Empowering Meta-skills of Undergraduate Students with Work-Based Learning Programs

Suci Nurpratiwi[1,] Amaliyah [2]

Universitas Negeri Jakarta, Indonesia

Abstract: *Referring to the ministry's program regarding independent learning-independent campuses (MBKM), learning in higher education needs to be workplace-based to get a good correlation between output and outcome for students. This study analyzes how the work-based learning approach with the independent learning-independent campus programs (MBKM) in higher education can strengthen students' meta-skills. The research method used qualitative research, data obtained through observation, interviews, and documentation. The research subjects were students participating in internship programs and teaching assistantships. The study results show that with several programs referring to work-based, it can strengthen students' meta-skills, including self-management, social intelligence, and innovation.*

Keywords: *meta-skills, work-based learning, independent learning-independent campuses*

Introduction

As it is known that learning at universities must prioritize outcomes, to support the output of graduates so that they can adapt to the changing times that demand mastery of 21st-century competencies and will be in accordance with the needs of the business and the industrial world. Universities have taught a lot related to hard and soft skills but getting a positive start to work life and excelling at the workplace demands much more than just ample knowledge of the core subject of every student.

Massive changes because many demands on university graduates in the world of work. For graduates to be competitive, students must be honed to have the skills expected. One of the skills needed in the world of work is good meta-skills, which consist of social and emotional skills, as well as higher cognitive skills. So, graduates can have high skills to be able to compete.

Meta-skills are important for improving skills, strengthening job opportunities, and career development. Having meta-skills allows one to gain a competitive advantage, business leaders are actively looking for candidates who can give their companies an edge. The world of work is looking for employees who are adaptable and have extraordinary resilience. Both are major meta-skills. According to McKinsey & Company, adaptability is the most important skill an employee must thrive in a volatile environment, uncertain, complex, and ambiguous (VUCA) (TestGorilla, 2022).

---

[1] Correspondent Author E-Mail: sucinurpratiwi@unj.ac.id

Another reason that meta-skills are important is that tomorrow, professional expertise will need to be much more flexible to adapt to new realities. Referring to BPS data for 2021 regarding unemployment data based on education level, 11.85% of the unemployed in Indonesia are diploma and bachelor graduates (Badan Pusat Statistik, 2022). This is partly due to the low ability and skills of graduates in responding to the challenges and needs of the world of work. Learning in universities needs to emphasize the integration between the needs of the world of work and the curriculum. So that the curriculum in universities has to prioritize workplace-based learning in order to have graduates who are competent in their meta-skills.

Referring to the ministry's program regarding independent learning-independent campuses (MBKM), learning in higher education needs to be workplace-based to get a good correlation between output and outcome for students. The aim of MBKM is to increase the competency of graduates, both soft skills and hard skills, so that they are more prepared and relevant to the needs of the times, preparing graduates as future leaders of the nation who are superior and have personality. It is hoped that the work-based learning in MBKM programs with flexible pathways could be able to facilitate students in developing their potential according to their passions and talents.

The independent learning-independent campus programs (MBKM) policy launched by the Minister of Education and Culture is a framework to prepare students to be excellent scholars, relevant to the needs of the times, and ready to become leaders with a high national spirit. Permendikbud No 3 of 2020 gives students the right to study three semesters outside their study program. It can be carried out inside and outside the study program covering 8 programs, including internships and teaching assistance.

This study analyzes how the work-based learning approach with the independent learning independent campus programs (MBKM) in higher education can strengthen students' meta-skills.

Literature Review
Work-Based Learning

Work-Based Learning (WBL) is a subset (core) of experiential learning. But within a rather narrow range of vocational education and training, WBL refers to learning that occurs through doing real work, both from the process of producing goods and services (Sweet, 2013). WBL is seen as a learning process that focuses thinking on a particular job, used to facilitate students in finding important knowledge, skills, and abilities. WBL starts from the influence of the needs of the labor market or the needs of the business world and the industrial world, which then acts as a key in driving program development (Romadin, 2020). According to Haruna, work-based learning is a teaching method that supports the transfer of basic degrees and requires students to be able to balance learning in the classroom and their role as candidates for the workforce (Haruna & Kamin, 2019). Furthermore, WBL provides students with an organized learning experience through business and industry-oriented efforts. It gives students the opportunity to explore what they have learned in the classroom within a real-world context. Not only is this immensely beneficial for hands-on learners, but it also gives students some much-needed direction, and it gets them thinking about what they want to do after graduation (Naw, 2022).

