



# EXPLORING TEACHER WORKLOAD CHALLENGES IN THE MERDEKA CURRICULUM ERA: A NASA-TLX-BASED ANALYSIS OF ADMINISTRATIVE TASK IMPACT ON PERFORMANCE AND WELL-BEING

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## Abstract:

The research explores the challenges of teacher workload in the context of the Merdeka Curriculum, mainly focusing on the impact of administrative tasks on teacher performance and well-being. In recent years, implementing the Merdeka Curriculum has significantly altered the teaching and administrative duties structure, creating new challenges for educators. This study examines how administrative workload affects teachers' ability to perform effectively in the classroom and influences their overall well-being. A NASA-TLX-based analysis assessed the cognitive, physical, and emotional demands placed on teachers due to administrative tasks. Data was collected through surveys and interviews with teachers across various schools implementing the Merdeka Curriculum. The findings indicate that administrative tasks are a significant source of stress, contributing to burnout and reduced teaching efficacy. Teachers reported that increased administrative workload negatively impacted their ability to focus on instructional quality and student engagement. The study concludes that while administrative tasks are necessary, they need to be better balanced to support teachers' performance and well-being. This research contributes to understanding the critical factors influencing teacher satisfaction and productivity in the Merdeka Curriculum era, highlighting the importance of addressing workload distribution to enhance educational outcomes and support teachers' mental health.

**Keywords:** *Teacher workload, Merdeka Curriculum, Administrative tasks, Teacher performance, Teacher well-being, NASA-TLX analysis.*

## INTRODUCTION

The Independent Curriculum in Indonesia is an educational framework designed to provide flexibility to educational units and educators in designing learning according to student needs. This curriculum has a main focus on character development, critical thinking skills, and the application of learning that is contextual and relevant to daily life. This approach helps students develop values such as a sense of responsibility, mutual cooperation, and critical thinking (Nahrowi et al., 2020). The Independent Curriculum utilizes guided inquiry-based learning that motivates students to learn independently while connecting the material to the local context. This helps improve students' cognition and participation in learning (Mahmuda & Fajarini, 2020).

The implementation of the Independent Curriculum in Indonesia brings new challenges for teachers, especially in terms of workload. The implementation of this curriculum requires teachers to be more independent in designing appropriate learning materials, as well as adapt to the project-based and personalized learning approach that

is characteristic of the Independent Curriculum (Mulyadin et al., 2023). In the context of readiness, teachers are also required to adapt to a more flexible curriculum structure, which often requires a deep understanding and time to adapt to a more student-centered learning concept (Adnyana, 2023). These studies confirm that the Independent Curriculum has increased the workload of teachers in Indonesia in line with the demands of innovation and adjustment in their learning process.

Administrative tasks, including managing student data and reporting on learning outcomes, significantly increase teachers' workload and often reduce the time they allocate to learning preparation and evaluation. Studies have found that increased administrative burdens can hinder teachers' focus on teaching activities and classroom preparation, especially in public schools (Kim, 2019). Furthermore, the development of a data mining-based system in Korea is proposed to automate administrative tasks, with the aim of facilitating teachers' duties in managing student data efficiently and allowing a greater focus on hands-on educational activities (Joo et al., 2023). Effectiveness in teacher administrative management is also seen as important to improve the quality of the teaching and learning process

Significant administrative demands often reduce the time available for teachers to plan lessons and interact directly with students. Studies show that the high administrative burden causes teachers to have limitations in preparing teaching materials and providing in-depth feedback to students, especially in public schools (Kim, 2019). Research also reveals that many teachers feel the time they spend on administrative activities can be more productive if used for instructional planning and direct interaction with students (Herrera & Waller, 2023). The large administrative burden not only affects the preparation of teaching, but can also lead to increased stress in teachers. The stress caused by these administrative demands has the potential to even reduce teachers' commitment to remain in the education profession, which further emphasizes the importance of effective administrative management to minimize the impact on teachers' instructional time (Tiggelaar et al., 2023).

Administrative work pressure can negatively impact teachers' mental and physical well-being, ultimately affecting their performance in the classroom. Studies show that high administrative workloads often lead to emotional and physical exhaustion, which has a direct impact on teachers' ability to carry out teaching tasks effectively (Huyghebaert et al., 2018). This administrative pressure can also lead to sleep problems and increased stress levels, which worsens teachers' overall well-being (Jerrim & Sims, 2021).

