Pedagogia Jurnal Ilmu Pendidikan

Journal homepage: http://ejournal.upi.edu/index.php/pedagogia

A Sociological Review of School-Based Learning Laboratories

Atik Catur Budiati

Department of Sociology and Anthropology Education, Faculty of Teacher Training and Education, Universitas Sebelas Maret, Solo, Indonesia

Correspondence: E-mail: atikcaturbudiati@staff.uns.ac.id

A B S T R A C T

This study aims to develop the construction of sociology laboratory in learning to integrate the theoretical knowledge of students, enhance the practical competence of students and enhance the teaching quality. In this study, which takes a constructivist approach and employs a qualitative descriptive style. The technique in data collection included class observation, and document analysis. The aim of class observation was to identify the activities of sociology learning including the learning method or model, teacher's activities, students' activities, learning sources, and learning media. The document analysis included a set of learning, social engineering product as the students' assignment, and a document of curriculum policy. The results of the study showed that first, learning sociology is learning about community; second, learning sociology is learning about sociological theories, and research methodology; and third, to learn the community through sociological theories, it requires scientific activities by practicing the research method. Those three definitions of sociology learning become the base of the construction of sociology laboratory in learning, including the effort to implement the sociology knowledge (cognitive competence) in analyzing the social issues by practicing the simple research method (psychomotor competence) in order to increase the sensitivity and concern for students to be critical and capable of finding the solutions to social problems (affective competence).

A R T I C L E   I N F O

1. INTRODUCTION

Currently, two national curricula are being implemented in Indonesian secondary education: the 2013 Curriculum and the Merdeka Curriculum. In the 2013 Curriculum, the objectives of sociology education are defined as follows: to develop students' understanding of sociological knowledge, to foster the application of this knowledge in addressing social issues through improved social skills, and to cultivate students' sensitivity, concern, and responsibility in resolving societal problems (Ministry of Education and Culture Regulation No. 59 of 2014). In contrast, the Merdeka Curriculum, as outlined in the Decree of the Head of the Educational Standards, Curriculum, and Assessment Agency (Number 008/H/KR/2022), identifies four key learning objectives for sociology: adaptability to social changes in the surrounding environment, awareness of self-identity within social groups, civic responsibility in addressing societal issues and conflicts, and the ability to collaborate and take collective action to address public concerns and build civil society. From these two curricular frameworks, it is evident that sociology education aims to develop cognitive competence through the acquisition of sociological knowledge, psychomotor competence in the form of social problem-solving skills, and affective competence through civic awareness and engagement with public life.

Sociology, as a discipline within the social sciences, centers on human behavior within social contexts. One reflection from the American Sociological Association (ASA), commemorating 95 years of sociology instruction at the secondary level, highlights that high school sociology content typically emphasizes current social issues and civic education, which are more engaging to students than abstract theoretical concepts or methodological discussions (DeCesare, 2005). The ASA (2015) further states that sociology education investigates and interprets group structures, institutional processes, and interpersonal interactions. According to ASA national standards, sociology instruction at the middle and high school levels should encompass four key domains: (1) The Sociological Perspective and Methods of Inquiry; (2) Social Structure: Culture, Institutions, and Society; (3) Social Relationships: Self, Groups, and Socialization; and (4) Stratification and Inequality. Scholars have also emphasized the importance of embedding four pedagogical principles in sociology instruction: fostering sociological imagination, embracing the discipline's multiparadigmatic nature, recognizing the complexity of social realities, and employing multi-level analyses (Ferreira & Serpa, 2017; Ormerod, 2020).

Central to the study of sociology are the concepts of experiment and hypothesis (Gërxhani & Miller, 2022). Experiments are closely associated with laboratory-based learning, while hypotheses represent the foundation of scientific discourse. These concepts highlight the need for a learning space, both physical and conceptual, that facilitates the development of sociological reasoning, including theory construction and empirical inquiry. Historically, the sociology laboratory emerged as a metaphor for a systematic and empirical approach to studying society, particularly within the tradition of the early 20th-century Chicago School (Guggenheim, 2012; Swedberg, 2012). In this context, the idea of a sociology laboratory in schools can be seen as a natural extension of the broader development of social science laboratories. These environments are conceptualized not only as spaces for conducting experimental research, but also as platforms for engaging with complex societal challenges through collaborative, systemic, and innovative approaches (Hassan, 2014; Popa et al., 2018; Romero-Frías & Robinson-García, 2017).

