, teaching-learning process can use it.

Currently in UM there are two rooms designed as an indoor laboratory. One has facilities needed in teaching-learning process, while others designed as microteaching room and/or ICT and IT workshop. As ICT and IT workshop, it needs supporting facilities to produce teaching media that focuses on synergizing with technology. It is as stated by Koehler & Moshra (2009) about the development of *Pedagogical Content Knowledge* to *Technological Pedagogical Content Knowledge* (TPCK). Through this process, it is expected that teachers or teacher candidates would be able or become expert to package learning materials with educating courses (*subject-specific pedagogy*) by utilizing technology as teaching-learning support.

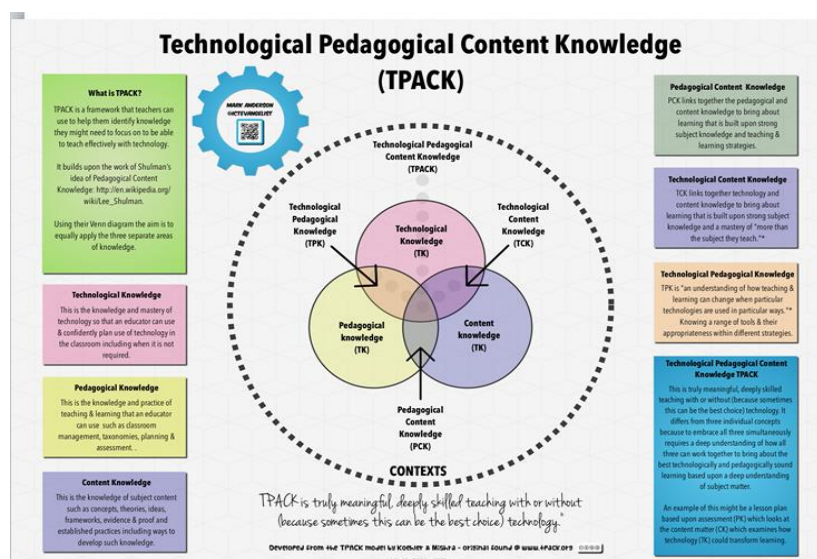


Figure 2 Diagram of *Technological Pedagogical Content Knowledge* (TPAC)

### 3.3 Outdoor Laboratory

As described in laboratory pocketbook of study program of social science education, outdoor laboratory for UM is the school, especially junior high school with its function as apprentice place or *Kajian Praktik Lapangan* or KPL (previously it was known





as PPL, while nowadays PPL is used by PPG students and postgraduate students). The junior high school what means here is the one located in Malang, Batu or Malang regency. In this laboratory, there are at least several activities conducted by colleges students, namely recognizing and describing school activity and the second is the teaching-learning process or teaching students in the class.

The second outdoor laboratory is still debated on its naming. The author calls it “life laboratory” but some friends call it with other terms, like “nature laboratory” and the others call it “field laboratory”. Nature laboratory, it is appropriate because the designation of nature laboratory based on several conditions that contrasted with social problems. Meanwhile, the second naming, field laboratory is the way to complete the previous laboratory that mostly is inside room.

In the meantime, Social Science Education is comfortable and feeling meaningful with the title the laboratory of life. It is initiated first through the dispute between two regencies on their area borders. It is between Kediri and Blitar regency. This dispute continued in a court process that finally won by Kediri regency.

In the context of dispute, Faculty of Social Science of the Universitas Malang had assignment to study the social traces and cultures of Kelud Mountain. It is meant as the assistance to help Blitar to win the court process, although the result is not as expected.

The study on history and social culture of Blitar gives a document that Kelud Mountain is in Blitar from the beginning. After this study, the idea came out to make Blitar as the laboratory for the Faculty of Social Science for its departments and study programs. Researches had been initiated and supported by Faculty of Social Science through research that conducted by the lecturers. Along with and/or after that, students are also expected to use Blitar as field of study for their thesis or essay.

### **3.4 Society Knowledge In Daily Life**

Life reality is the basic knowledge and the development of knowledge. The knowledge itself is also the guidance of human attitude in daily life. Daily life shows themselves as reality, which is translated by people and it has subjective meaning for them as a coherent world. Daily life is not just accepted as reality by ordinary people, it has subjective meaning in their life. It is a world from their thoughts and actions and are maintained as “the real one” by the thoughts and the actions (Berger & Luckmann, 1990:29).

