

Self-Education: A Prediction of The Needs-Based Merdeka Belajar Curriculum Framework in Indonesia

Julduz Ruland Paus*, Mint Husen Raya Aditama, Hary Dwi Estafianto

Universitas Negeri Manado, Indonesia
*Email: julduzpaus@unima.ac.id

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Abstract. Merdeka Belajar is an educational program launched by the Minister of Education and Culture of the Republic of Indonesia. Merdeka Belajar prepares students to become strong graduates, relevant to the needs of the times, and ready to become leaders with a high national spirit. This research will reveal how Self-Education in the concept of Merdeka Belajar can improve students' hard skills and soft skills so that it can support the expansion of the Merdeka Belajar program. The results of measuring the need for soft skills and hard skills found the fact that factors of age, gender, and job status influenced the choice and needs in improving individual soft skills and hard skills. Factors such as leadership, determination, self-control and self-organization, work independence, and employability are the dominant factors used in the defensive approach to the development of self-education. This study shows that a Self-Education curriculum based on the need for soft skills and hard skills must be carried out consistently and regularly. Further research on Self-Education needs to be given special attention in developing more complex and diverse models, especially in the pedagogical skills of teachers as independent mentors of students, especially in non-formal educational institutions.

Key words: self-education, learning method, Merdeka Belajar, non-formal education.

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INTRODUCTION

Lifelong learning is one of the basic principles of sustainable development. In the beginning, a person obtains education through activities that are clearly defined and managed by the formal educational curriculum through primary, secondary and higher educational institutions. This does not always guarantee the existence of an expert who can work effectively throughout his life after graduation using only the knowledge, skills and abilities acquired and developed in formal schools. Behind the rapid development of technology today, it is not enough for a person to only be able to read, write, and have knowledge about certain issues to be successful. Technology has forced individuals to be able to adapt their abilities to changing times. Therefore, educational institutions of all levels face the urgent task of teaching students/ schoolgirls to get their Self-education, while stimulating and supporting them in adjustment to future challenges. This process may involve various forms, methods, tools and technologies of learning, especially the optimization of the role of Non-formal Education in the process of providing self-education. The Teacher (teacher in a non-formal educational institution), which is the organizer of the student's self-education process, plays an important role. The Teacher must take into account, among other things, the educational needs

and individual characteristics of each student. Therefore, Teacher itself must be involved in self-education and continue to improve their professional competence.

The issue of rules and laws to the principles of self-education in its status as a special education still does not get attention, although there are many works related to the study of self-education in the scientific literature. The purpose of this work is to study the application of the principles of regularity, consistency, the relationship between self-education (special/ non-formal) with formal education, and self-education with professional activities. That involves the following objectives: Finding out and promoting self-education methods as a model for optimizing academic performance in non-formal education; Providing motivation in educational activities, providing students with a much more deferential approach and social interaction; Assessing the competence of self-education that has been carried out based on the point of view of Student and Teacher; Building a relationship between non-formal education and formal education based on an self-education model; Analyzing the role of the principles of self-education in non-formal education; Studying the relationship between self-education and professional activity.

Merdeka Belajar requires students to be active in Self-Education. During the Covid-19 period, Self-

Education has become something that has supported the Merdeka Belajar program and directed it to learn in the 4.0 and 5.0 (Abidah et al., 2020). Merdeka Campus provides challenges and opportunities for the development of innovation, creativity, capacity, personality, and student needs, as well as developing independence in seeking and finding knowledge through realities and field dynamics such as ability requirements, real problems, social interaction, collaboration, selfmanagement, performance demands, targets and achievements (Abdul et al., 2022). Merdeka Belajar is a development of lifelong learning, where aspects of character development and skills to adjust to changing times are important points (Faiz & Kurniawaty, 2020).