Learning itself is inherently a social process and the foundation of intellectual development in sociocultural contexts (Eun, 2023; Lantolf & Poehner, 2023). Constructivist learning theory

posits that learners construct knowledge through interaction with their environment and engagement with others. Knowledge is not passively received but actively built through processes of socialization, adaptation, and meaning-making (Maiese, 2017; Suhartini et al., 2019; Woolfolk et al., 2013). In this view, teachers serve as facilitators, enabling students to connect new information with prior understanding and to transform experiences into structured knowledge (Amineh & Asl, 2015). Research has shown that restructured learning strategies grounded in constructivism can enhance academic performance and foster greater engagement, particularly among at-risk students (Adarbah & Jajarmi, 2022; Harland et al., 2019).

In summary, constructivist pedagogy supports the development of students' analytical and interpretive abilities through active participation, social interaction, and experiential learning. When aligned with the principles of social science laboratories, this pedagogical model supports the theoretical foundation for implementing a sociology laboratory in schools. The purpose of this study is to develop a conceptual and theoretical design for a school-based sociology laboratory, grounded in constructivist learning theory and the historical development of social science laboratory practices.

2. METHODOLOGY
2.1 Research Design
This study employed a qualitative descriptive research design grounded in a constructivist paradigm. The primary aim was to gain a deeper understanding of sociology learning documents and in-class learning activities as the foundational basis for conceptualizing a school-based sociology laboratory. Constructivism was adopted as the guiding theoretical lens, positing that social reality is co-constructed through interaction and interpretation. In this view, knowledge is not merely transmitted but collaboratively negotiated, with learners actively participating in meaning-making through dialogic engagement (Mishra, 2018).

2.2 Data Collection
Data were collected through classroom observations and document analysis across three secondary schools. Observation focused on teacher-student interactions and classroom activities, using an interaction analysis approach to examine how pedagogical messages were conveyed and interpreted. This approach enabled the researcher to capture the dynamic communicative strategies employed by sociology teachers and the behavioral responses of students. Documents analyzed included syllabi, lesson plans, learning facilities, student assignments, and relevant instructional materials. Table 1 outlines the categories of observational data, indicating whether each item involved interactional or static features.

Table 1. Observation Data Type

Object of Observation	Interaction	Nature
Syllabus	-	√
Lesson plan	-	√
Learning facility	–	√
Interaction between teacher and student	√	-
Teacher activity in class	√	√
Student activity in class	√	√
Student assignments	-	√

2.3 Data Analysis

Data analysis was conducted through a four-stage interpretive framework proposed by Greening (2019): (1) Bracketing, a data reduction process to isolate relevant information; (2) Intuition, the identification of emergent meanings from the observed phenomena; (3) Analyzing, interpreting those meanings within the study's sociological framework; and (4) Describing, presenting the interpreted data in narrative form. To ensure theoretical coherence, the analysis was guided by Fairclough & Fairclough (2015) critical discourse framework, which considers three interrelated dimensions: social structures (e.g., national curriculum policy), social practices (as reflected in pedagogical documentation), and social events (as evidenced in classroom interactions). These analytical components formed the basis for evaluating the conceptual relevance and potential framework for implementing a sociology laboratory in Indonesian secondary schools.

3. RESULT AND DISCUSSION

3.1 Result

In Indonesia, sociology is a subject in high school, which initially was taught in the 1984 Curriculum. At that time, sociology learning was still combined with anthropology. Then, it was separated from anthropology during the 1994 Curriculum. From 1984 until today, there have been 7 changes in the structure of the sociology curriculum in school. Currently, the curricula applied in school are the 2013 Curriculum and the Merdeka Curriculum (Merdeka Curriculum), particularly for schools declared as the Activator Schools. The 2013 curriculum has been designed based upon the objectives of the National Education System and National Education Standards, while the Merdeka Curriculum adds the Strengthening of the Profile Project of Pancasila Students.

Table 2. Document Analysis of Lesson Plan In Sociology Learning

Review Aspect	2013 Curriculum	Merdeka Curriculum
The formulation of learning indicators	a. Arranged based upon basic competences b. Using operational verbs of C4, C5, or C6 c. Developing cognitive, affective and psychomotoric competence	a. Referring to the phase of learning achievements b. Making the indicators of the profiles of Pancasila students
The selection of learning method	a. Adapting the indicators of competence achievement b. Adapting the characteristics of students c. Developing the learning system including Discovery Learning, Problem Based Learning, Project Based Learning	Developing the learning system, i.e. Discovery Learning, Problem Based Learning, Project Based Learning
Learning Scenario	a. Clearly presenting preliminary, core and closing activities	a. Learning steps include literacy, critical thinking, cooperation, communication and creativity