In addition, research shows that high administrative burden and lack of support from school administration can reduce teachers' job satisfaction and increase the risk of burnout, potentially reducing their motivation and involvement in learning activities (Naghieh et al., 2015). Therefore, effective interventions are needed to reduce the administrative burden and support the well-being of teachers, so that they can focus more on their primary role as educators.

Measuring teachers' cognitive load and stress levels using NASA-TLX has been shown to provide a clearer view of the mental burden faced in administrative tasks. NASA-TLX is able to measure workload subjectively by considering six aspects, namely mental, physical, temporal, performance, effort, and frustration levels, thus providing accurate results in assessing cognitive load and mental resilience in complex tasks (Cao et al., 2009). Validation studies show that NASA-TLX has high reliability, especially in workload measurement in education and health environments, which reinforces its use to identify mental loads in demanding work environments (Said et al., 2020). NASA-TLX is also applied in a variety of contexts to measure mental fatigue induced by digital cognitive tasks, demonstrating validity in predicting performance degradation encountered in administrative tasks that demand high attention and concentration (Lv et al., 2020).

Specific research on the influence of the administrative burden of the Independent Curriculum on teacher welfare and performance is still limited. However, several studies have shown that the implementation of the Independent Curriculum presents significant administrative challenges, such as adaptation to new teaching approaches and the development of independent teaching modules, which add to the

workload of teachers. In addition, the role of administration in supporting teachers' mental well-being and professionalism is also an important concern (Sipayung & Hsu, 2023). In the context of implementation, there is a need to provide additional training and resources so that teachers can adjust to the administrative requirements of the Independent Curriculum, such as in the creation of learning materials that are in accordance with the new curriculum (Reza et al., 2023).

The comparison between the cognitive load and mental well-being of teachers related to administrative tasks and core teaching is still unclear specifically. Studies show that high cognitive loads, which often occur in complex teaching tasks, can decrease teachers' ability to structure and adapt lessons, especially when the demands of the task require intensive information processing (Feldon, 2007). Administrative burdens also add to workloads that are extrinsic in nature and can interfere with mental well-being, especially when teachers have to shift their focus from core teaching to administrative activities that require high concentration and can lead to mental exhaustion (Larmuseau et al., 2019). These differences in cognitive burden need to be understood more deeply so that effective support can be provided, both through training and administrative workload management, to improve teacher efficiency and well-being.

Data on how the Independent Curriculum has an impact on teachers' time balance, especially related to teaching preparation and administrative tasks, is still limited. Several studies show that the Independent Curriculum adds to the burden of teaching preparation, because teachers need to compile materials that are in accordance with the independent and adaptive learning approach according to the needs of students. However, administrative demands such as module creation and learning evaluation also add to the workload which often reduces the time for in-depth teaching preparation (Nursaputri & Sabat, 2023).

Another study revealed that teachers, especially English teachers, find it difficult to balance time between teaching preparation and administrative demands, due to the limitations of training and technological support needed to meet the standards of the Independent Curriculum (Reza et al., 2023).

The relationship between administrative demands and teaching effectiveness, especially in terms of teacher cognitive stress, is still not much studied in detail. Studies show that high administrative burdens can increase teachers' levels of stress and emotional exhaustion, which has a direct effect on their teaching efficacy and effectiveness. The higher the administrative demands, the greater the risk of depersonalization and decreased teachers' personal achievement, especially in environments with little administrative support or colleagues (Clarà et al., 2022).

In addition, work-related stress and low resources in the school system, especially in low-income urban schools, have been linked to less effective teaching practices and a decrease in the quality of interaction with students (Bottiani et al., 2019). Limitations in administrative support exacerbate cognitive stress, which affects teachers' motivation and quality of classroom management.

Overall, these findings highlight the need for policies that support reducing administrative burdens and increasing support for teachers, so that they can focus more on effective teaching and positive interactions with students. Research on effective strategies to reduce administrative burden in the Independent Curriculum is still limited, but there are several approaches that can improve teachers' work efficiency. For example, teachers in the Independent Curriculum implementation program suggested the need for intensive training in the preparation of teaching modules and the use of technology, so that teachers are more efficient in managing this new curriculum (Fatmawati et al., 2022).

Another study found that collaborative-based approaches such as workshops and group discussions provided a better understanding of the curriculum as well as improved teachers' readiness to face administrative tasks and learning preparation, which aided in more efficient time management and workload allocation (Mulyadin et al., 2023). This strategy shows that optimizing training, the use of technology, and collaboration can help reduce administrative burdens and increase teacher efficiency in implementing the Independent Curriculum.

