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INFLUENCING FACTORS OF MEANINGFUL LEARNING IN HIGHER EDUCATION: A CASE STUDY OF MBKM KKN IN XY UNIVERSITY

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ABSTRACT

Modern learning has experienced many developments such as the digitalization of classes and the integration of production and education. One of these developments is the application of the Meaningful Learning concept by Ausubel. Meaningful Learning is learning that utilizes students' previous knowledge to build new, more in-depth knowledge. Meaningful Learning can be applied in Higher Education, namely in the form of Experiential Learning. An example the Merdeka Belajar Kurikulum Merdeka (MBKM) learning. MBKM consists of nine programs, where the author is focusing on discussing the Real Work Lecture (KKN) program in XY University, Indonesia. The aim of this research is to find out what factors influence the implementation of Meaningful Learning in higher education, especially in the KKN program. The research was conducted qualitatively, where the participants consisted of eight students who had taken part in the KKN program. Data was obtained through interviews and observation. Then the interview results were processed through thematic analysis. It was found that the environment, social support, and activities carried out can influence Meaningful Learning. In the case of eight KKN participants, a convenient and strategic location could help the participants' work productivity. Moreover, each group member can mix well so that the KKN program can run conducively. Lastly, the teaching program implemented in KKN helps participants to expand and deepen new skills such as classroom management and teaching. In conclusion, the factors that influence Meaningful Learning in Higher Education are the learning environment, social factors, and the programs implemented.

Keywords: *Meaningful learning, experiential learning, higher education, MBKM, KKN*

1. PREFACE

Technological and educational developments are two things that occur simultaneously (Qureshi et al., 2020). Modern learning introduces new and more efficient learning methods such as online classes, digitized learning, and the integration of production and education (Liao et al., 2021). Improvements have been made in many different levels of education, from elementary school to higher education such as college-level learning. These developments are made to further improve and deepen the understanding of the students about a certain topic. Classes at various levels of education integrate technological advancement to develop learning models. One such example is a study from Jap et al. (2022) in which the researchers develop a Science, Technology, Engineering, and Mathematics (STEM) learning model by utilizing the concept of Internet of Things for primary school students. Another example of this advancement in learning is the implementation of meaningful learning on Massive Open-Online Courses (MOOC) for university students (Ghazali et al., 2020). In both of these examples, it is shown that the implementation of modern technology and learning methods improves learning efficiency and students retain more knowledge from lessons. Meaningful learning is one of these methods that is shown to be a significant factor in positive learning outcomes.

Meaningful learning is a concept of learning that was first introduced by David Ausubel in 1960. The concept itself is defined by subsumption or prior knowledge about a certain topic of learning.

Students who know the basic concepts of a certain topic continue to reinforce their knowledge with the help of teachers by building on the prior knowledge. This process is called “anchoring”, where prior knowledge is continuously improved and corrected as the process of learning goes on (Agra et al., 2019). Meaningful learning consists of five characteristics: (a) Constructive; (b) Active; (c) Cooperative (Bryce & Blown, 2019); (d) Intentional; and (e) Authentic (Korucu-Kis, 2021). Constructive refers to how an individual can form new knowledge and reflect on the learning process (Korocu-Kis, 2021).

Meaningful learning can be implemented into many different forms of learning methods. One of these methods is through experiential learning. Numerous research have been conducted to identify the effectiveness of meaningful learning on experiential learning such as online classes, nursing school, dashboard learning, and specific subjects (Cadorin et al., 2016, Ghazali et al., 2020, Korucu-Kis, 2021, Kostianen et al., 2018). Experiential learning itself is a form of learning that is done through concrete experience (Morris, 2020). Experiential learning originates from a study by Brown et al (1991) as a way to improve organizational training through direct experience. However, it has since been utilized for educational purposes such as learning in schools (Morris, 2020). An example of this is a curriculum in Indonesia that focuses on hands-on work experience called Merdeka Belajar Kurikulum Merdeka (MBKM).

MBKM is a curriculum that was developed by the Indonesian Ministry of Learning, Research, and Culture to improve the overall human resource quality of higher education students. This is supported by research by Jung (2020) where it is stated that higher education is one of the best ways to improve human resource quality. MBKM consists of eight programs and other studies have investigated the learning aspect of MBKM programs such as internship and research (Tiatri et al., 2022; This paper focuses more on the KKN program which is a program that focuses on community service work for a certain period of time at a particular village or community (Direktorat Jenderal Pendidikan Tinggi Kementrian Pendidikan dan Kebudayaan, 2020).