Review Aspect	2013 Curriculum	Merdeka Curriculum
	b. Learning steps using scientific approach including observing, asking questions, collecting information, associating information and communicating it. c. Adjusting it with learning method d. Organizing the activities systematically in the sequence of materials e. Managing learning time effectively	b. Developing differentiated learning
Research Design	a. Using an authentic approach b. Adjusting the competence achievement c. Arranging the assessment instrument covering three points: cognitive, affective and psychomotor	Using the assessment concept including cognitive, affective, and psychomotor assessment as one unit

Referring to Table 1 in preparing the lesson plan, the teachers use the curriculum structure applied in school as a basis. There is no significant difference from the implementation of the two curricula. Sociology teachers prepare the lesson plans based on 6 activities, i.e. first, identifying each basic competency and learning achievement; second, compiling the indicators of competency achievement based upon the students' needs; third, designing learning activities based upon the achievement indicators; fourth, developing the learning resources, teaching materials, student worksheets and media based upon the students' needs, fifth, developing an assessment instrument based upon the approach used and sixth, developing lesson plans for learning activities.

Teachers have developed learning that is not monotonous. Based on the research results, most of the teachers have implemented scientific learning including the application of discovery learning model, problem-based learning, and project-based learning. The development of this learning strategy is an effort for sociology teachers to organize a cooperative learning involving students by utilizing any existing learning media. What becomes a challenge is to involve the community into sociology class in which it requires a strategy to introduce the sociological concepts for real. One of the efforts is by asking the students to make social engineering product as an indicator of students' understanding of social reality and social issues. Teachers have developed the school assignments into project assignments in the form of social products such as posters, simple research reports, making resumes and making documentaries using simple handphone. Various products created by students technologically and substantially require infrastructure.

Sociology teachers have implemented a variety of learning models and methods. Here, students need various school facilities such as software applications, filmmaking equipment, voice recorders and reference books to accomplish the assignments given. This is in consideration that in the process of analyzing social problems, students need facilities to

present and disseminate the results that have been made. For instance, in conducting simple research activities, students need a voice recorder to record interviews, a camera to record the activities of research subjects, and reference books to analyze the results. Although research at the school level is seen still simple, students need to understand the use of various technologies in supporting research activities.

There is no a significant difference in terms of the scope of sociology materials developed in Merdeka Curriculum. Overall, the sequence in learning the sociology materials is similar but the differences are found in the sub-materials. There are some additions in social institution materials in Merdeka Curriculum. However, in its implementation, the concept of social institutions is also taught by the teachers in 2013 Curriculum. Importantly, sociology teachers need to be more conscientious in developing sociology materials since there are some repetitions of the sociology concept but has a different context. In addition, the sociology materials taught are more contextual so that it reduces students' perception that studying sociology is learning to memorize. For this reason, teaching the concept of sociology needs to be linked to the facts occurred in society.

Table 2. Scope of Sociology Materials for Senior High School

2013 Curriculum	Merdeka Curriculum
Class X	
Basic Sociology Concept, Social Phenomena, Social Reality, Individuals, Groups, and Social Relations	Sociology Functions, Self-Identity, Social Action, Social Relationship, Roles of Social Institutions
Simple Social Research Method	Simple Social Research
Class XI	
Social Group, Social Problems	Social Group, Social Problems
Equality Principles towards Social Differences	Equality Principles towards Social Differences
Social Conflict and Conflict Resolution	Social Conflict and Violence, Social Integration
Class XII	
Social Changes, Globalization Impacts, Social Gaps	Social Changes, Globalization Impacts, Social Gaps
Community Empowerment	Local Wisdom based Community Empowerment

3.2 Discussion

In the Merdeka Curriculum, in each competency achievement, students are expected to have an ability to conduct simple social research using the basic sociology concepts that have been studied. To conduct a simple research, students need the support of facilities such as reference books, video recorders and computers/laptops to compile their reports. Also, in the Merdeka Curriculum, there is the strengthening of the Pancasila Student Profile Project (P5); school here needs collaboration of various subjects to realize it. There are 7 sociological themes including global climate change, local wisdom, Bhinneka Tunggal Ika (Unity in Diversity), building body and soul, the voice of democracy, engineering and technology to build the NKRI (Unitary State of the Republic of Indonesia), and entrepreneurship. These themes are closely related and close to sociology learning. Thus, it can be a momentum for

teachers to develop broader sociology materials by collaborating with other teachers, practitioners or related institutions.