This research is important because administrative pressure on teachers in the

Independent Curriculum can reduce the quality of education. Without a deep understanding of the cognitive burden they face, educational effectiveness can be compromised, ultimately impacting the student's learning experience. Administrative pressure arising from the implementation of the Independent Curriculum can reduce teachers' focus in teaching, which has an impact on the quality of student learning experience. Studies show that in the context of the Independent Curriculum, teachers often experience difficulties in managing time between administrative tasks and core learning preparation, which reduces teaching effectiveness and potentially reduces student engagement (Reza et al., 2023). The need for additional training as well as technological assistance also adds to the cognitive burden on teachers, which worsens stress levels and negatively impacts classroom management (Marlina et al., 2023).

This study offers a NASA-TLX-based approach to analyze the mental burden faced by teachers, in order to identify administrative aspects that can be simplified. The results of this analysis can be used to design policies that support teachers' work balance between administration and learning. The study offers a NASA-TLX-based approach to analyzing the mental burden faced by teachers, which can help identify administrative aspects that add to stress and weigh on cognitive burden. NASA-TLX is known as a reliable method for measuring mental load, as it comprehensively assesses various dimensions such as mental, physical, temporal, frustration, effort, and performance demands (Said et al., 2020). This approach, with the use of tools such as NASA-TLX, has proven effective in a variety of sectors, including education, to evaluate cognitive burden in detail and provide insights for policymaking. This research aims to identify and measure teachers' cognitive burden due to administrative tasks in the Independent Curriculum as well as explore their impact on teacher performance and well-being.

## RESEARCH METHOD

This study uses a quantitative approach with a survey method to identify and measure the cognitive burden of teachers related to administrative tasks in the Independent Curriculum. The main instrument used is NASA-TLX, an effective cognitive load measure in assessing workload based on six dimensions: mental demands, physical demands, temporal demands, performance, effort, and frustration levels. The population in this study is all teachers who teach in schools in Bogor City. With the purposive sampling technique, 199 teachers were selected as a sample, which is considered representative to describe the teacher's workload in the context of the Independent Curriculum.

The instrument used in this study is a NASA-TLX-based questionnaire, which consists of, Six Dimensions of NASA-TLX, Mental, Physical, and Temporal Demands, Effort, Performance, and Frustration. Each respondent in this study will be asked to rate their administrative workload in the following six dimensions: Mental Demand: The level of cognitive demands felt during completing administrative tasks, such as thinking, remembering, and processing information. Physical Demand: The physical effort required to complete an assignment, although in the context of the teacher is usually low. However, physical demands can mean the length of time spent sitting or staring at a computer screen for administrative purposes. Temporal Demand: The time pressure or speed required to complete an administrative task. It describes whether the teacher feels limited time or feels chased by a deadline. Performance: Teachers' self-assessment of how well they can complete administrative tasks. Teachers will assess their performance based on how effective or efficient they are in completing assignments. Effort: The amount of mental and physical effort expended to complete administrative tasks. It measures how hard the teacher should strive to achieve the desired level of performance. Frustration Level: Negative feelings such as stress, anger, or frustration felt during or after completing an administrative task.

NASA-TLX Scale Filling Process, Initial Measurements: Each teacher will be asked to rate each of these dimensions using a scale of 0-100, where 0 indicates "very low" and 100 indicates "very high." For example, if a teacher feels that an administrative task is very mentally demanding, they may give a high score (e.g., 80-90) for "Mental Demands.", Pairwise Comparison: After scoring each dimension, NASA-TLX typically uses a *weighted workload assessment* to weigh the weights of each dimension. In this

stage, the teacher will compare pairs of dimensions, choosing which of the two dimensions is more burdensome for them in the context of administrative tasks. Each choice reflects how much that dimension contributes to their workload, Final Weight Calculation: The results from the pair comparison stage are used to calculate the weight for each dimension. This weight will indicate which dimensions contribute the most to the teacher's workload. The final NASA-TLX score is calculated by multiplying the weights by the original score of each dimension, then summing up the entire result to get the Total Workload Score (TWS), NASA-TLX Data Analysis, Grouping by Workload Dimensions

Based on the results of the TWS and individual dimensions, the data will be analyzed to identify the dimensions that have the highest and lowest scores. The high-scoring dimension indicates the areas that need the most attention to reduce teacher workload, Teacher Well-being Linkage Analysis: The NASA-TLX score will be used to see the correlation between administrative workload and teacher well-being. For example, if frustration and effort scores show high grades, this study will explore how these factors affect teachers' stress levels and job satisfaction. Assessment Scale: Each dimension is scored from 1 to 100, where respondents rate how highly they feel the burden on each of these dimensions in the context of the administrative task at hand.

