RELEVANCE OF 21ST CENTURY SKILLS IN DEALING WITH SUSTAINABLE DEVELOPMENT GOALS THROUGH THE INDEPENDENT CAMPUS LEARNING PROGRAM

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Abstract. Learning in the old curriculum tends to create students who are successful in class, with high GPA and are required to memorize theories and concepts. The impact of this condition is that students have difficulty interacting with the community, because there are no opportunities/opportunities to understand life in society. 21st century learning expects students to have the competence to think critically, creatively, communicatively, and be able to collaborate or 21st century skills. Therefore the opportunity for independent learning can be said as an effort to develop student competence. The research was conducted on 418 students from 4 batches. The instrument in the form of a questionnaire uses a Likert scale. The data obtained were analyzed using descriptive statistics. The results show the relevance of 21st century skills that are able to support the sustainability of sustainable development or SDGs. This finding is evidenced by the average of the four learning skills indicators showing a high value, 3.53. Most of the respondents agreed with the MBKM program and were very satisfied with their learning experience. The relevance of teaching skills through MBKM can be interpreted as an effort to realize the whole human being in facing sustainable development or SDGs. It can be concluded that the MBKM program provides opportunities and opportunities for students to have 21st century skills towards continuing education through the SDGs.

Keywords: 21st Century, Independent_Learning, SDGs.

I. INTRODUCTION

Students in the era of the industrial revolution 4.0 are expected to be able to master integrated literacy and numeracy materials which are the main needs in this era. Efforts that need to be designed and developed in maximizing this mastery in the field of education are one of them with the Merdeka Learning-Independence Campus program. This program is expected to be able to increase the competence of graduates, both soft skills and hard skills, so that they are more prepared and relevant to the needs of the times, preparing graduates to become superior, moral and ethical future leaders of the nation [1]. Through the MBKM program, students, in this case students, are given flexibility and freedom in choosing their studies [2].

Freedom in thinking both individually and in groups is the essence of independent learning. The hope is that in the future it can give birth to excellent, critical, creative, collaborative, innovative, and participatory students. It is also hoped that this program can increase student involvement in learning [3]. Thus the hope of creating human resources that are in accordance with educational goals and have the Pancasila character can be realized. Students who are ready to face challenges in the world of work in the 5.0 era or human society.

The real manifestation of students who are ready and skilled towards the 5.0 era is in the quality of education. However, based on the 2012 UNESCO Education For All Global Monitoring Report, the quality of education in Indonesia is ranked 64th out of 120 countries worldwide. Meanwhile, based on the 2015 Education for All Development Index (EDI), Indonesia was ranked 57th out of 115 countries. In the latest report on the UN development program for 2015, Indonesia ranks 110th out of 187 countries in the Human Development Index (IPM) with a score of 0.684. With that figure, Indonesia is still lagging behind the two neighboring ASEAN countries, namely Malaysia (ranked 62nd) and Singapore (ranked 11th) [4].

Efforts to improve and increase the quality of education are carried out by changing the perspective and goals of development. Educational goals will be more oriented towards achieving sustainable development goals and objectives in the era of Sustainable Development Goals or known as SDGs. Thus increasing education for the Indonesian people will spur the achievement of the goals and targets of the SDGs, especially to increase Indonesia's human development index. Therefore, it is hoped that the role of education will be able to increase Indonesia's competitiveness in supporting the 2030 SDGs.

The role of education provides direction in developing 21st century skills that students need to have. 21st century skills emphasize collaboration, communication, ICT literacy, creativity, critical thinking, problem solving, and social and cultural competence [4]. (Voogt et al., 2013). 21st century skills emphasize how to learn with the aim of not just memorizing theory. 21st century skills prepare students to be able to find solutions to the complexities of modern society [5]. Skills such as reasoning, understanding the content of knowledge transfer as an effort to solve problems and determine the right solution [6].