Furthermore, sociology teacher conducts a project-based learning by combining indoor and outdoor activities. The outdoor activities are conducted out of effective class hours since students will do simple research, and make a report to be presented. This situation illustrates that sociology learning has been carried out using a contextual-based learning approach. Teacher here acts as a learning facilitator; while students are able to develop creativity with the help of existing infrastructure in school. Sociology learning is designed through observation of a case or phenomenon, direct research, or collaboration with social programs. The main purpose of this learning management is to develop students' competence in applying sociological concepts to see various existing social problems. This learning opens opportunities for students to connect and strengthen theoretical concepts taught in class. It also targets various learning outcomes including learning experiences in seeing the world of society more clearly and factually though it is in a prototype concept. Sociology learning taught will be more meaningful if students are invited to conduct scientific and technical experimental activities on social problems contextually. This condition can be done with the support of the existence of a sociology laboratory in school. The basic concepts of sociology are focused on three things: sociological thinking including research theories and methods, basic concepts (pure sociology), and sociological studies (applied sociology).

Sociology laboratory in school is developed from the existing social science laboratory. The development of social science laboratory in school can be explained in 3 stages: in early 20th century, 20th century and 21st century. In early 20th century, the development of social science laboratory was dominated by the concept of natural science laboratory; hence, experimental activities were associated with direct problem solving. This condition then brought an impact on the changes in teaching patterns among social science teachers, from being information presenters to be information guides for students. The purpose of social science learning was directed at the introduction of the life reality through the interpretation of social data and participation in solving social problems (Duverger & Anderson, 2020). Social scientist Mary Sheldon Barnes offered learning with social science laboratory method. Here, teachers were encouraged to leave the test books and the classroom to move to a special room equipped with maps, pictures, books and a work desk. Students were asked to critically interpret what was taken place in the provided pictures and maps (Brugar, 2017). In carrying out the learning process, teachers needed assignment sheet, study guides, reference lists, discussion topics and maps (Pribadi et al., 2021).

Furthermore, in 1909, the development of social laboratory through the annual meeting of the American Historical Association identified social laboratory equipment that must be equipped with maps, globes, pictures, newspapers, books and desks and work chairs for students. Also, the equipment with modern technology such as film projectors, film screens, film lamps and multigraph machines were required. Teacher as the subject in managing social science laboratory applied a teaching pattern of student-centered learning method. Teaching method through social science laboratory was focused on students as the active learners. While, social science teacher no longer acted as the conduit of information, but as the broadminded guide, coach, and referee.

At that time, students were expected to conduct their own research on certain topics using dictionary, map, pictures, encyclopedias, magazines, newspapers and journals as the sources of research data. Then, they used equipment and technology to create social products such as books, maps, pictures, scales, posters or other visual displays with an aim to describe their

understanding and interpretation of the subject being studied. Furthermore, in the 1970s the equipment needed by social science laboratory were tape recorder and video cassette, television, film, projector, and microfilm reader (Frederick, 2023). Learning through a social science laboratory used a teletype machine to collect news. With guidance from the teacher, students interpreted the facts provided by the news.

Social science learning through a laboratory approach also involved library research. In collaboration with existing librarians, the teacher designed the activities by focusing on reference sources in the library (Majidah & Rullyana, 2024). Social science learning was not monotonous. However, the social science laboratory experiences such as making drama projects and taking data in government offices were not been carried out for the absence of special room for social science students to develop the experimental activities. Hence, there was an initial need to design a social science laboratory space specifically to make social experiment activities carried out flexibly.

In the 21st century, social science laboratory emphasizes student-centered learning and social problem solving. The development of laboratory has been driven by the existence of educational and technological advances, and equipment that helps to create and build various social science concepts. Rapid technological advances, accompanied by an equally rapid decline in costs, become the reasons to reconsider the development of social science laboratory in the 21st century. This means that technological advances provide strong evidence to support the existence of social science laboratory. Social science concepts, lessons, skills, and ideas can be taught and learned when students are technology literate. It was determined that each application of the learning model resulted in a different rise in students' conceptual mastery ability (Gani & Zulaikhah, 2022).

The use of technology can explore the main sources of information. For instance, students are capable of filtering the initial concepts from textbook authors presenting a perspective from one side. However, with the ease of obtaining other sources of information, it can encourage students to develop critical, reasoning and problem-solving abilities. The argument is that the very nature of primary sources is to be able to help students to "avoid" the act of simply "absorbing" the material and lead them to analyze and evaluate those sources, and recognize bias and potential significance of information in the process. It can be concluded that the available technological resources can support both teachers and students to develop social science laboratory. Laboratory equipment includes computers, printers, smartboards, video cassette recorders and televisions. Social science laboratory can support student research, develop cooperative learning, and improve students' presentation skills using multimedia. Learning of sociology involves more than just textbooks, but teachers should work harder to provide the best educational opportunities for students' by exposing them to self-identity values outside of the confines of textbooks (Azmi, et al., 2020).

