

## Portrait of Chemistry Teachers' Readiness in Implementing the Independent Curriculum in High Schools

Dola Suciana<sup>1\*</sup>, Ayu F D Wathi<sup>2</sup>, Inas Sausan<sup>3</sup>, Faizal A A Masbukhin<sup>4</sup>,  
and Desi Lisa Rosanna<sup>5</sup>

<sup>1,2,3,4</sup> Universitas Terbuka, Tangerang Selatan, Indonesia

<sup>5</sup> Universitas Islam Negeri Syekh Ali Hasan Ahmad Addary, Padang Sidempuan, Indonesia

\*E-mail: [dola.suciana@ecampus.ut.ac.id](mailto:dola.suciana@ecampus.ut.ac.id)

### ARTICLE INFO

#### Article History:

Received May 2024

Revised May 2024

Accepted June 2024

Published June 2024

#### Keywords:

Freedom to learn;

Independent curriculum;

Teacher readiness;



© 2024 The Authors. This open-access article is distributed under a (CC-BY-SA License)

### ABSTRACT

This research aims to describe portrait of chemistry teachers' readiness to implement the Independent Curriculum in high schools throughout South Tangerang City. The Independent Curriculum aims to increase the relevance and quality of education in Indonesia. The research was conducted using a quantitative approach with descriptive data analysis. This research was conducted in South Tangerang City involving 56 chemistry teachers at high schools in South Tangerang City. The type of data used in this research is primary data. The instrument used to collect data in this research was a list of questions in the form of a questionnaire. The results of the research show that chemistry teachers in South Tangerang City are relatively ready to implement the independent curriculum in the schools where they teach. Researchers looked at the level of teacher readiness in implementing the independent curriculum from their knowledge regarding the characteristics and structure of the independent curriculum, readiness in planning learning, readiness in implementing learning, and readiness in implementing learning assessments. This research provides insight into the development of educational policies and the development of teacher professionalism in facing the challenges of the new curriculum.

### INTRODUCTION

Education is incredibly important in human life as it is vital for community development and shaping the future of a nation (Astuti & Olensia, 2019). With proper education, individuals can develop the skills, knowledge, and understanding necessary to succeed in life (Singh, 2016). Education also helps improve problem-solving abilities and eliminate inappropriate beliefs in human thinking. Additionally, it provides people with a clearer understanding of the world around them (Hidayat et al., 2023). It is crucial to enhance the quality of education to raise national education standards (Kasman & Lubis, 2022). Therefore, the Indonesian government, through the Ministry of Education and Culture, is working to improve the quality of education by implementing a new curriculum known as the independent curriculum.

The curriculum is a set of plans and arrangements regarding objectives, content, and learning materials, as well as methods used as guidelines for implementing learning activities to achieve certain educational goals (Digna & Widyasari, 2023). The curriculum is an important factor in determining the quality of education. Ismawati stated that the curriculum is the teaching objectives, learning experiences, learning tools, and assessment methods planned for education (Anom et al., 2023). The curriculum needs to have the ability to adapt to changing times to suit the needs of students at that time (Nugraha, 2022). Preparing a curriculum requires careful planning and is implemented well (Muskin, 2015). This is because the curriculum is the most basic element of all education. After all, it acts as a guide to achieving targeted education.

The quality of a country's education system can be seen from the curriculum that applies in that country (Apsari, 2018).

Changes to the curriculum are normal, considering that the curriculum must be adapted to educational needs at that time. The changes made regarding the implementation of the education system are demands that need to be made so that the quality of human resources produced in the education system becomes better and can face changing challenges. In a curriculum, there are instructions for teachers to prepare learning plans, carry out learning activities, and assess learning outcomes. Changes to the curriculum, of course, also cause changes to the series of processes mentioned above (Nevenglosky, 2018). In Indonesia, before the independent curriculum was established, several changes were made to the curriculum as a form of effort to improve the quality of education. There have been eleven recorded changes to the curriculum in Indonesia since Indonesia became independent. Among them were eight changes before the regional autonomy era in 1999, namely starting from the 1947 curriculum, 1964 curriculum, 1968 curriculum, 1973 curriculum, 1975 curriculum, 1984 curriculum, 1994 curriculum and 1999 curriculum. Meanwhile, during the regional autonomy era, there were three changes to the curriculum. Including the 2004 competency-based curriculum (KBK), the 2006 educational unit-level curriculum (KTSP), and the 2013 curriculum (Digna & Widyasari, 2023).