21st century skills have been classified in three broad domains [7]. The cognitive domain includes competencies related to cognitive processes and strategies, knowledge and creativity, such as critical thinking, reasoning and argumentation. The intrapersonal domain concerns beliefs and motivation in learning, metacognition and independent learning. The interpersonal realm includes competencies related to collaboration and leadership, for example effective communication and responsibility. These skills are nothing new, however, the development of an advanced modern society creates a need for all students to be able to apply them in various areas regardless of the future world of work [8].

Students as future intellectuals need to be motivated in developing 21st century skills. Their critical thinking needs to be directed at problem-solving skills, being creative, innovative, and being able to communicate their thoughts and collaborate with other students. Developed 21st century skills will be useful in society later. As the beginning of implementing the skills possessed by students, the government through the ministry of education launched the independent learning campus independent program.

Merdekalearning Merdeka Campus aims to improve the competence of graduates, both soft skills and hard skills. Students are expected to be better prepared to meet the needs of the times, and become graduates who can become future leaders of the nation who are superior and have personality. Experiential learning programs with flexible pathways are expected to facilitate students in developing their potential according to their passion and talents [9]. Universities must be able to build cooperation with the private business world and the government as an effort to realize this experiential learning. Collaboration is based on a framework for increasing the professionalism of the academic community [9] [10]. Universities need to understand the importance of establishing partnerships, especially in the implementation of credit transfers, monitoring, assessment, and program evaluation [10] [11]. The implementation of independent learning activities will be carried out with the synergy of various parties.

Referring to the description of the background above, this study aims to determine the relevance of 21st century skills in dealing with sustainable development goals (SDGs) through the MBKM program. By knowing student responses, it is hoped that those aspects that are still weak can be used as material for improvement so that the MBKM program as an effort to realize sustainable development or SDGs is getting better and according to the expectations of all parties, and realizing students have the Pancasila character.

II. RESEARCH METHODS

This research was conducted in the Primary School Teacher Education (PGSD) study program at Pakuan University. The survey method was used in this study with the initial stages of identifying the concept of MBKM, 21st century skills, and SDGs as the basis for making research instruments. The research instruments included closed questionnaires regarding 21st century skills, SDGs closed questionnaires, student perspective questionnaires related to MBKM. After making the questionnaire, continue distributing the questionnaire online using the Google form. The results of the questionnaire are processed and analyzed using a description or describing the results of a questionnaire or survey then reduced using data triangulation, the final stage is making a report.

Population and Sample
The population and sample or it can be said that the respondents in this study were all students of the Pakuan University PGSD study program from the 2018 – 2021 class, namely 807 people. The sample is part of the number and

characteristics possessed by the population [11]. So that it is expected to represent the population, namely Pakuan students from the 2018-2021 class. The data collected was 418 respondents.

Data collection technique
The data collection method in this study was carried out using a questionnaire or online questionnaire. The instruments used in this study consisted of two types: the MBKM 2021 implementation survey instrument in PTS which was accessed through SPADA DIKTI and also a questionnaire from the Pakuan University research team in the form of a closed questionnaire on 21st century skills, a closed questionnaire on SDGs, a student perspective questionnaire related to MBKM. The statement scale used is nominal and ordinal. The nominal scale is related to the characteristics of the respondents, while the ordinal scale related to the variables used consists of 2 types, namely 5 scales from never, rarely, sometimes, often and always and 4 Likert scales from strongly disagree, disagree, agree and strongly agree.

Data analysis

The data collected in this study were processed and analyzed using descriptive analysis procedures. Reduction is needed to see the validity of the analysis. Data analysis was carried out by describing the data that had been collected with the aim of providing an overview or describing the data into writing. In this study descriptive analysis was used to analyze the answers of student respondents from the MBKM implementation survey instrument for students, while from the research team's instrument to describe the characteristics of the respondents and also assess the respondents' answers regarding the skills variable and the SDGs.

III. RESULTS AND DISCUSSION

This research was conducted on 807 elementary school teacher education study program students. The results of the research are described descriptively based on a questionnaire that has been filled out by students with question criteria that have been determined using a Likert scale. Before discussing the results of the questionnaire, the characteristics of the respondents who filled out based on the percentage will be described.