Referring to Figure 1, it can be assumed that the social science laboratory develops along with the development of existing technology. In the 21st century, the development of social science laboratory is focused on student participation in solving social problems. Also, the demand of the increasingly complex community development has triggered the changes into student-centered learning. The competence of students in conducting social research also becomes a standard in developing social science laboratory. This then has brought an impact on the existence of sociology laboratory. Various social challenges occurred in society encourage students to have sensitivity and concern for the sustainability of various existing social problems. For this reason, teachers have to develop learning with existing facilities in sociology laboratory so as to provide a new face for students to apply sociological

concepts/theories. The development of sociology laboratory refers to a pragmatic effort in analyzing various existing social problems using a sociological approach so that it is possible to make students able to have both critical thinking and competence in problem solving. Pedagogical approach in answering various social problems is a part of the learning by doing process as expected by John Dewey. This constructs an understanding that experimental activities as part of sociology learning in school are similar to the sociological approach at the beginning of its discovery.
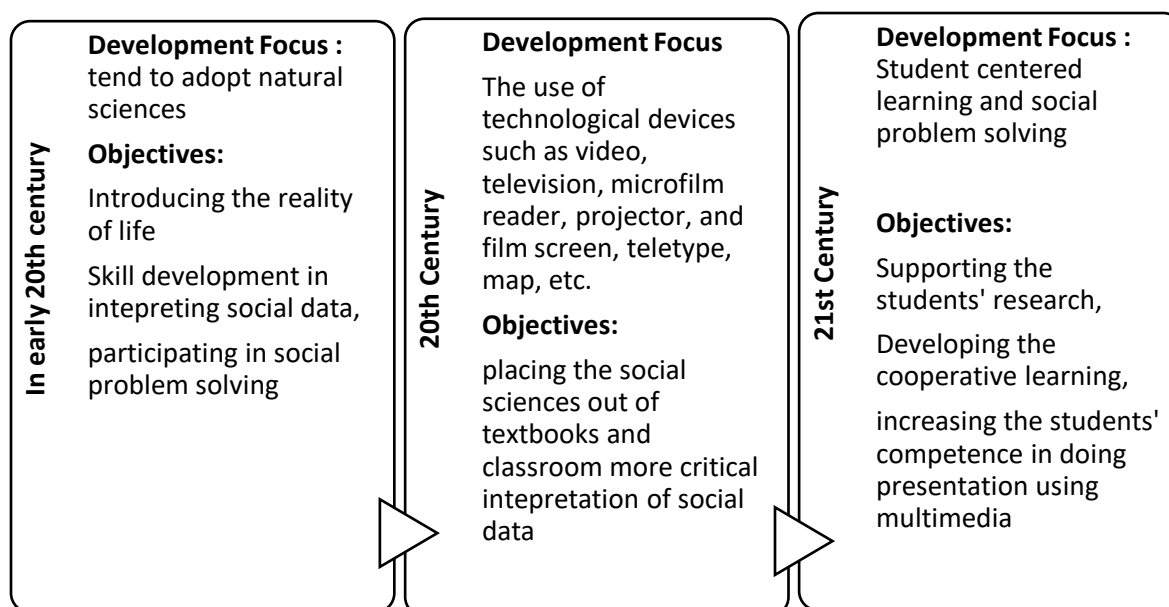