Every change to the curriculum certainly involves a series of processes such as planning, testing, and then revision to ensure good interaction between teachers, students, the educational environment, and school resources. With this series of processes, the educational goals that have been set can be achieved (Olamo et al., 2019). A new curriculum that the authorized institution has determined will then enter the implementation process (Dzimiri & Marimo, 2015). The most important thing in every change to the curriculum is to ensure that the change has gone through careful and thorough planning and preparation so that the curriculum can be well received and easily implemented by educators and students (Lathif, 2023). Through this implementation, the advantages will be known as the shortcomings of a curriculum, and efforts can be made to overcome the weaknesses of the curriculum.

To face the Industrial Revolution 4.0 and the challenges of learning in the 21st century requires students to be able to develop critical thinking skills, the ability to communicate effectively, be able to solve problems, and build collaboration with other people. Apart from that, students also need to have good digital literacy (Nada & Sari, 2020). So, the Indonesian government, through the policy of the Minister of Education and Culture, launched a new curriculum called the Independent Curriculum. This is to follow up on directions from the President of the Republic of Indonesia to improve the quality of Indonesia's human resources. The independent curriculum is a learning design that provides opportunities for students to learn more relaxed and enjoyable so they can show their natural talents. The independent learning curriculum focuses on increasing creativity and freedom for students (Aina, 2020). Through this independent curriculum, it is hoped that students can develop based on their potential and abilities because the independent curriculum will create more critical, expressive, quality, and applicable learning.

In policies related to the application of the independent curriculum, four issues need attention, including policies related to the National Examination (UN), National Standard School Examinations (USBN), learning implementation plans (RPP), as well as regulations regarding the acceptance of new students. In this independent curriculum, the implementation of national exams will be abolished and replaced with minimum competency assessments and character surveys consisting of literacy, numeracy, and character education skills. Each school will implement USBN to assess students' abilities, which can be carried out in various forms such as written tests, portfolio assignments, and so on. This will give teachers more freedom in assessing students' abilities. Meanwhile, the policy related to lesson plans is to simplify the preparation of lesson plans by eliminating several components, and teachers, as educators, are

also given the freedom to develop the lesson plan format. This will certainly enable teachers to have more time for a better learning process for their students. Regarding the acceptance of new students, zoning regulations are enforced in the context of realizing equitable and just educational services (Afista et al., 2020)

The creation of high-quality education is influenced, among other things, by the teacher's ability to carry out the learning process. Therefore, to support the successful implementation of the independent curriculum and to realize quality education, an important thing that needs to be highlighted is the readiness of teachers to implement this curriculum in schools. Of course, government policies regarding changes or improvements to the education system will not be implemented properly if professional and qualified teachers do not support them. In the independent curriculum, teachers are given freedom and flexibility in carrying out the learning process. Teachers can design learning activities according to the characteristics of their students. However, this flexibility and freedom cannot be implemented properly if the teacher does not have references or knowledge regarding the implementation of student-centered learning (Isnaini et al., 2023). Therefore, teachers, as drivers of independent learning, must be active, creative, innovative, and skilled in carrying out their role. Teachers must also be able to master and utilize information technology to improve their teaching methods to suit the demands of the times. Not only that, amidst the onslaught of developments and changes in this era, through an independent curriculum, a teacher must also be able to teach good values to their students so that they have noble character and manners (Mulyasa, 2009).

The large role of teachers as educators in the successful implementation of the independent curriculum needs special attention. The readiness of teachers in the field of study is important (Dwi Pertiwi et al., 2023). One of them is a chemistry teacher. Chemistry is one of the important subjects in science. Chemistry teachers must be the main implementers of the curriculum and must be able to adapt to these changes. Therefore, chemistry teachers need to be ready and motivated to implement the independent curriculum. Teachers must be able to implement new mechanisms in this new curriculum, starting from planning, implementing, and evaluating the learning process (Farwati et al., 2022).

Several previous studies regarding teacher readiness in implementing the independent curriculum have shown mixed results. Research conducted by Apriyani, 2022 with the title *The Analysis of Schools and Mathematics Teachers' Readiness to Face The "Merdeka" Curriculum Implementation* concluded that teachers have not been able to implement learning activities following the principles of the independent curriculum, which has resulted in them still being hampered in carrying out a series of learning activities starting from designing to evaluating learning (Apriyani, 2022). Research conducted by Prihatini, 2022 with the title *"The Image of the New Curriculum: Teacher Readiness in Implementing the Independent Curriculum"* is known to be in line with the continuous training and practice carried out by teachers in implementing the independent curriculum, making their understanding better in applying the independent curriculum (Prihatini & Sugiarti, 2022). Based on research conducted by Minarti et al. in 2023 with the title *"Analysis of Teacher Readiness in Implementing the Independent Curriculum in High School Biology Learning at the Demak Regency Driving School,"* it is known that teachers are categorized as ready to implement the independent curriculum in schools. However, there are still several obstacles, such as difficulties in optimizing learning time and problems in implementing differentiated learning activities due to the large number of students and inadequate facilities (Minarti et al., 2023).