Table 1 Respondent Data

No	Jenis Kelamin		Angkatan				Keterlibatan pada MBKM	
	L	P	2018	2019	2020	2021	Ya	Tidak
	7,2%	92,8%	36,4%	17,7%	19,1%	26,8%	16,3%	83,7%

The focus of the research is to find out the relevance of 21st century skills towards the Sustainable Development Goals (SDGs) by analyzing the results of a questionnaire. The questionnaire was filled in by 418 students out of 807 PGSD students from the 2018-2021 class. The distribution of the questionnaire was carried out using the Google form. The data shows that student responses have not been maximized. Based on interviews with several students regarding statements in the questionnaire, it was found that students had difficulty understanding statements. This condition can be caused,

students do not get information related to the instrument in the questionnaire. As a result, students were confused in determining the answers, and finally chose not to fill in. The following will describe the results of student responses regarding 21st century skills.

Improving the quality of education is one of the focuses in the SDGs. Therefore skills are needed to support the implementation of the SDGs program. 21st century skills as skills needed by students when they enter society require support from study programs and various parties. This support can be in the form of developing a curriculum that refers to MBKM. The study program is expected to be able to realize the curriculum in the form of a distribution of courses. When it comes to curriculum, it cannot be separated from learning. Student response data from 18 statements regarding MBKM, only 3 statements were stated with very high criteria, namely in the statement "Gives me the opportunity to discuss issues of improving the quality of learning in schools" with statements that strongly agreed 35 respondents, agreed 30 respondents, 1 respondent disagreed , and strongly disagree 2 respondents. Then the statement "Make me aware of the importance of improving the quality of learning in schools" with statements that strongly agreed 37 respondents, agreed 28 respondents, disagreed 1 respondent, and strongly disagreed 2 respondents. Next to the statement "Gets me involved in handling problems that occur in school" with statements that strongly agree 30 respondents, agree 32 respondents, disagree 6 respondents. It can be concluded that these three statements are categorized as very high. Meanwhile for the other 15 statements the respondents did not provide answers and were categorized as very low.

Furthermore, on the SDGs indicators which consist of 6 aspects including quality education 102 respondents answered strongly agree, 90 respondents answered agree, 8 respondents answered disagree, and 4 respondents answered strongly disagree. As for aspects or indicators of access to affordable energy, climate change, maintaining terrestrial ecosystems, and revitalizing the global partnership of respondents did not provide answers. The data shows that respondents or students have not understood the SDGs concept. The table below is student responses to the SDGs.

Table 2 PGSD Student Responses to the SDGs

No	SDGs	Frequency/Presentation				Total Score	Average	Information
		SA	S	NA	SD			
		102	90	8	4			
1	Quality education	50%	44%	4%	2%	204	3.42	Very high
2	Affordable Energy Access	0	0	0	0	0	0	Very low
3	Reducing inequality	0	0	0	0	0	0	Very low
4	Climate change	0	0	0	0	0	0	Very low
5	Maintain terrestrial ecosystems	0	0	0	0	0	0	Very low
6	Partnership revitalization global	0	0	0	0	0	0	Very low
	Total	102	90	8	4	204	3.42	

Referring to student response data, it was found that of the six aspects of the SDGs, respondents only responded to aspects of quality education or teaching assistance. This

means that students do not have interest in other aspects. In this condition, it can be seen that socialization related to continuing education which can be realized through the MBKM program is still not optimal. Study programs need to be better at socializing existing programs in MBKM. In addition, study programs need to create programs that involve students regarding SDGs. Appropriate steps are needed to improve the quality and relevance of Education. Study programs must motivate resources, both educational and non-educational staff, provide and develop facilities that support lifelong education. Learning is more directed at student centered, active, collaborative, utilizing learning resources and technology.