Figure 1. Development of Social Laboratory in School

Referring to the concept initiated by Dewey about the school laboratory, the existence of sociology laboratory becomes a space for the emergence of ideas as well as a learning community. Students learn to produce knowledge through experimental activities based on the achievement of learning competencies. With Dewey's point of view, we can approach the resolution of challenging social and educational issues with a lot of current thinking as well as a lot of common sense (Williams, 2017). Sociology focused on research activities that refer to experimental activities (research methods) and hypotheses (using the perspective of sociological theory) has encouraged the need for a sociology laboratory in school. As shown in Table 2 that presents the scope of the sociology materials and their reflection, the research method and basic theories/concepts of sociological theory are the bases for learning sociology in school. Reflecting on the concept of social laboratory, conducting research is deemed important for students to find out the concept of knowledge through learning activities as designed by teacher. This approach becomes a basis that learning is a process of social construction. Furthermore, from Figure 1 on the development of the social science laboratory, it can be constructed that its existence focuses on the competence of students to recognize the reality in society, interpret data, and participate in problem solving. These three concepts become the basic findings in building a theory of sociology laboratory in school. In addition, the existence of technology is a key word related to the facilities and infrastructure in the sociology laboratory space.
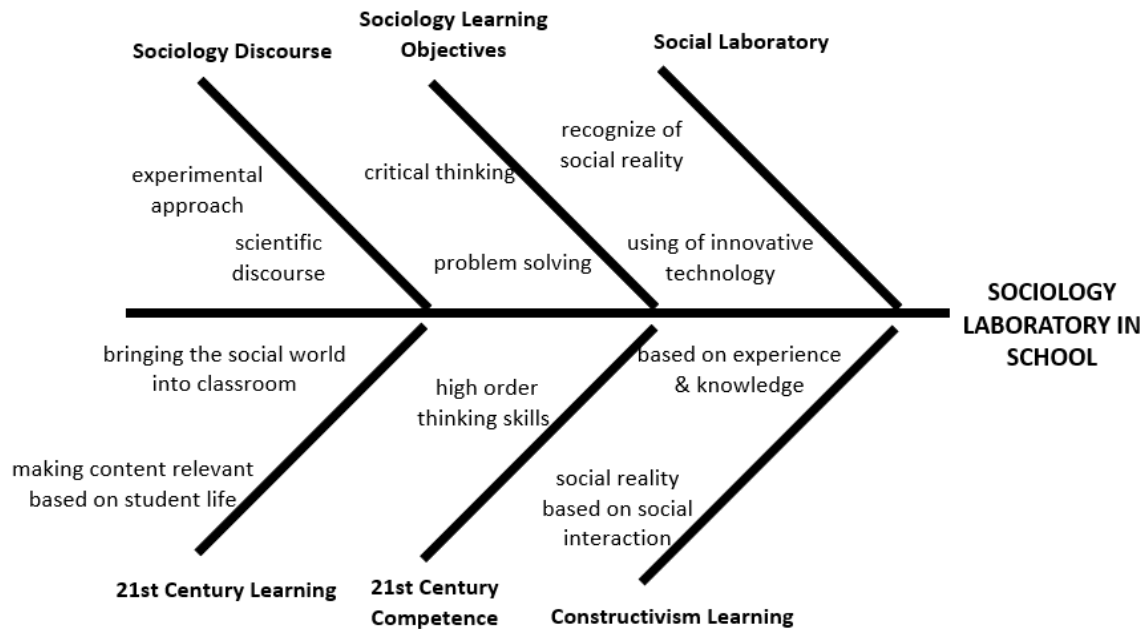
Figure 2. Construction of a Sociology Laboratory Based on Learning at School

The results of research conducted by Better (2013) showed that improving students' sociological understanding can be done by developing observational skills based upon students' daily experiences. The sociological concepts learned are used as a tool to analyze what students have observed. This condition then creates students' ability to do sociological observation and build their critical analysis skills in observing the social world. Better (2013) assigned projects to his students based upon the materials of sociology. To study social values and norms, Better, for example, asked students to violate the norms in society and to write down their experiences regarding events that might occur if the social order is broken and the way to maintain that social order. The learning strategy carried out (Better, 2013) provided the benefit of changing the way students in seeing the world such as understanding the inequalities in the world, seeing opportunities for progress and change for society to be better. This concept can be found in learning through the laboratory. In addition, Jedynak & Kinal (2014) argued that conducting research on the community could help to determine their condition and dynamics so that it can propose effective ways to fix any deficiencies hindering the functions of the community.

Activities designed in sociology laboratory have fulfilled the learning elements of social constructivism according to Cruickshank et al. (2003). First, active learning. Through these three activities, students actively carry out learning activities including 3 stages: observing, writing and presenting. Second, students are involved in an authentic and situational learning. They learn to understand the concept of sociology associated with people's lives surrounding. Third, student learning activities must be interesting and challenging. Learning emphasis on critical thinking and problem solving requires social analysis skills and is able to produce social engineering products. Fourth, students must be able to relate new information to information they already have in a process called as "bridging". The sociology laboratory bridges the application of sociological knowledge more realistically through a simple scientific research technique students need to have. Fifth, students must be able to reflect on the knowledge being studied. The three learning designs are part of the practice of applying sociological

knowledge in viewing social phenomena and problems. Sixth, the teacher acts as a facilitator who can assist students in constructing knowledge. This can be seen from the teacher's activities during the learning process by giving guidance. Seven, the teacher must be able to provide assistance in the form of scaffolding needed by students in the learning process. The scaffolding made by the teacher is carried out through the existing facilities in sociology laboratory, including the design of learning activities.