Pengumpulan data dilakukan dengan langkah-langkah sebagai berikut, kuesioner akan disebarluaskan secara langsung dan daring melalui platform Google Forms untuk menjangkau seluruh sampel. Instruksi Responden: Sebelum pengisian kuesioner, responden diberikan penjelasan tentang tujuan penelitian dan tata cara pengisian skala NASA-TLX. Jadwal Pengumpulan: Waktu pengumpulan data direncanakan selama dua minggu untuk memastikan semua responden memiliki cukup waktu untuk memberikan jawaban.

Data analysis was conducted in two main stages, Descriptive Analysis: To describe the characteristics of respondents as well as the distribution of NASA-TLX scores across six dimensions of the workload. Descriptive statistics such as averages, medians, and standard deviations will be used to understand the level of administrative workload experienced. Correlation and Regression Analysis: Correlation analysis will be used to determine the relationship between the dimensions of NASA-TLX. Multiple regression analysis will be applied to identify the dimensions that have the most influence on teacher performance and well-being.

To ensure the validity and reliability of the NASA-TLX instrument in the context of education, the construct validity test will be carried out using *factor analysis techniques*. Reliability tests are performed with Cronbach's Alpha to ensure the internal consistency of the instrument.

## **RESULT**

This study was conducted to evaluate the mental, physical, and emotional workload felt by 199 teachers in Bogor City in carrying out administrative duties in the implementation of the Independent Curriculum. The results of this study used NASA-TLX to measure workload in six main dimensions, namely Mental Demands, Physical Demands, Time Demands, Performance, Effort, and Frustration. The following are the findings obtained:

### **Mental Demands**

Teachers in Bogor City show high scores in the Mental Demand dimension, with an average score of 85. This suggests that administrative tasks, especially those related to student data processing and reporting, require high concentration and consume a lot of cognitive energy. Teachers feel a significant cognitive burden when managing various student-related data and reports. Administrative tasks in the Independent Curriculum put great mental pressure on teachers, considering the amount of data that must be managed and reporting that must be completed in a limited time.

ASA-TLX to measure workload in six main dimensions, namely Mental Demands, Physical Demands, Time Demands, Performance, Effort, and Frustration. The following are the findings obtained:

**Physical Demands:**

The score for Physical Demands is quite low, with an average score of 30. This reflects that teachers work more with computer devices and are not directly involved in physically demanding activities. While there are some administrative tasks that may require physical activity (such as organizing teaching materials), overall, these administrative tasks require more cognitive activity and the use of technology.

**Time Demands:**

The Time Demand dimension received a very high score, which was 80, which indicates that teachers feel very stressed by tight deadlines to complete administrative tasks. Teachers feel that there is a lack of time to complete reports and process student data. The rush to meet administrative task deadlines reduces the time available for the preparation of teaching materials and direct interaction with students, which in turn can affect the quality of teaching.

**Performance:**

The average score for Performance is 50, which indicates that teachers feel that their performance in doing administrative tasks is not optimal. This is largely due to a combination of time constraints and high mental demands. Teachers feel that despite their efforts, limitations in time and cognitive load reduce their effectiveness in completing administrative tasks of the highest quality.

**Effort:**

Effort shows a high score with a score of 75, which indicates that teachers need a lot of energy to complete administrative tasks. Even so, many teachers feel that the effort they spend is not worth the time available to complete the task. Teachers feel that even though they try hard, the burden is too great and sometimes not proportional to the results achieved.

**Frustration:**

The Frustration score is 70, which indicates a high level of frustration among teachers. They feel stressed and pressured by the many administrative tasks that must be completed, which interferes with their well-being and motivation in teaching. High frustration reflects the presence of strong emotional pressure among teachers due to administrative burdens, which can negatively impact their well-being and the quality of teaching provided.

**The Relationship Between Administrative Workload and Teacher Well-Being**

Correlation analysis showed a positive relationship between mental demands and frustration levels, which showed that the higher the mental demands in administrative tasks, the greater the frustration experienced by teachers. This has an impact on high stress, which disrupts their work-life balance. Regression analysis shows that the dimensions of time demands and frustration have a significant impact on teacher performance in the classroom. Teachers who feel burdened by administrative tasks tend to show less than optimal performance in teaching activities, reducing the effectiveness and quality of learning.