Other studies, (Marisa, 2021) on the learning process in the Merdeka Belajar curriculum, emphasize more on building student character, this is applied by means of educators and students being able to communicate well through Self-Education activities. Contextual Learning in Self-Education contributes to the cognitive, affective, and psychomotor development of students (Suhartoyo et al., 2020). In his literature study, he stated that curriculum development in Merdeka Belajar can improve soft skills and hard skills, can develop graduates so that they are relevant to the needs of the times, and develop graduates as future leaders of the nation who are superior and have personalities.

The learning process at the Merdeka Campus is one of the most essential manifestations of student-centered learning. Self-Education that researchers carry out is part of the 9 Merdeka Belajar frameworks, namely Independent Studies/ Projects (Guidebook Merdeka Belajar - Kampus Merdeka, 2020). The development of self-education skills was popularized by electronic (distance) learning developed by teachers, which included texts and videos of lectures, tasks for self-control and self-completion, tests and electronic methods for assessing the level of knowledge of students (Umarova, 2020). Active learning methods and student research activities contribute to the development of self-educational skills (Scherbakova et al., 2021).

How well a specialist in a particular field will perform his professional duties depends on the ability to learn independently acquired during the course of obtaining an education. Writers (Samuseviča & Striguna, 2017), demonstrates ways to acquire self-educational competencies while studying at the university, as well as continue to develop independently throughout professional life. Formal and non-formal learning can be involved. This competence determines the ability of a person to make

his own judgments, his evaluation of his own activities, the ability to enrich his own experience, plan, organize and engage in self-education. For the development of skills and abilities necessary in self-education it is necessary to provide a regular organization of self-education in educational institutions (Abdullayeva, 2021), teaching students to work with information (W.Cobern, 2015), pay attention to it, categorize it in a certain situation, and observe craftsmanship. In addition, building the so-called self-leadership, that is, the ability to self-regulate, which is the main condition necessary for self-education (HakanKör MelihEngin HamitAksoy, 2018)

Special education programs are created to involve students in self-education, which includes, among other things, consultations, group and individual discussions (Razumova, 2019). It stimulates students to self-education and introduces the necessary tools for that purpose. Self-education provides the following advantages: Resistant to the individual peculiarities of each student, increases the level of academic performance of students and promotes the development of highly qualified specialists. A well-constructed learning process with a focus on developing self-educational competencies allows students to learn to adapt quickly to rapidly changing conditions. Students also develop critical thinking, the ability to work with different information. Under these conditions, students are expected to develop communication skills and cooperation with people belonging to different social groups (Toirova et al., 2020).

Competence of self-education has certain features: self-knowledge and self-analysis of the advantages and disadvantages of the activity, adequacy of knowledge to solve urgent problems; ability to plan self-education adaptable to situations, opportunities, and needs; ability to analyze information; apply critical thinking in a rapidly changing world to meet professional goals; digital literacy (Cattaneo et al., 2022), and information culture; the ability to achieve maximum results, presenting and proving the usefulness of self-education; ability to interact with employees and respect the opinions of others; sense of responsibility; sustainability of the process of self-education despite doubts and difficulties (consistency); understand the need for self-education for professional growth (Pidhirnyi, 2020).

Self-education has different traits at different stages of personality development (Pidhirnyi, 2020). Students have an externally motivated self-education. In professional activities, the motivation of employees to apply the method of self-education occurs

intrinsically. That means the encouragement of independent learning in students is more about the demands given by educational institutions or educational curriculums. In addition, it is evident that unconscious self-education is less effective than ordinary and conscious education (Pavlovych & Bilous, 2020).

It is believed that the process of self-education is possible only outside the educational institution (Mihai, 2021). It may involve teaching methods inherent in institutional training. Researchers (Mihai, 2021), develop a plan to transition from traditional education into an educational model that can help develop the skills needed by students, By Mihai referred to as self-education.