Based on this, in this article, the researcher will discuss the readiness of chemistry teachers to implement the independent curriculum in high schools throughout South Tangerang City. It is necessary to look at the readiness of teachers in terms of their knowledge regarding the characteristics and structure of the independent curriculum, readiness in planning learning, readiness in implementing learning, and readiness in implementing learning assessments. This

level of teacher readiness can later be used as a basis for making policies related to education or implementing an independent curriculum in schools.

## METHODS

### Research Design

This research is a quantitative approach with descriptive data analysis. It is said to be descriptive research because a variable is described without comparing it with other variables (Abubakar, 2021).

### Research Target

This study was conducted in South Tangerang City and involved 56 high school chemistry teachers. The sampling method used in this study was Non-Probability Sampling, specifically Purposive Sampling. Samples were chosen based on specific criteria to determine the number of samples for the study (Sugiyono, 2012).

### Research Data

The study utilized primary data obtained directly from responses of chemistry teachers in South Tangerang City through questionnaires and interviews.

### Research Instruments

The data for this study was collected using a questionnaire with a list of questions. During the descriptive analysis stage, the data was grouped into categories based on a scale to explain the average scores of respondents' answers. The study used the Likert model with five answer options, and each answer was given a score between 1 and 5 based on the following categories: Very Non-Conforming, Non-Conforming, Neutral, Compliant, and Very Appropriate.

### Data Analysis

The research instruments were tested for validity and reliability using SPSS. Validity was tested using Pearson Correlation, and reliability was evaluated using the Cronbach Alpha technique in SPSS. After obtaining the scores, they were further analyzed and converted into qualitative criteria. The assessment categories are available in the following table.

Table 1. Assessment Categories

Score Interval	Category
$X > \bar{X}_l + 1.8 \times sbi$	Very Good
$\bar{X}_l + 0.6 \times sbi < X \leq \bar{X}_l + 1.8 \times sbi$	Good
$\bar{X}_l - 0.6 \times sbi < X \leq \bar{X}_l + 0.6 \times sbi$	Pretty Good
$\bar{X}_l - 1.8 \times sbi < X \leq \bar{X}_l - 0.6 \times sbi$	Not Good
$X > \bar{X}_l - 1.8 \times sbi$	Very Not Good

(Widoyoko, 2009).

Where:

$\bar{X}_l$  = Ideal average =  $1/2$  (ideal maximum score + ideal minimum score)

$X$  = Empirical score

$sbi$  = Ideal standard deviation =  $1/6$  (ideal maximum score - ideal minimum score)

On the Likert scale used in this study, the ideal minimum score is 1, and the ideal maximum score is 5, so the following readiness category table is obtained:

Table 2. Likert Scale Score Interval

Score Interval	Category
$X > 4.2$	Highly Prepared
$3.4 < X \leq 4.2$	Ready
$2.6 < X \leq 3.4$	Simply Ready
$1.8 < X \leq 2.6$	Less Prepared
$X \leq 1.8$	Very Poorly Prepared

## RESULTS AND DISCUSSION

### Respondent Demographics

Sampling in this research was carried out using techniques of *Non-probability sampling*, that is, *purposive sampling*, and obtained demographic data as follows:

Table 3. Respondent Demographic Data

Attribute	Category	Amount	Percentage
Gender	Man	10	18%
	Woman	46	82%
Age Range	20-30	12	21%
	31-40	12	21%
	41-50	16	29%
	Above 50	16	29%
Type of School	State	12	37.5%
	Private	20	62.5%

### Questionnaire Validity and Reliability Test Results

Questionnaire validity testing is carried out using the SPSS application *Pearson Correlation*. Data from the validation of instrument items were analyzed by comparing values  $r_{xy}$  count with  $r_{xy}$  table. When obtained  $r$  count  $\geq r$  table means the correlation is significant, meaning the test instrument used can be said to be valid. Based on the tests carried out by the researcher, it was found that all question items had a calculated  $r$  that was greater than the  $r$  table, which means that the items were valid. In testing the reliability of the instrument items, the following data was obtained:

Table 4. Data from questionnaire reliability test results

Part	Cronbach Alpha value
Knowledge about the characteristics of an independent curriculum	0.843
Learning planning	0.891
Implementation of learning	0.911
Implementation of learning evaluation	0.920

An instrument is said to be reliable when a value is obtained from *Cronbach's Alpha*  $> 0.60$  (Ghozali, 2016). Based on the table above, all values of *Cronbach's Alpha* are greater than 0.60, which means that all question items in the instrument can be said to be reliable.