The focus of work-based learning is to develop students' professionalism in the workplace and provide opportunities for students to focus on their own evolution and take the next step toward a bright career (Dalakoura, 2019). Career exploration opportunities provide a more focused experience where students take a proactive role in identifying and pursuing desired careers to shape their long-term goals. Once students have a deeper understanding of the world of work, they can form their own path in preparation for their chosen careers. Career preparation and training experiences are on-the-job learning opportunities that enable students to demonstrate progress toward academic and career/technical prowess through experience that is directly related to a particular job or business.

In the continuity of the WBL program, there is an interaction between 3 pillars: people, organization, and curriculum. Sweet affirms that WBL is not a learning or training that exists in the company/industry but a vocational education institution that organizes industry-based learning (Sweet, 2013). The results of the study (Siswanto, 2012) that the benefits of the WBL approach in education have a positive influence on achievement, motivation, and continuing education. Depending on the country, institution, and the type of agreement between the student and the company, the WBL programs could be an internship, an apprenticeship, or a mentorship (Moldovan, 2020). Finnish research, as cited by Sweet, has shown that it can teach entrepreneurship, promote maturity, and help to develop generic skills such as initiative and problem-solving. It can be used as a way of improving basic literacy and numeracy by helping students to understand the real-world application of basic skills (Sweet, 2013)

The characteristics of WBL:
1. Relationships between partners and educational institutions are specifically established to assist learning
2. Students are involved as employees
3. The program is tailored to what is needed by the workplace and needed by students
4. Can challenge students to meet future needs
5. Educational institutions have outputs that are in line with those needed by the world of work.

Meta Skills

Meta-skills are one word of many used to describe the wider skills. Terms include attributes, capabilities, character, competencies, dispositions, habits, non-cognitive skills, soft skills, transferable skills, transversal skills, twenty-first-century skills, and wider skills, with each word/phrase bringing certain associations with it (Spencer & Lucas, 2021). Meta skills include problem-solving and decision-making knowledge and skills that can be applied across the hard and soft skill areas. These include perceiving and responding to potential danger, creatively facilitating learning outcomes, and generating new approaches.
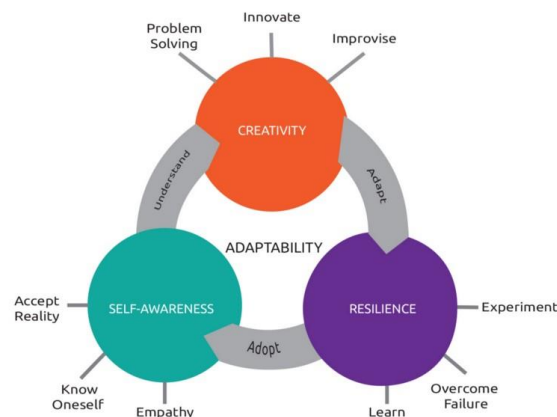
Figure 1. Three critical meta-skills

Source: https://www.fearlessculture.design/blog-posts/the-metaskills-you-need-to-thrive-in-the-21st-century (Razzetti, 2018).

Meta-skill is a type of skill that enables to learn and build new skills faster. It also allows to improve and develop other skills. Skills are temporary because they are learned and developed, and therefore can be forgotten and refreshed. By contrast, a meta-skill is a permanent part of you that enables you to achieve things. For example, while learning a language is a skill, the ability you develop to learn languages, thus making it easier for you to learn several, would be a meta-skill (Holyoake, 2021). The five meta-skills that can make a difference in the postindustrial workplace, include feeling, seeing, dreaming, making, and learning (Neumeier, 2012).

Methodology

The methodology used in this research is qualitative research. Qualitative research is a study conducted based on the philosophy of positivism, used to examine the condition of natural objects, and researchers act as key instruments (Sugiyono, 2010).

The research was carried out at the State University of Jakarta, with the research subjects were students participating in internship programs and teaching assistantships. Data collection techniques are observation, documentation, and interviews. Based on the data collection techniques used, the instruments in this study were a) online observations to observe the situation directly and indirectly in the process of internship and teaching assistantship; b) supporting tools and applications used to obtain data based on observation and interview techniques (in-depth interview) (Nurpratiwi et al., 2022); c) in the form of documents related to the MBKM programs.