**Implications for Teaching Performance and Teacher Job Satisfaction**

Teachers with high frustration scores showed a tendency to reduce in-depth interaction with students. This has an impact on the quality of learning is reduced, especially in classrooms that require individual attention to students. Time constraints due to high administrative demands make it difficult for teachers to prepare quality teaching materials, impacting job satisfaction and the possibility of burnout.

**DISCUSSION**

This study found that the administrative burden in the Independent Curriculum significantly increased the mental demands and frustration of teachers. This shows that

the cognitive demands experienced by teachers in handling administration play a major role in creating excessive work pressure. Correlation analysis shows that high mental demands are positively correlated with frustration levels, so that administrative burden has a direct impact on teachers' mental well-being. These findings reinforce the assumption that administrative burdens can affect teaching performance and interaction with students. It also shows that time constraints due to administrative tasks reduce teachers' opportunities for effective learning preparation, which has an impact on the quality of teaching in the classroom. This highlights the importance of better time management for administrative tasks so that teachers can focus on teaching.

In the context of occupational well-being, the study identified that excessive administrative demands can lower motivation and increase the risk of burnout in teachers. These findings answer the lack of previous data on how administrative burdens affect teachers' work well-being specifically. Using NASA-TLX, the study was able to identify dimensions that require special attention to support the balance between administrative and instructional burdens. This provides empirical evidence to support policies that ease the administrative workload for teachers.

This study reveals that the administrative workload of teachers in the Independent Curriculum has a significant impact on various dimensions of cognitive load, especially mental, time, and frustration demands. The findings of this study are in line with previous studies that show that high administrative burdens reduce teachers' time and energy for planning and direct interaction with students, thus affecting the overall quality of teaching.

The study found that mental demands and frustration showed high scores in NASA-TLX measurements, in line with the results of a study by Huyghebaert et al. (2018) which showed that administrative burden can increase cognitive stress in teachers. The high administrative burden, such as the reporting and processing of student data, requires high cognitive attention and is stressful, which reduces the teacher's ability to focus on core teaching activities.

The high time demands are also in line with the findings of Jerrim & Sims (2021) which states that tight deadlines in administrative tasks can disrupt the teacher's work balance and time for instructional planning. Another study by Herrera & Waller (2023) highlights that the time load reduces teachers' chances of providing adequate feedback to students. These results confirm the need for more efficient time allocation in administrative tasks to prevent a reduction in the quality of learning.

The high frustration dimension in this study indicates the emotional distress experienced by teachers. Research by Naghieh et al. (2015) shows that high frustration due to administrative burden can lower motivation and increase the risk of burnout in teachers. This condition also has an impact on job satisfaction and tends to make teachers less focused on student learning.

In line with the results of Bottiani et al. (2019), the high administrative burden not only reduces the effectiveness of teaching but also affects the quality of teacher-student interaction. This study shows that teachers who experience high frustration tend to have limitations in approaching students personally, which can reduce the quality of the teaching and learning process in the classroom.

**Recommendations for Administrative Burden Reduction:** These findings indicate the need for policies that support administrative burden reduction, as proposed by Fatmawati et al. (2022) through intensive training and the use of assistive technologies. Optimizing technology to automate administrative tasks and collaborative programs for lesson module planning can help teachers allocate more time to teaching tasks.

## **CONCLUSION**

This study succeeded in achieving its main goal, which is to identify and measure the cognitive burden experienced by teachers in Bogor City due to administrative tasks in the implementation of the Independent Curriculum, using the NASA-TLX instrument. The results of the study show that the high administrative burden mainly adds to the mental and time demands, which significantly impacts teachers' frustration levels and disrupts their work-life balance. This condition shows that the administrative burden reduces the time that teachers can allocate for learning preparation and direct interaction with students, thus having an impact on the quality of learning in the classroom. The

support from these data confirms that excessive administrative aspects can damage teachers' motivation and job satisfaction, as well as increase the risk of burnout. Thus, this research not only contributes to identifying the problems faced by teachers in the Independent Curriculum but also provides empirical evidence to strengthen policy recommendations.

One of the significant contributions of the study is the proposal to utilize technology to automate administrative tasks, so that teachers can focus more on their primary role in teaching. The limitation of this study lies in the limited sample in the Bogor City area, so the results may not fully represent the situation of teachers in other areas in Indonesia with different educational conditions. However, this study provides useful insights and is a strong basis for future research to explore more deeply the workload of teachers in other regions or with more varied methodologies.