An experiential learning program such as KKN can be enhanced with the implementation of meaningful learning (Polman et al., 2021). A prior study by Korucu-Kis (2021) also showed that meaningful learning method can be integrated into experiential learning in an elementary school setting. This study also identified the influencing factors of meaningful learning in an experiential learning setting. However, there have been no studies that investigated the influencing factors of meaningful learning in the context of experiential learning in MBKM KKN. This study will be valuable in expanding the literature review of meaningful and experiential learning implementation in higher education. Results from this study can also be used as a way to improve study effectiveness in students and enhance their mastery through experiential learning with meaningful learning.

2. RESEARCH METHOD

This research is carried out with the qualitative method and the design case study at XY University, Indonesia. The qualitative method is used because this is a fitting way to understand a central phenomenon through the experiences of the participants. The case study is a form of ethnography study in which the aim is to identify a certain “case” revolving around a program or event (Creswell et al., 2018). The data is collected through semi-structured interviews. The interview guide is made according to the characteristics of meaningful learning and additional questions related to the factors influencing meaningful learning are asked during the interview. An example of the interview question is “Did you set any learning objectives before following the KKN program?”

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There are eight participants that are selected through purposive sampling. Purposive sampling is a form of participant selection in which the participants are selected due to their relevance to the research topic (Andre et al., 2009). The eight participants are the students who are part of the MBKM KKN period of 2023/2024. The participants consist of 19 to 22-year-old undergraduate students from multiple faculties with two female and seven male students.

Table 1
Participant Description

Participant	Age	Sex	Faculty
R	22	Male	Machine Engineering
A	22	Male	Machine Engineering
A	19	Female	Machine Engineering
D	20	Male	Economy
M	21	Male	Management
J	19	Female	Law
A	22	Male	Information Systems
A	22	Male	Information Systems

The data collected from interviews are then written verbatim and analyzed thematically according to the characteristics of meaningful and experiential learning. Numerous factors will be investigated and kept not to properly form a clear overview of the factors that influence meaningful learning in the KKN program. The data from observation will be used as supplementary data to help support or prove the statements of the participants.

3. RESULT AND DISCUSSION

The KKN program was carried out for three weeks. The participants are divided into two groups and must develop work programs to help support the development of two schools each. The program was also done with weekly supervision by university lecturers. Based on the results of the interview and observation, there are five main points of interest that are found in every participant of this research: (a) work program; (b) duration of program; (c) prior knowledge; (d) social and environment; and (e) teacher guidance.

The work program of KKN was designed and developed by two teams. Each group is responsible for three work programs. The first group consists of five members and their work programs are teaching literacy and numeracy skills, socialization of computer-based examination, and project-based learning for elementary students. The second group consists of four members and their work programs are teaching computer skills, socialization of computer-based examination, and waste management skills for elementary students. Both groups carried out their work programs at the same time but in different schools. The first group leader, "A" reported that the work program was carried out after deep discussion with school teachers, university lecturers, and the school headmaster.

"The idea from the work programs that we did came from discussion with [school] teachers and the headmaster. We also did some observation and applied the work program according to the problems that they [the school] had." The second group leader, "J" reported that he formulated and organized the work program even before going to the KKN site.

"We have the idea of teaching computers before going to the schools. It came to us after discussion and because we had someone that is a part of the Information Systems faculty. Same with the

waste management program, a member saw that waste management is a big problem in every part of Indonesian society, that's why we made it into our work program." The process of observing, synthesizing, and carrying out a structured work program is in line with the characteristics of meaningful learning. More specifically the characteristics of "Authentic" and "Constructive". Solving real-life problems is the main point of these work programs. Teachers shared their grievances and each group was given a chance to solve the problems with their own solutions. The problem-solving process reflects the "Authentic" characteristic because the learning process implements real-life problems that require relevant problem-solving skills (Agra et al., 2019). This work program design is also reflective of the "Constructive" characteristic because learners form new knowledge from the work programs that are carried out.

The program lasted for three weeks. With the first week being reserved for early observation. This one week of observation was rated as too long by "A" as the time could have been used to carry out the work programs. "[The duration of the program was] Not enough, we spent too long on observation when we already knew what we had to do. It was also not efficient because we needed more time to carry out our work programs properly. Overall, it felt like we were being rushed." This perception of the short duration of the program and their solution of weekly meetings is reflective of the "Intentional" characteristic of meaningful learning. The participants are able to estimate the amount of time that is needed in order to complete their work programs and keep track of their progress by having weekly meetings.

Before the program, every participant reported that they had followed supplementary lectures. While every participant noted how the supplementary lectures were "enough" to help the program, three out of eight participants elaborated on how the lectures were not on point with the program. For example, "A" reported the following: "I feel like the lecture about medium, small, and micro enterprises was not implemented at all during our program because our program mainly focuses on education in school. It feels like a missed opportunity to teach about how to teach elementary-level kids instead. Because we never really had that experience before."