Teachers have an important role in determining the success of implementing a curriculum. This is because a teacher is an educational actor who directly interacts with students in a learning process. In carrying out their role as educators, teachers can be effective agents of change in implementing the independent curriculum. Therefore, teachers are expected to have a good level of readiness to carry out learning activities in this independent curriculum era. Readiness is a person's condition that makes him ready to respond to a certain situation. The level of readiness of chemistry teachers in South Tangerang City to implement the independent curriculum can be described in several indicators, including knowledge related to the characteristics and structure of the independent curriculum, readiness in planning learning, readiness in implementing learning, and readiness in implementing learning assessments.

### Knowledge Related to the Characteristics and Structure of the Independent Curriculum

Teachers' knowledge of a newly implemented curriculum is very important to study. Because, of course, it has a very important impact on the educational process. Understanding



the characteristics of the curriculum is the first thing that teachers must do. This can, of course, provide opportunities for teachers to respond to curriculum changes professionally. The table below shows the level of teacher readiness in implementing the Merdeka curriculum in the city of South Tangerang when viewed in terms of their knowledge of the characteristics and structure of the Merdeka curriculum. The classification of readiness categories is adjusted to the categories specified in Table 5.

Table 5. Knowledge about characteristics of the Merdeka curriculum

Statement	Average Answer Score	Category
In my school, the independent curriculum has been implemented	4.5	Highly Prepared
I understand the regulations regarding the independent curriculum that apply	4.12	Ready
I understand the basic differences between the independent curriculum and the previous curriculum	4.30	Highly Prepared
I understand the background to the implementation of the independent curriculum	4.03	Ready
Average	4.23	Highly Prepared

Based on the results of the analysis carried out by researchers, most of the chemistry teachers in South Tangerang City already understand the characteristics of the Merdeka curriculum. As shown in the table above, for each item in the questionnaire related to knowledge of the characteristics and structure of the Merdeka curriculum, the average obtained -average score of 4.23 in the very ready category. Understanding the structure and characteristics of the independent curriculum is important because this will be the initial basis for teachers in exploring and implementing the independent curriculum in the learning process that will be carried out. Teachers need to understand the regulations regarding the independent curriculum, the basic differences between the independent curriculum and the previous curriculum, and the background to the implementation of the independent curriculum.

Based on the results of interviews conducted by researchers with 3 resource persons in 3 different schools, it is known that they have obtained sufficient information regarding the independent curriculum. The results of the interviews can be seen in Table 6.

Table 6. Respondents' answers related to their general knowledge about the independent curriculum

Question	Interviewees	Answer
Have you received sufficient information about the Independent Curriculum? Has there been any training or workshop related to this?	KB	<i>"I have received information regarding the independent curriculum because this curriculum has been implemented at school, and there have been 2 training sessions for teachers."</i>
	PN	<i>"The school implemented an independent curriculum in the first year, and training has already been carried out. The education and school departments provide the training."</i>
	BA	<i>"The school has implemented the independent curriculum for approximately 1 year, and there has been independent training, and our school is already independent of change."</i>

There are four important points that educators need to pay attention to regarding the latest regulations contained in the independent curriculum which differentiate this new curriculum from the previous curriculum, including those related to the implementation of The national standard school exam, implementation of national exams, making learning plans, as well as zoning requirements in accepting new students (Jamilah et al., 2023). Teachers also need to understand the differences between the independent curriculum and the previous curriculum.

This is because these differences will influence the approaches, teaching methods and learning objectives that will be applied.

In implementing the curriculum into the learning process, the greatest responsibility falls on a teacher. Teachers play a key role as direct implementers of the curriculum. Therefore, the role of the teacher is very crucial, so a teacher needs to understand this independent curriculum well. Without a teacher's good understanding of implementing the curriculum, any good curriculum concept will be useless (Pernando & Wirdati, 2022). An educator will be motivated and enthusiastic in implementing learning if they understand the curriculum well. Based on previous research conducted by Nurzein in 2022, it is known that when a teacher is enthusiastic and motivated in implementing a new curriculum, it will have a positive impact on the quality of education in schools. Apart from that, motivation and enthusiasm will be transmitted to students, thus making the learning process more enjoyable (Nurzen, 2022).

### Readiness in Lesson Planning

The next thing that needs to be paid attention to in curriculum implementation is readiness in learning planning. In the learning process, of course, there needs to be good planning from the teacher as an educator. In the table below, the level of readiness of teachers in South Tangerang City in learning planning is described.