In daily life, awareness is always intentional. It is always directed on object of something, like the analog of thinking and thinking always referred to object or think of something. Likewise, awareness cannot stand-alone. The possibility is awareness on something. Natural reality of daily life is something ordered and organized. Moreover, daily reality is also structured and organized neatly, here and nowadays. The everyday reality would always display an intersubjective reality. This intersubjective reality differentiating daily life to other recognized realities (Berger & Luckmann. 1990: 31-33).



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This principle made life as laboratory rich of knowledge. It also answering and confirming that there is a reason of Social Science Education calls it as life laboratory.



### 3.5 Example Of Using “Life” Laboratory

One of life reality that can be used as the laboratory is family. Sociologically, it is the smallest social institution. It can be explained and/or elaborated to the frame and order of geography, history, sociology, economy, and others, as it is described below.

First, the consideration on whose family it is and how far the location of this family to school and does the family and/or school in town or village or between both. Furthermore, how the geographical condition where the family lives in and how the environment is. Second, in the historical perspective, it can be described and/or explained how the father and mother is born, married, had their first child, and since when the family lived in the house. The answers that reveal historical aspects of the house where the family lived will be an episode of materials for Social Science Education. From the perspective of history education, it is also studied on how inheritance values of a parent are inherited to children or family, either by grandfather and grandmother, servants, and other families who live in the house or in the family. Third, sociologically it also can trace social interaction between family members, parts of social practice where it can be executed as an object. It is also the externalization and internalization aspect of social practice of the family. Family is part of life reality. Family in daily attitude will determine and be determined by norms and values in community or in family itself.

In its development, the life laboratory is not only limited to the daily routine of life. Along with the development of the 4th industrial revolution, Schwab (2016) saw that the development of technology became the driven factor of change and could not be separated in life, both work and every day activity. However, what is the impact on social science laboratories? Inevitably, as a growing science, social science must be able to develop technology not only as a supporter, but also as an inseparable part. The development of technology-based social laboratories was also developed by Ryssevik (1991) who developed social data owned by the Norwegian government to become a game software which later became a form of social science learning. The same technology can also be developed by looking at the game not only as a pleasure, but as a form of learning method even a simulator of social reality.

Development of live laboratory technology-based can also be developed through the World Wide Web. In his research Piper (1998) developed a psychological experiment with the World Wide Web. Today, with the rapid development of social media, social media can be a form of laboratory. Various opportunities are still open and still require suggestions from various parties. Not only how to develop the laboratory as a standard form, but also how the laboratory can have the character of life, it can be adjustable but can still represent science, with scientific step to answer curiosity and build theoretical construction according to the needs of the nowadays life.

## IV. CONCLUSION





As though someone who finally arrived at their destination, this paper also comes to conclusion formulated as follow:

- 1) It's been the time for the social science of the humanities to consider and actualize laboratory as an effort to increase the quality of the research or study result. It also means that no matter how small or no matter how simple it is the social science education should pioneer the materials to be a laboratory. Besides, it can also utilize life reality and life itself as learning facilities to social science education.
- 2) An *Outdoor* laboratory can be started from the simplest reality as the result of construction about school, family around school and/or the student's family. Families outside school are the basic material of the cheapest laboratory in life. It is only needed a willingness to think and thinking the design or its learning design. After family, it can increase toward the neighborhood (RT/RT and RW/Rukun Tetangga and Rukun Warga) to be a laboratory as part of life and put life reality as a knowledge source. Furthermore, laboratory can expand into social media as part of nowadays life.
- 3) After procurement stub and/or the use of laboratory actualized, there should be cooperation between the schools to teach and utilize each other life as a laboratory for social science education. It must be held that the world has changed and we should be dare to change to actualize mutual goals of creating a good laboratory for social science education, either indoor or outdoor.
- 4) Members of the community should have attention to the development of a laboratory; it is either in the supply, its maintenance, and its usage. In line with the implementation of K-18, it demands academic community to have creation and innovation in the existence of a laboratory for social science education.

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