The researchers studied the role of self-education in various fields. Self-education, along with four other criteria such as professionalism, responsibility, cooperation and flexibility, however it is considered key in teacher competency development training (SAMUSEVIČA & STRIGUNA, 2017). Competency development in assisting in carrying out self-education for important teachers, because a teacher who is able to engage in the model of self-education will be able to teach his students how to learn throughout life (Ambika et al., 2019). This will allow students to change rapidly according to the changes determined by their environment. In this process, the

teacher must take into account the individual peculiarities of each student.

Based on the problem formulated above, This research will reveal how Independent Education in the concept of Freedom to Learn can improve students' hard skills and soft skills so that they can support the expansion of the Merdeka Learning program compiled by the Government of the Republic of Indonesia. This study is especially important for scholars and educators working on the development of their students' self-educational skills and abilities, as well as those involved in self-study. Further efforts of the researchers can be focused on the development and analysis of the effectiveness of teaching methods that promote the development of self-educational competencies of students, students and specialists in various fields.

METHODS

The following principles of self-education were considered in the study: Soft-skill and Hards-skill needs of student package-C (Equivalent of students at the Level of Education in High School) at Non-formal educational institutions in north Sulawesi province, Indonesia. Model of application of self-education, regularity of self-education, consistency of self-education, the relationship between self-education in formal and non-formal education, and the relationship of self-education with professional activities. View Table 1.

Table 1. Research methods for the application of the principles of Self-education

Principles of Self-education	Methodology
Methodology and sampling	Pedagogical experiments Self-Education Competency Assessment Questionnaire
Soft-skills and Hards-skills student package-C	Competency assessment for student Need assessment by teacher
Regularity	Questionnaire
Consistency	Questionnaire

Principles of self-education in relation to the improvement of Soft-skills and Hards-skills student package-C learned through pedagogical experiments that include several stages:

1. Methods of measuring the needs of Soft-skills and Hard-skills of student packages-C that promote the development of skills and abilities necessary for self-education. Used to draw up a framework of methods in the concept of self-education.
2. The effect of the introduced method on academic performance student package-C.
3. Conducted a survey on teacher and student package-C to assess the impact of self-education on motivation to learn, to ensure a different approach, changes in social interaction, and the development of skills and abilities necessary for self-education.
4. Competence of self-education (objectives in obtaining knowledge and the need to improve existing knowledge, the ability to learn and complete tasks independently, as well as independently organize the learning process and carry out diri control) rating by student and teacher sanggar

kegiatan belajar (SKB) and Pusat Kegiatan Belajar Masyarakat (PKBM) at non-formal educational institutions in North Sulawesi Province, Indonesia.

- The questionnaire consists of closed questions that meet all the ethical standards and requirements used. These surveys are voluntary, anonymous, free. The study was conducted over an academic calendar year. Sample involving 112 student package-C and 12 Teacher from 8 SKB & PKBM which represents each of the residencies in north Sulawesi province, Indonesia (Table 2).

Table 2. Sample description

	Number of Subjects	
	Student Paket-C	Teacher
Number of Subjects	112	12
Age	17-45	26-60

To measure the standard needs of the results of the trial of the independent education learning method, the researcher conducted an experimental test on Student Packages-C on Non-formal educational institutions. Testing was carried out to find out how much impact the self-education learning method is able to improve individual hard skills and soft skills. Field test results are calculated using the gain score method by comparing the results of pre-test and post-test measurements in the control group and experimental group. The number of subjects in the results of the hard skill improvement experiment amounted to 40. 20 in the control group and 20 in the experimental group. While the subjects in the soft skills improvement trial were 80

Table 4. Table of Soft-skill and Hard-skill needs

Kind	The value of Soft-skill and Hard-skill dominant in student				
Soft skills	Determination of Heart	Leadership	Discipline	Motivation	
	4.6	4.5	4.4	4.4	
Hard skill	Employability Skills	Quality re-	Mastery of technol-	Independence	
	8.6	sults 8.4	ogy 8.2	8.1	
Kind	Value Soft skills and Hard skills teacher recommendations				
Sof Skill	Leadership	Motivation	Discipline	Responsibility	
	5.1	4.6	4.3	4.3	
Hard Skill	Employability skills	Independence	Academic ability	Mastery of technol-	
	10	9.7	8.8	ogy 8.4	