Table 7. Readiness in learning planning

Statement	Average Answer Score	Category
I can analyze learning outcomes	4.08	Ready
I can formulate learning objectives	4.16	Ready
I can organize the flow of learning objectives	4.13	Ready
I can design/develop teaching modules	4.00	Ready
I can plan diagnostic assessments	3.89	Ready
I can design formative assessments for students	4.12	Ready
I can design summative assessments for students	4.19	Ready
Average	4.08	Ready

Based on the table above, it is known that for each item contained in the questionnaire related to the readiness of chemistry teachers in South Tangerang City in planning lessons, an average score of 4.08 was obtained in the ready category.

One of the Interviewees, namely BA, stated that "*at the school where I teach, chemistry teachers can be said to be ready to plan the lessons. This is because the learning community has been optimized, and there is a collaboration with the chemistry teacher forum. In this forum, we discussed and shared learning planning with chemistry teachers in various schools.*"

Based on the questions asked to respondents, it is known that respondents have a good level of readiness in carrying out learning planning, which means that they can analyze learning outcomes, formulate learning objectives, develop learning objectives, develop teaching modules, plan diagnostic assessments, and able to plan summative assessments for students. The teacher's ability and readiness to carry out learning planning is important because this will provide an overview of the teacher's ability to carry out the learning process later (Suyanto, 2017).

A teacher can be said to be a professional teacher if he can plan learning activities well. This is because learning activities at school will not run effectively if they are not planned well (Dwi Pertiwi et al., 2023). If the learning plan is prepared well by a teacher, the learning process will be better. Learning planning is not designed to impose learning activities on students but must be made according to the student's circumstances (Sufiati & Afifah, 2019). Based on research previously conducted by Pertiwi in 2023 regarding teacher readiness in implementing the independent curriculum at SMAN 1 Ciomas, it is known that teachers already have a good

level of readiness in planning independent curriculum learning. In planning learning, good pedagogical competence is needed from a teacher (Kumalasari et al., 2017). That way, they will understand what is needed in the learning process so that it is what is mandated by the independent curriculum.

### Readiness for Learning Implementation

In the table below, you can see the readiness of chemistry teachers in South Tangerang City to carry out learning activities. There are 8 question items to determine the level of teacher readiness in implementing learning.

Table 8. Readiness in implementing learning

Statement	Average Answer Score	Category
I assess at the beginning of the lesson	4.07	Ready
I understand various cutting-edge learning methods	3.91	Ready
I can apply various learning methods in class	3.89	Ready
I can apply a learning process that focuses on the expected essential materials	4.12	Ready
I have the flexibility to be able to carry out learning that suits the student's abilities	4.10	Ready
I can apply various innovative and interesting learning media	4.00	Ready
I can master ICT-based learning media	4.19	Ready
The learning materials provided are what students need	4.14	Ready
Average	4.05	Ready

Based on the table above, it is known that for each item contained in the questionnaire related to the readiness of chemistry teachers in South Tangerang City to carry out learning, an average score of 4.05 was obtained in the ready category.

Researchers also conducted interviews to determine teacher readiness in implementing learning. BA, one of the Interviewees, said that:

*"In the learning process, in my school, diagnostic tests are only carried out when students are in the tenth grade. Apart from that, I have also carried out diagnostic tests to map students' abilities. In the learning process, I also apply a project-based STEAM learning approach. For the development of teaching modules, we have made modifications to the teaching modules provided by the Ministry of Education to suit the needs of our students."*

In another school, one of the Interviewees, namely KB, said that:

*"I have not had a diagnostic assessment done yet. At this time, teachers are required to carry out student-centered learning. Regarding teaching modules, I use independent curriculum-based teaching modules provided by the Ministry of Education."*

The independent curriculum and the independent learning education program provide freedom for students to develop better according to their interests and talents. Apart from that, it is also hoped that with this independent learning program, students will be able to explore their potential in their way (Ndari et al., 2023). Therefore, the implementation of learning activities in schools must be able to support the independent learning program that the government has established. One manifestation of implementing the independent learning program is carrying out diagnostic assessments in schools. Based on the research results, it was found that chemistry teachers in South Tangerang City were ready to carry out this diagnostic assessment at the school where they taught. This needs to be a concern because this diagnostic assessment is one of the components of the independent curriculum, which is carried out to understand students' characteristics, competencies, strengths, weaknesses and learning styles (Aringka & perpisa, 2023).