Sociology laboratory in school is developed to support a meaningful and interactive learning because it can encourage teachers to design lesson plans referring to practical activities. This is a step to involve sociology teachers and students in providing ideas for finding solutions to social problems. Thus, it can be the first step in educating students' character in seeing the existing social changes. The biggest expectation from building the concept of sociology laboratory is that its design for learning can be a scaffold in the practical activities of sociology subject at school. The sociology laboratory in school is an effort to apply knowledge of sociology (cognitive competence) in analyzing social problems (psychomotor competence) according to the learning materials of sociology. By so doing, it can increase students' sensitivity and concern in being critical and able to formulate solutions to the existing social problems (affective competence). This is also in accordance with the objectives of learning sociology, i.e. the competencies achieved by students focused on caring for social problems and efforts to solve them.

4. CONCLUSION

The findings of this study underscore the relevance of integrating a sociology laboratory within the secondary school setting as an essential pedagogical innovation. Rooted in Dewey's concept of the school laboratory as an interactive learning community, the sociology laboratory is envisioned as a space where students actively engage with sociological knowledge through experimental and inquiry-based activities. Tracing the historical trajectory of the social science laboratory, from its early 20th-century focus on social realities and problem-solving, through its 20th-century emphasis on critical data interpretation, to its 21st-century orientation toward student-led research and technology-enhanced learning, it becomes evident that the sociology laboratory plays a vital role in developing students' analytical and collaborative competencies.

Aligned with the objectives of sociology education, the proposed sociology laboratory bridges theoretical understanding (cognitive competence), applied analysis of social issues (psychomotor competence), and value-based critical engagement (affective competence). The necessity of its physical presence stems from the nature of sociology itself, which parallels natural sciences in its methodological emphasis on experimentation and observation. Furthermore, the evolving paradigm of sociology as a practice-based, rather than purely theoretical discipline, necessitates a shift away from traditional, lecture-centered classrooms toward dynamic learning environments. Future research should further investigate the operational design, pedagogical impacts, and institutional readiness for implementing sociology laboratories, particularly in diverse educational contexts.

REFERENCES

Adarbah, H., & Jarjami, H. (2022). Active learning for Omani at-risk students through educational technology: a case of content-based language instruction. *International Journal of Society, Culture & Language, 10*(2), 125-136. https://doi.org/10.22034/ijscl.2022.550654.2583

American Sociological Assosiation. (2015). National standards for high school sociology. https://www.asanet.org/wpcontent/uploads/savvy/ASA%20HS%20Standards%20(Final).pdf

Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages, 1*(1), 9-16.

Azmi, M. N. L., Isyaku, H., Engku Ali, E. M. T., Hidayah, A. T., Yah@Alias, M. H., Anas, M., & Suhaimi, N. I. (2020). Teachers' perceptions of islamic self-identity formation through language learning among students in selected religious secondary schools. *Journal of Society, Culture & Language, 8*(1), 82-91.

Better, A. (2013). Learning from Experience: Integrating Students' Everyday Lives into the Urban Community College Sociology Classroom. American Sociologist, 44(4), 385–395. https://doi.org/10.1007/s12108-013-9192-7

Brugar, K. A. (2017). "We don't have students colour maps anymore…" a survey of social studies teachers use of visual materials. *Journal of Visual Literacy, 36*(3-4), 142-163. https://doi.org/10.1080/1051144X.2017.1397380

Cruickshank, D., Jenkins, D. B., & Metcalf, K. (2003). The Act of Teaching. Mc-Graw Hill.

DeCesare, M. (2005). 95 Years of teaching high school sociology. *Teaching Sociology, 33*(3), 236–251. https://doi.org/10.1177/0092055X0503300301

Duverger, M., & Anderson, M. (2020). *Introduction to the social sciences (RLE Social Theory)*. Routledge. https://doi.org/10.4324/9781003074458

Eun, B. (2023). Teachers learning to teach: professional development based on sociocultural theory for linguistically and culturally diverse classroom. *Professional Development in Education*, *49*(5), 914-924. https://doi.org/10.1080/19415257.2021.1879224

Fairclough, N., & Fairclough, I. (2015). Textual analysis. In *Routledge handbook of interpretive political science* (pp. 186-198). Routledge. https://doi.org/10.4324/9781315725314