As shown in Table 4, determination, leadership, discipline and motivation have the highest percentage of needs for C-package Student compared to other aspects of soft-skills. The use of teaching methods that promote the development of independent education

subjects. 40 in the control group and 40 in the experimental group. As a comparison of the level of competence between Student Packages-C with students in higher education, Researchers include students of the Non-formal Education study program at Manado State University, which totals 8 students. Table 3 is a categorical division based on the formula used.

$$\langle g \rangle = \frac{\%Sf - \%Si}{100 - \%Si}$$

Information:

$\langle g \rangle$: gain score

Sf : average post-test score

Si : average pre-test score

Table 3. Catagorization of Analysis Results *Gainscore* (Hake, R. R., 1998:65)

Equivalency	Value	Catagories
$g \geq 0,7$	A	High
$0,7 > g \geq 0,3$	B	Medium
$g < 0,3$	C	Low

RESULTS AND DISCUSSION

Needs analysis is used to measure Soft-skill and Hards-skill needs in Student Packages-C at non-formal educational institutions in North Sulawesi Province, Indonesia. The results of the needs measurement are used as a reference in determining the needs-based self-education model. Table 4 presents the results of the analysis.

skills would be more appropriate if it contained reinforcement on these soft-skill aspects.

A survey of Pemong Belajar was conducted at the end of the survey to build a relationship between student and teacher perspectives. This survey is to

determine the attitudes of teachers and students towards the self-education model, as well as the advantages and disadvantages of teaching methods that

provide self-learning. Table 5 presents the results of the survey.

Table 5. Self-educational competence assessment results

Question	Answer	Percent-
	Student	Teacher
Despite the various challenges faced, I will continue to try to complete my studies.	4.6	4.2
I have been entrusted by friends or others to lead, for example as a class president or other assignment.	4.5	5.1
I have a high enthusiasm for achieving high learning achievements.	4.4	4.6
I really need instructions on how to be on time e.g., completing tasks.	4.4	4.3
If there is a task assigned by the teacher or someone else, I must have carried it out responsibly.	3.9	4.3
how important it is to understand the ability of the hard skill:		
Employability skills	8.6	10
Quality results	8.4	8.6
Mastery of technology	8.2	8.4
Work independence	8.1	9.7
Academic ability	7.1	8.8

As shown in table 5, the distinguishing needs between the survey and the teacher can be seen in the soft skills column, namely responsibility and hard skills. Where each has a not so far range of scores between 4.6 and 4.2 on the aspect of determination, as well as 3.9 and 4.3 on the aspect of responsibility. The difference in scores obtained is influenced by the perspective of each respondent. Data analysis from respondents of student became the main reference, while respondents of teacher were used as supporting data and strengthening surveys of soft-skill and hard-skill needs.

The results of the questionnaire conducted on the learning staff are just to provide an overview of the needs of learning residents based on their perspective. Thus, as illustrated in the results of the survey, the need that the principles of independent education can be carried out for life (lifelong learning) if they have: consistency, regularity, synergy between student and

teacher servants, and have a relationship with professional activities.

The preparation of a self-education model and the measurement of competencies resulting from self-education are necessary.

Experimental Test Results

The results of experimental tests on improving hard skills and soft skills were carried out on student Package-C at Non-formal educational institutions and 5th semester College students in the department non-formal education, Manado State University. Competency tests on college students are not carried out and applied to the experimental group, meaning that students are not equipped with a developed learning model. The results of the Experimental Test can be seen in Table 6 & 7 below.