Through an independent curriculum, teachers have the freedom to carry out learning activities. Therefore, teachers must know various methods, models, and learning media. Based



on the research results obtained by researchers, it is known that chemistry teachers in South Tangerang City are ready to carry out learning by applying various methods and learning media, which, of course, support the learning process. By implementing this independent curriculum, they are free to explore various learning methods or use learning models and media that are suitable for their students so that the learning process takes place well and is fun (Dwi Pertiwi et al., 2023). Teachers need to have good cognitive abilities so that they can improve their skills along with current curriculum developments (Hanifa et al., 2024). Apart from that, current developments also require teachers to have good digital literacy, one of which is the ability to master ICT-based learning media. Having good digital literacy skills can make the learning process more interesting and make the knowledge transfer process more effective (Laksono, 2021).

### Readiness in Implementing Learning Assessments

After carrying out the learning activities, the teacher will then evaluate the student's learning activities in a series of learning activities. In this case, to determine teacher readiness in carrying out learning assessment activities, there are several important aspects that teachers need to understand in the Merdeka curriculum, including the following: (1) being able to develop formative assessment instruments for students; (2) able to develop summative assessments for students; (3) able to determine criteria or indicators of achievement of learning objectives; (4) understand the principles of implementing the learning assessment process; (5) able to process learning assessment results; (6) able to carry out reflection or follow-up after conducting a learning assessment.

Table 9. Readiness in learning assessment

Statement	Average Answer Score	Category
I was able to develop formative assessment instruments for students	3.91	Ready
I can develop summative assessments for students	4.12	Ready
I can set criteria or indicators for achieving learning objectives.	4.16	Ready
I understand the principles of implementing the learning assessment process	4.03	Ready
I can process the results of learning assessments	4.07	Ready
I can carry out reflection or follow-up after conducting a learning assessment.	4.05	Ready
Average	4.05	Ready

Based on the research results, it is known that chemistry teachers in South Tangerang City are classified as ready for implementing learning assessments in general. The implementation of the independent curriculum does not replace all the policies in the previous curriculum, but this curriculum is present as an evaluation and improvement of the previous curriculum (Pantiwati et al., 2023). Based on the results of this research, researchers know that chemistry teachers in South Tangerang City are categorized as ready to develop formative and summative assessment instruments for their students. Formative assessments are carried out at the beginning of learning to provide information or feedback for educators and students to improve the learning process. Meanwhile, a summative assessment is carried out if a learning material has been studied in class. This summative assessment is carried out to ensure that students have been able to achieve all the learning objectives set for certain learning materials (Budiono & Hatip, 2023). The implementation of formative and summative assessments in the independent curriculum is based on various paradigms, including the application of a growth mindset, integration, freedom in determining assessment times, freedom in determining the type of

assessment, freedom in determining assessment techniques and instruments, freedom in determining criteria for achievement learning outcomes, flexibility in the process of assessing learning outcomes, as well as freedom in determining the criteria for class promotion (Yulianto, 2022).

## CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research conducted, it is known that based on the indicators set by researchers in determining the readiness of chemistry teachers in South Tangerang City, it is known that teachers can be classified as ready to implement the independent curriculum in the schools where they teach. The indicators that researchers mean include their knowledge regarding the characteristics and structure of the independent curriculum, readiness in planning learning, readiness in implementing learning, and readiness in assessing learning. The application of an independent curriculum in learning is something that educational institutions must implement. Gradually, all schools at all levels of education will apply the independent curriculum as mandated by the Indonesian Ministry of Education, Culture, Research and Technology. The research carried out is still limited. There are many things about the implementation of this new curriculum that can be researched by other researchers, such as conducting further and in-depth research into the obstacles experienced by teachers in implementing the independent curriculum. Besides that, stakeholders related to the implementation of this new curriculum are also recommended to hold ongoing training programs and workshops to improve teachers' understanding and skills in implementing the Independent Curriculum.