The prior knowledge that participants had before the KKN program was called subsumption. This is a key concept of meaningful learning in which the teachers or the More Knowledgeable Others (MKO) reinforce the prior knowledge (Sexton, 2020). In the case of the KKN program, the MKO is the program itself and the university lecturers. This prior knowledge is also a reflection of the "Active" characteristic of meaningful learning. Participants learn new things that were not familiar with their own faculties such as teaching elementary grade students. Participants also got the chance to implement their studies in real-life scenarios.

There were three participants that played a role in leadership. First is "A" as the coordinator of the KKN program for students. She reported that the social environment of the KKN program is supportive and conducive, despite having many differences from each other. "We [KKN participants] were very different from each other. But I am very grateful that we can work together so well and understand each other enough. It feels like a very tight-knit group. Almost like a small family."

This form of collaborative learning is a big part of meaningful learning. More specifically "Cooperation" characteristics. Learners help each other reach their learning goals while learning to work together. Skills that were taught in the supplementary lecture such as public speaking and mannerism are displayed in the program as they work with each other and with teachers. The researcher can also confirm this as we have observed the group homogeneity in the KKN program

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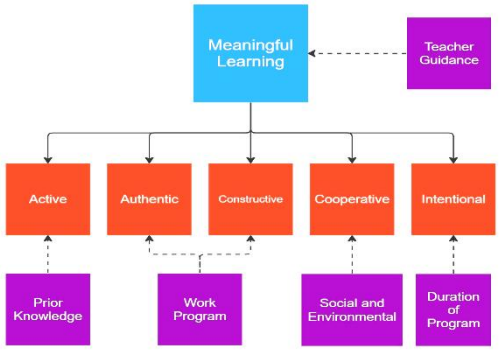
and how they are on great terms with the school teachers. Teamwork is also present as they work together constantly in order to complete the work programs on time.

There were weekly meetings that were made by lecturers to the participants. The aim of this meeting is to give feedback and guidance to the participants. However, five out of eight participants felt that teacher's guidance was limited while the other four reported that the guidance was very helpful in the program. As reported by "Y", a member of the second group, he felt that the teacher's guidance was enough and helpful: "She [the lecturer] was very helpful to us. We received a lot of feedback for the program and the guidance was quite enlightening."

Despite this finding, this must be taken with a grain of salt. Because it is important to remember that the researchers are also supporting the KKN program, so participants may be reluctant to share their grievances with the researcher. This factor has a direct influence on how well meaningful learning will be implemented. As seen by the guidance of both groups, one was seldom given while the other was reportedly more supportive. Participants of group one felt like it was more difficult to gauge their success while the other group reported more enjoyment and clarity while working in the KKN program. Following the findings and discussions above, the researcher provided a proposed model of influencing factors of meaningful learning in the experiential learning setting of the KKN program (Figure 1).

Figure 1
Proposed Model of the Influencing Factors of Meaningful Learning in Experiential Learning Setting of MBKM KKN



4. CONCLUSIONS AND RECOMMENDATIONS

Meaningful learning is properly implemented in the KKN program. Furthermore, factors such as work program, duration of the program, prior knowledge, social and environment, and teacher guidance influence the success of the learning process. It is advised for further studies to explore the overall implementation of meaningful learning in an experiential learning setting. Further studies should also seek to learn about more diverse cases. This study also suggests that a learning method that encourages meaningful learning is an engaging and efficient way of learning. It is also hoped that further research will be able to dig deeper into the concept of meaningful learning by considering factors such as work program, duration, prior knowledge, social, environmental, and guidance in the learning process.

Looking at the meaningful learning experienced by KKN students, researchers hope that the implementation that occurs must be maintained in managing the work program design. It is hoped that the work program that allows students to be involved in this activity will be meaningful for the local community. A broader form of community development can also help in enhancing the

experience of participating students. Finally, meaningful learning can be initiated as a way to improve experiential learning in many other fields of study.

Researchers also hope that the teaching methods used in the KKN program, including discussions, groups, projects, cases, and other active methods, can increase student involvement and understanding. This research also suggests that learning methods that encourage meaningful learning are interesting and efficient ways of learning. Meaningful learning methods also create a new and unique climate of learning in which students are forced to leave their comfort zone to achieve higher than usual.