Table 6. Hard skill Test Results in the Control Group and Experimental Group

Group	Si Pre-test	Sf Post-test	Gain score	Categories
Control	30,7	65	0,49	Medium
Experiment	27,5	81,5	0,74	High

Table 7. Soft skills test results in the Control Group, Experimental Group of Students

Group	Si Pre-test	Sf Post-test	Gain score	Categories
Control	29,75	57,25	0,41	Medium
Experiment	31	79,75	0,71	High
College Student	41.25	82.5	0.70	Tinggi

The results of experimental tests on improving the hard skills and soft skills of student package-C at the non-formal educational institution show that learning models that are adapted to the needs and demands of technological developments can affect the level of student understanding of the material presented by the learning staff.

The factors contained in the material of the self-education curriculum influence the level of cognitive activity and increase motivation in educational activities, social interaction and goals, show gaps in the knowledge gained and help apply a differential approach to student of package-C. This study shows that an independent education curriculum based on the needs of soft skills and hard skills must be carried out consistently and regularly by non-formal educational institutions in Indonesia.

The studies conducted in this paper show that compliance with the principles of self-education (regularity, consistency and relationship between education and self-education) is necessary when studying in general secondary education and higher educational institutions. It is necessary to use forms, methods, tools and technologies of teaching that promote the development of self-educational competencies in students and students. Self-acquired skills and abilities during their studies in an educational institution will help specialists in learning throughout their professional life.

A study involving 219 students in grades 8-9 showed that the use of digital technology contributes to an increase in self-esteem and an increase in self-study skills (Efremova et al., 2020; Wahyudi et al., 2023). According to the researchers (Scherbakova et al., 2021), students themselves believe that active learning methods are not very effective in developing independent educational skills.

The creative approach affects the professional development of teachers and affects student learning outcomes. It is considered that there is a direct relationship between them (Czaja-Chudyba et al., 2018). More creative people are more likely to engage in self-education through different forms of self-education, which results in more success than their peers.

One-third of students believe that educational content posted on the Internet helps in how they learn independently (Yuzhaninova & Moroz, 2018), although 60% use it only at the request of the teacher, not on their own initiative. And 21% of students argue that the Internet does not contribute to their self-education, while 24% of students will not use the Internet for education after graduation because they do not capture the relationship between self-education and professional activity. The researchers asked teachers to introduce students into the opportunities that the Internet offers, useful content for learning involves students in self-study through the Internet. Another way is to give students the task of finding a useful online website for

their future profession, for example, visiting web workshops, web laboratories, virtual exhibitions, virtual museums. This kind of work carried out among students makes it possible to involve 20% of them on the use of the Internet in their self-education. A survey of students (Samuseviča & Striguna, 2017), confirm the sequence of the process of self-education. Students showed improved scores for self-education competencies in the first years of study compared to those who did so after graduation.

Educators should engage in lifelong learning in addition to developing self-education skills in students. According to research (Shynhof, 2021), 93% of respondents engaged in self-education to improve their skills and become competitive in the labor market, while 23% of those surveyed gained confidence in their professional actions and decision-making thanks to self-education. Sources of self-education include not only advanced training courses, various programs, grants, lectures, scientific and instructional literature, but also social networks (Ansari & Khan, 2020), as a source of information necessary for professional development. The respondents, however, noted a number of barriers to their self-education: lack of time, long distances to self-education centres and others.

Teachers introduce various forms and methods of teaching to promote the development of self-educational skills in students: project and case methods (Ambika et al., 2019), as well as learning models such as Shenben (Jie & Burlakova, 2019). The following personal characteristics of students are necessary for them to be able to engage in self-education: self-discipline, motivation, the ability to make independent decisions and take responsibility, adapt quickly, have information literacy (Samuseviča & Striguna, 2017). In turn, the educator must be highly qualified, responsible, disciplined, self-critical, creative and optimistic (Shynhof, 2021).