## REFERENCES

- Abubakar, R. (2021). *Pengantar Metodologi Penelitian*. SUKA-Press UIN Sunan Kalijaga.
- Afista, Y., R, A. P., & Huda, S. A. A. (2020). Analisis Kesiapan Guru PAI dalam Menyongsong Kebijakan Merdeka Belajar (Studi Kasus di MTsN 9 Madiun). *Journal of Education and Management Studies*, 4(6), 53–60.
- Aina, K. Dela. (2020). Merdeka Belajar dalam Pandangan Ki Hadjar Dewantara dan Relevansinya bagi Pengembangan Pendidikan Karakter. *Jurnal Filsafat Indonesia*, 3(3), 95–101.
- Anom, K. W., Hikmahtika, Y., Ad, E., Abdurachman Ibrahim, dan, Sriwijaya, U., & Selatan, S. (2023). Kurikulum untuk Pengembangan Modul Pembelajaran Peningkatan Bobot Kambing di Era New Normal. *Orbital: Jurnal Pendidikan Kimia*, 7(1).
- Apriyani, D. C. N. (2022, July). The Analysis of Schools and Mathematics Teachers' Readiness to Face The“Merdeka” Curriculum Implementation. *International Conference on Learning and Education (ICLE)*.
- Apsari, Y. (2018). Teachers' Problems and Solutions in Implementing Curriculum 2013. *Acuity: Journal of English Language Pedagogy, Literature and Culture*, 3(1), 11–23.
- Aringka, Y., & perpisa, L. (2023). Diagnostic Assessment in Implementing Curriculum Merdeka on Senior High School. *Jurnal Pendidikan Mandala*, 8(3), 913–918. <http://ejournal.mandalanursa.org/index.php/JJUPE/index>
- Astuti, R. T., & Olensia, Y. (2019). *Berbasis inkuiri pada materi titrasi*. 4(2), 127–141. <https://doi.org/10.30870/educhemia.v4i2.5326>
- Budiono, A. N., & Hatip, M. (2023). Diagnostic assessment, formative assessment, summative assessment, independent curriculum Learning Assesment in the Independent Curriculum. *Jurnal Axioma: Jurnal Matematika Dan Pembelajaran*, 8.
- Digna, D., & Widyasari, C. (2023). Teachers' Perceptions of Differentiated Learning in Merdeka Curriculum in Elementary Schools. *International Journal of Elementary Education*, 7(2), 255–262. <https://doi.org/10.23887/ijee.v7i2.54770>

- Dwi Pertiwi, P., Nindiasari, H., Sultan Ageng Tirtayasa, U., Guru Matematika, K., & Merdeka, K. (2023). Analisis Kesiapan Guru Matematika dalam Implementasi Kurikulum Merdeka Kata kunci. *JIIP: Jurnal Ilmiah Ilmu Pendidikan*, 6(3), 1717–1726. <http://jiip.stkipyapisdmpu.ac.id>
- Dzimiri, W., & Marimo, S. T. (2015). Challenges Faced in The Implementation of The Zimbabwe Localised Advanced Level Geography Syllabus: A Case of Gweru District High Schools. *Global Journal Of Interdisciplinary Social Science*, 4(2), 52–56.
- Farwati, R., Metafisika, K., Nilam Sari, F., Ismail Sholeh, M., & Kunci, K. (2022). Kesiapan Guru Kimia Menghadapi Kurikulum Merdeka. *Jurnal Al'ilmu*, 11(2), 2022.
- Ghozali, I. (2016). *Desain penelitian kuantitatif dan kualitatif: untuk akuntansi, bisnis, dan ilmu sosial lainnya*.
- Hanifa, E., Hairida, H., Rasmawan, R., Masriani, M., & Lestari, I. (2024). Kesiapan Guru Kimia dalam Mengimplementasikan Kurikulum Merdeka di SMA. *Edukatif: Jurnal Ilmu Pendidikan*, 6(1), 956–963. <https://doi.org/10.31004/edukatif.v6i1.5913>
- Hidayat, U. S., Juariyah, S. P., & Rahma, A. (2023). *Teacher's Perspective on Implementation of Independent Curriculum in School of Activator*. 200–208. [https://doi.org/10.2991/978-2-38476-088-6\\_23](https://doi.org/10.2991/978-2-38476-088-6_23)
- Isnaini, M., Farwati, R., & Metafisika, D. K. (2023). CATUR STEM: Buku Panduan bagi Guru Kimia untuk Menyusun RPP Berbasis STEM. *Orbital: Jurnal Pendidikan Kimia*, 7(1).
- Jamilah, I., Murti, R. C., & Khotijah, I. (2023). Analysis of Teacher Readiness in Welcoming the “Merdeka Belajar” Policy. *AL-ISHLAH: Jurnal Pendidikan*, 15(1), 769–776. <https://doi.org/10.35445/alishlah.v15i1.3085>
- Kasman, K., & Lubis, S. K. (2022). Teachers' Performance Evaluation Instrument Designs in the Implementation of the New Learning Paradigm of the Merdeka Curriculum. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 8(3), 760. <https://doi.org/10.33394/jk.v8i3.5674>
- Kumalasari, S. P., Setiawan, B., & Sumarlam, S. (2017). Pedagogical Competence Of Indonesia Teacher Viewed From The Anecdote Writing Lesson Planning. *Lingua Didaktika: Jurnal Bahasa Dan Pembelajaran Bahasa*, 11(2), 146. <https://doi.org/10.24036/ld.v11i2.8054>
- Laksono, P. J. (2021). Literasi Digital Calon Guru Sains di Universitas Islam pada Masa Pandemi Covid-19. *Orbital : Jurnal Pendidikan Kimia*, 5(2), 91–109.
- Lathif, R. (2023). Comparative Study of Curriculum 2013 Implementation and Independent Learning Curriculum on Islamic Religious Education Learning at SMAN 2 South Tangerang City. *Scientia*, 2(1), 426–430. <https://doi.org/10.51773/sssh.v2i1.188>
- Minarti, I. B., Rossita Dewi, L., & Ika Setyaningsih, I. (2023). Analisis Kesiapan Guru Dalam Implementasi Kurikulum Merdeka Pada Pembelajaran Biologi di Sekolah Penggerak Kabupaten Demak. *Innovative: Journal of Science Research*, 3(4), 6942–6956.
- Mulyasa, E. (2009). *Kurikulum yang disempurnakan*. Remaja Rosdakarya.
- Muskin, J. A. (2015). Student Learning Assessment and the Curriculum: Issues and Implications. *Educational Theory*, 58(1).
- Nada, E. I., & Sari, W. K. (2020). Analisis Literasi Digital Calon Guru Kimia Dalam Pelaksanaan Ppl Berbasis Virtual Di Masa Pandemi Covid-19. *Orbital: Jurnal Pendidikan Kimia*, 4(2).
- Ndari, W., Suyatno, Sukirman, & Mahmudah, F. N. (2023). Implementation of the Merdeka Curriculum and Its Challenges. *European Journal of Education and Pedagogy*, 4(3), 111–116. <https://doi.org/10.24018/ejedu.2023.4.3.648>
- Nevinglosky, E. (2018). ScholarWorks Barriers to Effective Curriculum Implementation. In *Walden Dissertations and Doctoral Studies*. <https://scholarworks.waldenu.edu/dissertations>
- Nugraha, T. S. (2022). Kurikulum Merdeka untuk pemulihan krisis pembelajaran. *Inovasi*