Data collection techniques were also carried out by distributing meta-skills questionnaires to students after completing the programs. The researcher involved several students in obtaining data through interviews related to the work-based learning programs e.g internship and teaching assistantships that had been done and their effect on students' meta-skills. This approach was chosen because it provides a space for open discussion, allowing the

researcher to gain insight into the selected student's point of view on the subject under investigation (Kustandi et al., 2019).

Data analysis was carried out descriptively through data reduction, display data, and concluding what meta-skills developed from work-based learning programs.

Findings & Discussion

The on-campus programs that can be categorized as work-based learning on the independent learning-campus independent program (MBKM) are internships and teaching assistance. This program was developed by the demands of the college curriculum. The learning process can be represented as a consistent, gradual increase in the level of former professional competencies, or readiness for professional activity (Moldir Seidina et al., 2019).

Internship program and teaching assisstanship develop attitudes, knowledge, skills, insight, behavior, habits, and associations from the experiences of the two places (workplace and university) and allow for effective learning related to real-life work activities. Both programs can strengthen students' meta-skills, including self-management, social intelligence, and innovation.

Internship

Internships are learning activities that provide insight and practical experience to educational and non-educational students regarding real activities in educational institutions and industry, so that students have adequate competence in carrying out tasks according to their field of expertise. Work practices for education student's department are directed so that students have theoretical and applicable values and scientific insights into education and learning within the framework of Indonesian culture, in their role as critical, innovative, adaptive, and communicative educators in accordance with the character and culture of students in the global era. Work practices for non-educational students are carried out in the business or industrial world so that students have practical and meaningful experience according to their field of expertise, increase scientific competence, and provide experience solving problems that exist in the world of work.

Work-based learning through internship programs can enable students to systematically plan areas of work and work implementation standards; students also able to identify, analyze and solve problems in the workplace critically and responsibly according to their field of expertise; able to carry out and report work in a guided/independent, measurable, and responsible manner; able to interact, communicate and cooperate with colleagues, staff and leaders.

The internship is carried out for six months, at the same time students are trained to get to know the workplace, do various jobs, build good relationships with colleagues, develop creativity and innovation. Learning with internship has been determined in the curriculum.

Based on the analysis of the data obtained, it was concluded that an internship is a source of knowledge and direct experience in the world of work regarding how to implement the knowledge that has been learned in the classroom. Students learn a lot of skills required in the

professional world, and can develop themselves, such as applying discipline, responsibility, and good communication during the internship.

Teaching Assistantship

Teaching assistance in education units is a learning activity carried out by students collaboratively with teachers in various education units in the formal, non-formal, and informal education subsystems. Teaching assistance is in the form of activities related to the learning process as well as activities that support ongoing learning. This program is expected to provide a learning experience for students, especially in terms of teaching experience, broadening horizons, training and developing competencies needed in their fields, increasing skills, independence, responsibility, and ability to solve problems.

The teaching assistance activities developed are in line with efforts to produce prospective educators who will be ready, responsive, and understand that the task of educators is not only to provide material but what is more important is to instill an attitude of superior character in students.

Teaching assistance activities as one of the activities in the independent curriculum (MBKM) allow students to collaborate with schools, the learning community, and all citizens in the school. This activity can make students able to a) collaborate in compiling and making learning designs and using appropriate and targeted technology by the potential of educational resources in education unit partners so that the quality of education is more equitable, b) gain teaching experience, c) enable students to apply the knowledge, technology, and skills they have collaboratively with the education unit partners, d) gain experience on how to think and work in an interdisciplinary manner, so that they can understand the relevance of science in overcoming learning and education problems that exist in schools, learning communities, or other educational institutions.

Teaching assistance activities can improve students' meta-skills: self-management, social intelligence, and innovation. Self-management is seen in time management, discipline, and good emotional management when meeting with school students. Students could be proactive, doing self-improvement related to new knowledge about learning, teaching materials, and self-regulation in accordance with the provisions applied in school, whether it is about clothing, discipline, how to speak, etc.

Social intelligence is demonstrated by the ability to interact with all parties in the workplace, in this case, it can include students, civil servants, principals, and all other school members. Students need to have good social skills to be able to establish professional cooperation while running the program. This includes building relationships, empathy, giving feedback, and collaboration.

Students innovate in managing complex tasks and improving the quality of learning where they carry out teaching assistance tasks, such as innovating in compiling learning tools based on curriculum analysis; recognizing, studying, and living up to the problems of education in schools related to the learning process and the development of education; and make evaluations according to learning outcomes.