Ferreira, C., & Serpa, S. (2017). Challenges in the teaching of sociology in higher education. contributions to a discussion. *Societies, 7*(4), 30. https://doi.org/10.3390/soc7040030

Frederick, D. E. (2023). Automation, the growth of online information and digital formats: the story of libraries. *Library Hi Tech News*, *40*(2), 1-11. https://doi.org/10.1108/LHTN-02-2023-0023

Gani, A., & Zulaikhah, S. (2021). The effectiveness of team assisted individualization learning model using the sociodrama method in increasing the concept of mastery ability in islamic education learning. *Journal of Society, Culture & Language, 10*(2), 125-136. https://doi.org/10.22034/ijscl.2021.247369

Gërxhani, K., & Miller, L. (2022). Experimental sociology. In *Handbook of Sociological Science* (pp. 309-323). Edward Elgar. https://doi.org/10.4337/9781789909432.00026

Greening, N. (2019). Phenomenological research methodology. *Scientific Research Journal, VII*(V), 88-92. https://doi.org/10.31364/scirj/v7.i5.2019.p0519656

Guggenheim, M. (2012). Laboratizing and de-laboratizing the world: Changing sociological concepts for places of knowledge production. *History of the Human Sciences, 25*(1), 99-118. https://doi.org/10.1177/0952695111422978

Harland, F., Stewart, G., & Bruce, C. (2019). Leading the academic library in strategic engagement with stakeholders: A constructivist grounded theory. *College and Research Libraries*, *80*, 319-339. https://doi.org/10.5860/crl.80.3.319

Hassan, Z. (2014). *The social labs revolution: A new approach to solving our most complex challenges*. Berrett-Koehler Publishers.

Jedynak, W., & Kinal, J. (2014). Ethical and Technological Aspects of the Learning Process in Sociology. *Procedia-Social and Behavioral Sciences*, *140*, 328-332. https://doi.org/10.1016/j.sbspro.2014.04.429

Lantolf, J. P., & Poehner, M. E. (2023). Sociocultural theory and classroom second language learning in the East Asian context: Introduction to the special issue. *The Modern Language Journal*, *107*(S1), 3-23. https://doi.org/10.1111/modl.12816

Maiese, M. (2017). Transformative learning, enactivism, and affectivity. *Studies in Philosophy and Education*, *36*(2), 197-216. https://doi.org/10.1007/s11217-015-9506-z

Majidah & Rullyana, G. (2024, December). The Digital Odyssey: Mapping Science and Research in Digital Libraries (1984–2023). In *6th Open Society Conference (OSC 2024)* (pp. 228-247). Atlantis Press. https://doi.org/10.2991/978-2-38476-340-5_20

Mishra, R. (2018). Social constructivism and teaching of social science. *Journal of Social Studies Education Research, 5*(2), 1-13. https://doi.org/10.17499/jsser.22283

Ormerod, R. (2020). The history and ideas of sociological functionalism: Talcott Parsons, modern sociological theory, and the relevance for OR. *Journal of the Operational Research Society*, *71*(12), 1873-1899. https://doi.org/10.1080/01605682.2019.1640590

Popa, Eugen. Blok, Vincent. & Wesselink, Renate. (2018). *Social lab methodology manual*. Wageningen University and Research.

Pribadi, B. A., & Susilana, R. (2021). The use of mind mapping approach to facilitate students' distance learning in writing modular based on printed learning materials. *European Journal of Educational Research*, *10*(2), 907-916. https://doi.org/10.12973/eu-jer.10.2.907

Romero-Frías, E., & Robinson-garcía, N. (2017). Social labs in universities: Innovation and impact in medialab UGR. Comunicar, 25(51), 29-38. https://doi.org/10.3916/C51-2017-03

Suhartini, S., Sekarnigrum, B., Sulaeman, M. M., & Gunawan, W. (2019). Social construction of student behavior through character education based on local wisdom. *Journal of*

Social Studies Education Research, 10 (3),276-291. https://doi.org/10.12973/eu-jer.10.2.907

Swedberg, R. (2012). Theorizing in sociology and social science: Turning to the context of discovery. *Theory and society*, *41*, 1-40. https://doi.org/10.1007/s11186-011-9161-5

Williams, M. K. (2017). John Dewey in the 21st century. *Journal of Inquiry and Action in Education*, *9*(1), 91-102. https://digitalcommons.buffalostate.edu/jiae/vol9/iss1/7

Woolfolk, A., Hughes, M., & Walkup, V. (2013). The psychology of learning and education. In *Exploring Education Studies* (pp. 101-131). Routledge. https://doi.org/10.4324/9781315833682