The relevance of 21st century skills to the SDGs relates to the skills that students must have as the future generation or the golden generation in facing the 5.0 era. Critical thinking, collaborating, communicating, creative and innovative thinking skills are needed by students to face the world of work. The Merdeka Campus is a form of learning in universities that is autonomous and flexible so as to create a learning culture that is innovative, not restrictive, and in accordance with the needs of students [15]. Students have a very high response on quality education indicators, but on five other indicators such as affordable access to energy, reducing inequality, climate change, protecting terrestrial ecosystems, and revitalizing global partnerships, they get very low responses. It can be suspected that students do not fully understand or know about the sustainability of MBKM activities related to the SDGs. Obtaining a quality education is the basis for improving people's lives and sustainable development related to the SDGs. The MBKM program provides an opportunity to create a generation that is ready to face the 5.0 era and Golden Indonesia.

The MBKM program is a program that can have a good impact on students who take part in it. This is in line with the results of research [16] showing that students have a positive perception of the implementation of the student exchange program at the Indonesian University of Education. The student exchange program is considered as the development of an innovative learning culture in building collaboration, the obstacles that are often faced by activities seem sudden, there are dilemmas when taking credits, as well as students' difficulties when adapting to a new environment and time management. In accordance with the required curriculum [157] found that the curriculum can contribute to the sustainability of the MBKM program. This means that the curriculum needs to be analyzed and adapted to the 21st century skills that students need to have. In the research conducted [18] it was said that the Sustainability Development Goals (SDGs) are a framework that is used globally as a reference for how quality education must be prepared, one of which is through the curriculum. Meanwhile according to [17] in his research stated that 21st century skills can be developed by applying discovery, problem-based, and project learning models. This is in line with the learning models developed in the 21st century curriculum. In addition, the curriculum also needs to be developed with the right

design according to the characteristics and needs of students, in this case students [18]. The studies that have been conducted prove that there is a link or relevance between 21st century skills and SDGs through the MBKM program. Therefore the study program has an important role in activities involving students in other MBKM programs. The involvement of these students is expected to be able to compete as a golden generation that is ready to face the 5.0 era or human society, synergize with technology, be tough, independent, and have character.

IV. CONCLUSION

21st century skills are skills students must have towards Golden Indonesia and the 5.0 era. These skills have a connection with the development of sustainable education or known as the SDGs. Efforts to develop 21st century skills referring to the SDGs can be carried out with the independent learning campus independent program. The MBKM program provides opportunities for students to develop, train, and apply their 21st century skills. The findings regarding student responses indicate that the teaching assistance program as part of the MBKM program and also the SDGs concept is an option for respondents. This means that the respondents responded and agreed to answer the teaching assistance activities. While other programs did not get a good response. This fact can be caused by the lack of socialization regarding the MBKM program either by study programs, faculties, or universities or institutions. The lack of information sources caused by Covid-19 is the reason for students' misunderstanding. Therefore, the study program is expected to be able to find solutions in order to socialize activities related to MBKM. In addition, the study program is also expected to be able to involve students in MBKM activities in addition to teaching assistance. With MBKM, 21st century skills towards SDGs can be achieved as expected.

REFERENCE

[1] [Sudaryanto, Widayati, W., and Amalia, R. (2020). Konsep Merdeka Belajar-Kampus Merdeka dan Aplikasinya dalam Pendidikan Bahasa (dan Sastra) Indonesia. *Jurnal Bahasa*, 9(2).

[2] Widiyono, A., Irfana, S., & Firdausia, K. (2021). Implementasi Merdeka Belajar Melalui Kampus Mengajar Perintis Di Sekolah Dasar. Metodik Didaktik: Jurnal Pendidikan Ke-Sd-An, 16(2).

[3] Arifin, S., & Muslim, M. O. H. (2020). Tantangan Implementasi Kebijakan "Merdeka Belajar, Kampus Merdeka" pada Perguruan Tinggi Islam Swasta di Indonesia. Jurnal Pendidikan Islam Al-Ilmi, 3(1)

[4] Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of 21st century. Journal of Computer Assisted Learning, 29 (5), 403–413.