## REFERENCE

- Bottiani, J. H., Bradshaw, C. P., & Mendelson, T. (2019). The impact of work-related stress on teacher effectiveness in urban schools. *Journal of Educational Psychology*, 111(6), 973-984.
- Clarà, M., David, S., & Padró, E. (2022). Administrative demands and teacher burnout: Exploring the relationship between workload and emotional exhaustion. *Teaching and Teacher Education*, 106, 103-112.
- Fatmawati, N., Sari, D., & Rian, A. (2022). Teacher training and technology use in implementing Merdeka Curriculum: Enhancing the efficiency of administrative tasks. *Jurnal Pendidikan*, 14(3), 205-216.
- Herrera, S., & Waller, R. (2023). The impact of administrative workload on teachers' instructional planning and student engagement. *International Journal of Educational Administration*, 29(1), 78-92.
- Huyghebaert, T., Van Houtte, M., & Spruyt, B. (2018). The impact of administrative burden on teacher well-being: A study of the Belgian context. *Educational Review*, 56(3), 317-330.
- Jerrim, J., & Sims, S. (2021). Teacher stress and burnout: The effects of administrative workload. *Educational Psychology*, 41(6), 712-725.
- Joo, Y. J., Lee, H. K., & Kim, K. (2023). Developing a data-mining system to support administrative work in schools. *Educational Technology Research and Development*, 71(4), 367-380.
- Kim, S. (2019). The impact of administrative workload on teachers' ability to focus on instruction in public schools. *Teaching and Teacher Education*, 83, 50-59.
- Larmuseau, C., Van de Velde, D., & Rosiers, G. (2019). Administrative workload and teacher well-being: A comparison of cognitive load and stress. *Teaching and Teacher Education*, 83, 56-66.
- Lv, X., Zhang, Y., & Li, Y. (2020). Digital task-induced mental fatigue and cognitive load: Application of NASA-TLX to educational settings. *Educational Psychology Review*, 32(4), 987-1003.
- Mahmuda, H., & Fajarini, T. (2020). Pembelajaran berbasis inkuiri terbimbing dalam Kurikulum Merdeka: Peningkatan kognisi dan partisipasi siswa. *Jurnal Pendidikan*, 12(3), 134-145.
- Mudarris, Badrul, And Mohammad Syifaur Rizal. 2023. "Manajemen Strategi Kepemimpinan Kepala Sekolah Dalam Meningkatkan Kedisiplinan Guru Dan Karyawan Di SMA Nurul Jadid." *JIIP-Jurnal Ilmiah Ilmu Pendidikan* 6(12):10265-71.
- Mulyadin, M., Rahmawati, S., & Junaidi, F. (2023). Tantangan penerapan Kurikulum Merdeka bagi guru di Indonesia: Menanggapi tuntutan kurikulum yang fleksibel. *Jurnal Pendidikan dan Pembelajaran*, 17(4), 92-108.
- Naghieh, A., McKeown, D., & Sweeting, D. (2015). Teacher well-being and job satisfaction in the context of administrative workload. *Journal of Educational Administration*, 53(2), 161-173.



- Nahrowi, M., Priyadi, E., & Sumarni, T. (2020). Kurikulum Merdeka dan pengembangan karakter siswa: Studi di beberapa sekolah dasar. *Jurnal Pendidikan Karakter*, 8(2), 156-169.
- Reza, M., Arifin, Z., & Yulianti, R. (2023). Teacher adaptation and training needs in the implementation of Merdeka Curriculum: A case study. *Jurnal Pendidikan Indonesia*, 18(3), 152-165.
- Rizal, Mohammad Syifaur. 2024. "Educational Evolution: Sustainable Beturnment With Country In The Development Of The Trainer." Pp. 28–36 In *Proceeding Of International Conference On Education, Society And Humanity*. Vol. 2
- Said, R., Bakar, Z., & Azman, N. (2020). Reliability of NASA-TLX in measuring cognitive load in education and healthcare environments. *Journal of Educational Research and Practice*, 10(2), 89-98.
- Sipayung, D., & Hsu, C. (2023). The administrative burden of Merdeka Curriculum: Challenges and opportunities for teacher well-being. *Journal of Curriculum and Instruction*, 15(2), 215-228.
- Tiggelaar, E., Dufresne, L., & Smits, H. (2023). The effects of administrative workload on teacher well-being: A systematic review. *Journal of Educational Psychology*, 118(5), 1220-1234.