CONCLUSION

To what extent can an education designed to meet the demands of life and perform its professional duties as a tool in conveying learning systems can reach and determine the quality of life of society? The self-learning system allows the whole community to be involved and participate in improving their skills and abilities, becoming specialists, professionals in the field they are engaged in. Self-learning is becoming urgent because progress is so rapid that the world needs people who are skilled and specific to certain skills. This research provides an introduction to the development of self-education skills that are applied to formal education through the self-learning program on an independent campus. All activities involved in independent education on the Merdeka Belajar-Kampus Merdeka curriculum have a positive effect on student performance. It is important to adhere to the

principles of regularity, consistency, the relationship of self-education with education and self-education with professional activities in order to develop independent learning skills. Both advanced training courses, literature and social networks can be a source of self-education in professional life.

REFERENCES

- Abdul, R., Zubaidi, M., Mirnawati, M., & Mobo, F. D. (2022). Team Based Project Learning Model on The MBKM Course in The Department of Nonformal Education. *Journal of Nonformal Education*, 8(2), 208–221. <https://doi.org/10.15294/jne.v8i2.34194>
- Abdullayeva, D. (2021). Independent Education in Higher Education. *International Conference on Multidisciplinary Research and Innovative Technologies*, 2, 217–220. <http://mrit.academiascience.org/index.php/mrit/article/view/129>
- Abidah, A., Hidaayatullaah, H. N., Simamora, R. M., Fehabutar, D., & Mutakinati, L. (2020). The impact of covid-19 to indonesian education and its relation to the philosophy of “merdeka belajar.” *Studies in Philosophy of Science and Education*, 1(1), 38–49. <https://www.sciejournal.com/index.php/SiPoSE/article/download/9/5>
- Ambika, P., Ayshwarya, B., Livshits, Y. A., Nguyen, P. T., Hashim, W., Shankar, K., & Maseleno, A. (2019). Self-education as a condition of professional and personal development of a future specialist. *Religacion. Journal of Social Sciences and Humanities*, 4(16). <https://doi.org/10.14456/ITJEMAST.2020.13>
- Ansari, J. A. N., & Khan, N. A. (2020). Exploring the role of social media in collaborative learning in the new domain of learning. *Smart Learning Environments*, 7(1), 9. <https://doi.org/10.1186/s40561-020-00118-7>
- Cattaneo, A. A. P., Antonietti, C., & Rauseo, M. (2022). How digitalised are vocational teachers? Assessing digital competence in vocational education and looking at its underlying factors. *Computers & Education*, 176, 104358. <https://doi.org/https://doi.org/10.1016/j.compedu.2021.104358>
- Czaja-Chudyba, I., Muchacka-Cymerman, A., & Sajdera, J. (2018). Creativity and professional development of polish and american teachers. In *EDULEARN18 Proceedings* (pp. 9649-9659). IATED.
- Efremova, N., Shapovalova, O., & Huseynova, A. (2020). Innovative technologies for the formation and assessment of competencies and skills in the XXI century. *E3S Web Conf.*, 210. <https://doi.org/10.1051/e3sconf/202021018021>
- Faiz, A., & Kurniawaty, I. (2020). Konsep Merdeka Belajar Pendidikan Indonesia Dalam Perspektif Filsafat Progresivisme. *Konstruktivisme: Jurnal Pendidikan and Pembelajaran*, 12(2), 155–164. <https://doi.org/10.35457/konstruk.v12i2.973>
- HakanKör MelihEngin HamitAksoy, H. (2018). Investigation of College Students’ Capability of Self-Leadership. *Journal*, 4(2), 32–39. Retrieved from <https://dergipark.org.tr/en/pub/ijlel/issue/41857/491046>
- Jie, D., & Burlakova, I. I. (2019). Formation of the Ability to Learn as a Necessary Condition for Self-Education of Students. *International Conference on the Development of Education in Eurasia (ICDEE 2019)*, 173–177. <https://doi.org/10.2991/icdee-19.2019.32>
- Marisa, M. (2021). Inovasi kurikulum “Merdeka Belajar” di era society 5.0. *Santhet:(Jurnal Sejarah, Pendidikan, And Humaniora)*, 5(1), 66–78.
- Mihai, O. I. (2021). Self-education and lifelong learning. *IJASOS-International E-Journal of Advances in Social Sciences*, 7(19), 142–145. Retrieved from <https://ejournal.unibabwi.ac.id/index.php/santhet/article/view/1317>
- Pavlovych, L., & Bilous, I. (2020). Self-education of students in the conditions of higher educational institutions and its motivation. *Sciences of Europe*, 51-3 (51), 16–24. <https://doi.org/10.18769/ijasos.877846>
- Pidhirnyi, O. (2020). Preparation of future teachers of physical culture for self-educational activity as a psychological and pedagogical problem. *The Scientific Heritage*, (48-4), 47-50. Retrieved from <https://cyberleninka.ru/article/n/preparation-of-future-teachers-of-physical-culture-for-self-educational-activity-as-a-psychological-and-pedagogical-problem>
- Razumova, O. v. (2019). *Tutorship In University Educational Activity*. <https://osf.io/wrszd/download>
- Samuseviča, A., & Striguna, S. (2017). The Development of Teachers’ Pedagogical Competence in the Process of Self-education at the University. *International Journal on Lifelong Education and Leadership*, 3(2), 39–46. Retrieved from <https://dergipark.org.tr/en/download/article-file/551098>
- Scherbakova, T., Misirov, D., Akopyan, M., Ogannisyan, L., & Andchuk, I. (2021). Technologies of active learning in the context of the risks of modern professional education. *E3S Web of Conferences*, 273, 12025. <https://doi.org/10.1051/e3sconf/202127312025>
- Shynhof, I. (2021). Professional self-development of language and literature teachers as perceived by postgraduate pedagogical education courses attendees. *Primedia eLaunch LLC*, 211-223. <https://doi.org/10.11591/ijere.v1i13.22966>