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REFERENCE

Agra, G., Formiga, N. S., Oliveira, P. S. D., Costa, M. M. L., Fernandes, M. D. G. M., & Nóbrega, M. M. L. D. (2019). Analysis of the concept of Meaningful Learning in light of the Ausubel's Theory. *Revista brasileira de enfermagem*, *72*, 248-255. https://doi.org/10.1590/0034-7167-2017-0691.

André, P., Teevan, J., & Dumais, S. T. (2009). From X-rays to silly putty via uranus: Serendipity and its role in web search. *Conference on Human Factors in Computing Systems - Proceedings*, 2033–2036. https://doi.org/10.1145/1518701.1519009.

Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science, 2*(1), 40-57.

Bryce, T. G. K., & Blown, E. J. (2023). Ausubel's meaningful learning re-visited. *Current Psychology*, 1-20. https://doi.org/10.1007/s12144-023-04440-4

Cadorin, L., Bagnasco, A., Tolotti, A., Pagnucci, N., & Sasso, L. (2016). Instruments for measuring meaningful learning in healthcare students: a systematic psychometric review. *Journal of Advanced Nursing*, *72*(9), 1972-1990. https://doi.org/10.1111/jan.12926

Creswell, J.W., & Timothy C.G. (2018). Educational research educational research: planning, conducting, and evaluating quantitative and qualitative research (6th edition). Pearson.

Direktorat Jenderal Pendidikan Tinggi Kementrian Pendidikan dan Kebudayaan. (2020). *Buku panduan merdeka belajar-kampus merdeka*. Direktorat Jenderal Pendidikan Tinggi Kemdikbud RI.

Ghazali, N., Nordin, M. S., Abdullah, A., & Ayub, A. F. M. (2020). The Relationship between Students' MOOC-efficacy and Meaningful Learning. *Asian Journal of University Education, 16*(3), 89–101. https://doi.org/10.24191/AJUE.V16I3.11071

Beng, J. T., Dewi, F. I., Amanto, A. F., Fiscarina, C., Chandra, D., Lusiana, F., ... & Tiatri, S. (2022, April). STEM Learning Model Design Using IoT for Primary School Students. In *3rd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2021)* (pp. 1117-1122). Atlantis Press. https://doi.org/10.2991/assehr.k.220404.176

Jung, J. (2020). The fourth industrial revolution, knowledge production and higher education in South Korea. *Journal of Higher Education Policy and Management, 42*(2), 134–156. https://doi.org/10.1080/1360080X.2019.1660047

Korucu-Kış, S. (2021). Preparing student teachers for real classrooms through virtual vicarious experiences of critical incidents during remote practicum: A meaningful-experiential learning

perspective. *Education and Information Technologies, 26*(6), 6949–6971. https://doi.org/10.1007/s10639-021-10555-7

Kostiainen, E., Ukskoski, T., Ruohotie-Lyhty, M., Kauppinen, M., Kainulainen, J., & Mäkinen, T. (2018). Meaningful learning in teacher education. *Teaching and Teacher Education, 71*, 66–77. https://doi.org/10.1016/j.tate.2017.12.009

Liao, X., Fu, Z., Huang, Z., Li, Z., Pan, Q., Qian, L., Ling, B., Huang, J., Li, L., Xia, X., Chen, N., Tang, Q., & Li, X. (2021). Exploration and Practice of "Integration of Production and Education, Integration of Science and Education and Integration of Theory and Practice" in Medical Talent Training. *Advances in Applied Sociology, 11*(06), 308–314. https://doi.org/10.4236/aasoci.2021.116028

Morris, T. H. (2020). Experiential learning – a systematic review and revision of Kolb's model. *Interactive Learning Environments, 28*(8), 1064–1077. https://doi.org/10.1080/10494820.2019.1570279

Qureshi, M. I., Khan, N., Raza, H., Imran, A., & Ismail, F. (2021). Digital Technologies in Education 4.0. Does it Enhance the Effectiveness of Learning? *International Journal of Interactive Mobile Technologies, 15*(4), 31–47. https://doi.org/10.3991/IJIM.V15I04.20291

Sexton, S. S. (2020). *Meaningful Learning—David P. Ausubel. In T. J. Akpan Ben and Kennedy (Ed.), Science Education in Theory and Practice: An Introductory Guide to Learning Theory* (pp. 163–175). Springer International Publishing. https://doi.org/10.1007/978-3-030-43620-9_12

Tiatri, S., Fiscarina, C., Perlita, N., Ie, M., & Beng, J. T. (2022). Pembentukan Inventivitas Mahasiswa Melalui MBKM Penelitian. *Jurnal Muara Ilmu Sosial, Humaniora, dan Seni, 6*(2), 316-330. https://doi.org/10.24912/jmishumsen.v6i2.20514