[5] Kennedy, T., & Sundberg, C. W. (2020). 21st century skills. In B. Akpan, & T. J. Kennedy (Eds.), Science education in theory and practice: An introductory guide to learning theory (pp. 479e496). Cham: Springer International Publishing.

[6] OECD. (2018). The future of education and skills. Education 2030. Paris: OECD Retrieved from. https://www.oecd.org/education/2030/E2030%20Positi on% 20Paper%20(05.04.2018).pdf.

[7, 8] National Research Council. (2012). Education for life and work: Developing transferable knowledge and skills in the 21st century. Washington, DC: The National Academies Press.

[9] Susilawati, N. (2021). Merdeka Belajar dan Kampus Merdeka Dalam Pandangan Filsafat Pendidikan Humanisme. *Jurnal Kajian Pendidikan Dan Pembelajaran*, *2*(3).

[10] Hidayat, S. E., Samidi, S., and Nasution, A. (2021). The Alignment And Misalignment of The Islamic Economics Curriculum With The Indonesian Government Policy. *Jurnal Ekonomi Dan Keuangan Islam*, *10*(1).

[11] Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung : Alfabeta, CV.

[12] Lunenburg, F.C., 2010, Communication: The Process, Barriers, and Improving Effectiveness. Schooling, Vol 1, No 10, Hal 1-11.

[13] Patacsil, F.F. dan Tablatin, C.L.S., 2017, Exploring the Importance of Soft and Hard Skills as Perceived by IT Internship Students and Industry: A Gap Analysis. JOTSE: Journal of Technology and Science Education Vol 7, No 3, Hal 347-368.

[14] Robles, M.M., 2012, Executive Perceptions of the Top 10 Soft Skills Needed in Today's Workplace. Business Communication Quarterly, Vol 75, No 4, Hal 453–465.

[15] Suwandi, S. (2020). Pengembangan Kurikulum Program Studi Pendidikan Bahasa (dan Sastra) Indonesia yang Responsif terhadap Kebijakan Merdeka Belajar-Kampus Merdeka dan Kebutuhan Pembelajaran Abad ke-21. Dalam: *Prosiding Seminar Daring Nasional: Pengembangan Kurikulum Merdeka Belajar Program Studi Pendidikan Bahasa Indonesia, 21 Oktober 2020,* pp 1-12. https://ejournal.unib.ac.id/index.php/semiba/article/vi ew/13356

[16] Insani, N.N., Fitriasari, S. & Iswandi, D. (2021). Persepsi Mahasiswa tentang Program Merdeka Belajar – Kampus Merdeka Pertukaran Pelajar. *MUKADIMAH: Jurnal Pendidikan, Sejarah, dan Ilmu-Ilmu Sosial*. *5*(2), 245-251.

[17] Sopiansyah, Deni, dkk. (2021). Konsep dan Implementasi Kurikulum MBKM (Merdeka Belajar Kampus Merdeka). Reslaj: Religion Education Social Laa Roiba Journal. Volume 4 Nomor 1 (2022) 34-41 P-ISSN

2656-274x E-ISSN   2656-4691.
DOI: 10247476/reslaj.v4i1.458

[18] Hidayah, Vina Nur dan Yuliawati, Fitri. (2021) Kurikulum Tematik 2013 Dalam *Framework Subtainable Development Goals* Di Sekolah Dasar. EduHumaniora: Jurnal Pendidikan Dasar | p-ISSN 2085-1243 | e-ISSN 2579-5457 Vol. 13 No.2 Juli 2021 | Hal 162-171. DOI: https://doi.org/10.17509/eh.v13i2.35824

[19] Redhana, I Wayan. (2019). Mengembangkan Keterampilan Abad Ke-21Dalam Pembelajaran Kimia. Jurnal Inovasi Pendidikan Kimia, Vol 13, No 1, 2019, halaman 2239 – 2253.