- Suhartoyo, E., Wailissa, S. A., Jalarwati, S., Samsia, S., Wati, S., Qomariah, N., Dayanti, E., Maulani, I., Mukhlis, I., & Azhari, M. H. R. (2020). Pembelajaran Kontekstual Dalam Mewujudkan Merdeka Belajar. *Jurnal Pembelajaran Pemberdayaan Masyarakat (JP2M)*, 1(3), 161–164. <https://doi.org/10.33474/jp2m.v1i3.6588>
- Toirova, G. I., Zilola, A. A., Malika, N. F., Fazilat, N. F., & Nafisa, Z. O. (2020). Application of Innovative Technologies in Teaching Process. *International Journal of Psychosocial Rehabilitation ISSN*, 1475–7192.
- Umarova, Z. (2020). Modern and Innovative Approaches to the Organization of Students' Self-Education in Higher Educational Institutions. *Journal La Edusci*, 1(4), 5–8. <https://doi.org/10.37899/journallaedusci.v1i4.223>
- Wahyudi, W., Kusuma, D., Prihatnani, E., Nova Hasti Yuniarta, T., & Amin, N. (2023). Development of Blended Learning Activities Based on 3CM (Cool-Critical-Creative-Meaningful) to Support Creativity and Good Character Students. *Journal of Nonformal Education*, 9(1), 10–22. <https://doi.org/10.15294/jne.v9i1.42095>
- W.Cobern, W. (2015). The Lifelong Learning of Science. *Journal*, 1(1), 1–10. <https://doi.org/10.25233/ijlel/2015-v1i1p1>
- Yuzhaninova, E. R., & Moroz, V. v. (2018). The development of a student's value orientations on self-education and self-development in the internet. *Purposes, Tasks and Values of Education in Modern Conditions*, 20–24. <https://doi.org/10.47750/jett.2022.13.03.015>