- Kurikulum*, 19(2), 251–262. <https://doi.org/10.17509/jik.v19i2.45301>
- Nurzen, M. (2022). Teacher Readiness in Implementing the Merdeka Curriculum in Kerinci Regency. *Edunesia: Jurnal Ilmiah Pendidikan*, 3(3), 313–325. <https://doi.org/10.51276/edu.v3i3.424>
- Olamo, T. G., Mengistu, Y. B., & Dory, Y. A. (2019). Challenges Hindering the Effective Implementation of the Harmonized Modular Curriculum: The Case of Three Public Universities in Ethiopia. *Creative Education*, 10(07), 1365–1382. <https://doi.org/10.4236/ce.2019.107102>
- Pantiwati, Y., Chamisijatin, L., Zaenab, S., & Aldya, R. F. (2023). Characteristics of Learning Assessment Towards Implementation of Merdeka Learning Curriculum. *Jurnal Penelitian Dan Pengkajian Ilmu Pendidikan: E-Saintika*, 7(1), 115–128. <https://doi.org/10.36312/esaintika.v7i1.1125>
- Pernando, D., & Wirdati, W. (2022). Kesiapan Guru PAI dalam Merencanakan Pembelajaran Berdasarkan Kurikulum Merdeka. *Jurnal Pendidikan Tambusai*, 7(2), 14047–14057.
- Prihatini, A., & Sugiarti. (2022). Citra Kurikulum Baru: Kesiapan Guru dalam Menerapkan Kurikulum Merdeka. *GHANCARAN: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 58–70. <https://doi.org/10.19105/ghancaran.vi.7447>
- Singh, R. (2016). Learner and Learning in Digital Era: Some Issues and Challenges. *International Education and Research Journal (IERJ)*, 2(10), 92–94. <http://www.igi-global.com/chapter/digital-era/29024>
- Sufiati, V., & Afifah, S. . (2019). Peran Perencanaan Pembelajaran untuk Performance Mengajar Guru Pendidikan Anak Usia Dini. *Jurnal Pendidikan Anak*, 8(1), 48–53.
- Sugiyono. (2012). *Jurna Pembelajaran*. Alfabeta.
- Suyanto, S. (2017). A reflection on the implementation of a new curriculum in Indonesia: A crucial problem on school readiness. *AIP Conference Proceedings*, 1868. <https://doi.org/10.1063/1.4995218>
- Widoyoko, E. P. (2009). *Evaluasi Program Pembelajaran*. Pustaka Belajar.
- Yulianto, H. (2022). An Implementation of Learning Assessment Model on The Curriculum of Merdeka Belajar. *Technical and Vocational Education International Journal*, 2(2).