Conclusion

Work-based learning allows learners to concurrently be exposed to instruction in both work and learning environments. The implementation of work-based learning through internship and teaching assistance programs can enable students to develop their meta-skills, especially in three aspects. Work-based learning needs to be done so that students can adapt to the demands of competence in the workplace before they graduate.

References

Badan Pusat Statistik. (2022). *Tingkat Pengangguran Terbuka Berdasarkan Tingkat Pendidikan 2019-2021*.

Dalakoura, M. (2019, June 6). *Benefits of Work-Based Learning- WBL*. Https://Ied.Eu/Project-Updates/Benefits-of-Work-Based-Learning-Wbl/.

Haruna, R., & Kamin, Y. bin. (2019). Factor Analysis of the Challenges and Strategies for Effective Work-Based Learning in Nigerian Technical and Vocational Education. *Jurnal Pendidikan Teknologi Dan Kejuruan*, *25*(1), 21–30.

Holyoake, M. (2021, April 6). *Meta-Skills: What Are They and How Are They Relevant to the Procurement Function of the Future?* Https://Futureofsourcing.Com/Meta-Skills-What-Are-They-and-How-Are-They-Relevant-to-the-Procurement-Function-of-the-Future.

Kustandi, C., Ibrahim, N., & Muchtar, H. (2019). Virtual Reality Based on Media Simulation for Preparing Prospective Teacher Education Students. *International Journal of Recent Technology and Engineering (IJRTE)*, *8*(IC2), 400.

Moldir Seidina, Dina Arkhabayeva, Inobat Erina, Lilia Mokeeva, Sergey Perederiy, Yulia Mitina, & Yuliya Rakhmatullina. (2019). Metasubject Competences of University Students as a Reflection of Psychological and Pedagogical Innovations in Higher School. *Atlantis Press: Advances in Social Science, Education and Humanities Research*, *374*, 297–297.

Moldovan, L. (2020). An Innovative Guide to Work-Based Learning in the Field of Industry 4.0. *14th International Conference INTER-ENG 2020 Interdisciplinarity in Engineering*, 1–7.

Naw, N. (2022). Work-Based Learning: A Learning Strategy in support of the Myanmar Education Framework. *The Universal Academic Research Journal*, *4*(2), 22–31.

Neumeier, M. (2012). *Meta Skills: Five Talents for the Robotic Age*. https://ptgmedia.pearsoncmg.com/images/9780321898678/samplepages/0321898672.pdf .

Nurpratiwi, S., Amaliyah, & Romli, N. A. (2022). Learning by Project: Develop Students' Self-reflection and Collaboration Skills Using Team-Based Project. *Hayula: Indonesian Journal of Multidisciplinary Islamic Studies*, *6*(2), 267–284.

Razzetti, G. (2018, September 4). *The Metaskills You Need to Thrive in the 21st Century*. Https://Www.Fearlessculture.Design/Blog-Posts/the-Metaskills-You-Need-to-Thrive-in-the-21st-Century.

Romadin, A. (2020, November 20). *Model Pembelajaran Work-Based Learning pada Pendidikan Kejuruan*. Https://Ayoguruberbagi.Kemdikbud.Go.Id/Artikel/Model-

Pembelajaran-Work-Based-Learning-Pada-Pendidikan-Kejuruan-Landasan-Orientasi-Sintaks-Kelebihan-Penerapan-Pada-Pendidikan-Kejuruan-Di-Indonesia/.

Siswanto, B. T. (2012). Model Penyelenggaraan Work-Based Learning pada Pendidikan Vokasi Diploma III Otomotif. *Jurnal Pendidikan Vokasi*, *2*(1), 12.

Spencer, E., & Lucas, B. (2021). *Meta-Skills: Best Practices in Work-Based Learning*.

Sugiyono. (2010). *Metode Penelitian Pendidikan*. Alfabeta.

Sweet, R. (2013). Work Based Learning: Why? How? In *Revisiting global trends in TVET* (pp. 167–176). UNESCO-UNEVOC. https://unevoc.unesco.org/fileadmin/up/2013_epub_revisiting_global_trends_in_tvet_chapter5.pdf

TestGorilla. (2022). *What is a meta skill?* Https://Www.Testgorilla.Com/Blog/Meta-Skills/#:~:Text=Many%20meta%20skills%20appear%20similar,People%2C%20meta%20skills%20are%20permanent.

About the Author:

Chief Researcher
Suci Nurpratiwi
Universitas Negeri Jakarta, Indonesia
Researcher Member
Amaliyah
Universitas Negeri Jakarta, Indonesia