



## Description of Science Teacher Readiness in Implementing Independent Curriculum at SMAN 1 Pulau Maya

Bella Agustina, Eny Enawaty\*, Andi Ifriany, Hairida, Erlina

Department of Chemistry Education, Faculty of Teacher Training and Education, Tanjungpura University, Jl. Prof. Dr. H. Hadari Nawawi, Bansir Laut, Kec. Pontianak Tenggara, Pontianak City, West Kalimantan 78124

\* Corresponding Author e-mail: [eny.enawaty@fkip.untan.ac.id](mailto:eny.enawaty@fkip.untan.ac.id)

### Article History

Received: 02-09-2024

Revised: 09-10-2024

Published: 31-10-2024

**Keywords:** teacher readiness; science teacher; independent curriculum

### Abstract

This study aims to evaluate the readiness of science teachers at State Senior High School (SMAN) 1 Pulau Maya in implementing the Merdeka Curriculum, with a focus on understanding the curriculum and readiness in developing teaching modules. The method used is descriptive qualitative, with data collection through observation, interviews, and documentation of three science teachers (Chemistry, Biology, and Physics). The results showed that the teachers' understanding of the curriculum reached excellent scores, namely 100 for Chemistry, 100 for Biology, and 93.8 for Physics, with an average of 98. However, their readiness in preparing teaching modules was at a sufficient level, with a percentage of 55% for Chemistry, 67% for Biology, and 72% for Physics, an average of 65% thus classified as ready. In conclusion, although science teachers have understood the curriculum well, there is still a need to improve their readiness in preparing teaching modules in order to carry out the learning process optimally.

**How to Cite:** Agustina, B., Enawaty, E., Ifriany, A., Hairida, H., & Erlina, E. (2024). Description of Science Teacher Readiness in Implementing Independent Curriculum at SMAN 1 Pulau Maya. *Hydrogen: Jurnal Kependidikan Kimia*, 12(5), 1009-1021. doi:<https://doi.org/10.33394/hjkk.v12i5.13120>



<https://doi.org/10.33394/hjkk.v12i5.13120>

This is an open-access article under the [CC-BY-SA License](#).



## INTRODUCTION

The Independent Curriculum is an innovative step in Indonesia's education reform efforts, especially in addressing the challenges of educational disparities between regions and social groups. The curriculum itself affects the pace and teaching methods used by teachers to meet student needs. To achieve educational goals, the curriculum is a tool or guide in the student learning process (Wafi, 2017). At State Senior High School (SMAN) 1 Pulau Maya, which is located on the coast of West Kalimantan with rural conditions that have limited infrastructure such as access to electricity and telecommunications networks, implementing the Independent Curriculum is a challenge in itself that requires readiness and adaptability from teachers, especially in the field of Natural Sciences. Unstable internet access can hinder the use of technology in learning, including the use of online learning platforms that may be required in the Independent Curriculum. Furthermore, for Science materials, field research may be hampered by accessibility to relevant locations, such as forests, beaches or other ecosystem areas. Then, from social challenges many students come from families with low educational backgrounds, which may affect their support and understanding of the importance of education.

The Independent Curriculum has several advantages over the previous curriculum, according to (Priantini et al., 2022) the first advantage is that the curriculum is simpler and also more in-depth. In the Merdeka Curriculum, learning focuses more on basic knowledge and developing students' abilities according to their stages. Learning is deeper, more meaningful, relaxed and fun. The second advantage is that it is relatively independent. Since there are no specific

requirements at the high school level, students can identify subjects of interest based on their talents and aspirations. For teachers in teaching activities, teaching can be carried out according to the grade level and development of students. Schools that implement Merdeka Curriculum have the right to formulate and manage the curriculum and teaching and learning process in accordance with the characteristics of the education unit and students. The third advantage is that it becomes more relevant and interactive. In this case, learning is mainly carried out through project work, and students are free to actively explore and describe practical issues such as environmental issues, circular economy, sanitation, and can develop critical thinking, careful and complex abilities. This is one form of character and competency development of the Pancasila Student Profile (Pertiwi et al., 2023).

Science teachers at SMAN 1 Pulau Maya need to prepare well for the significant changes in learning approaches required by the Independent Curriculum. Then, the readiness is done to face the big challenges that SMAN 1 Pulau Maya has such as limited books and teaching materials, lack of training for teachers regarding the independent curriculum, lack of facilities such as classrooms so that it is less effective in implementing the independent curriculum. This curriculum offers greater flexibility for teachers in designing learning that focuses not only on basic knowledge, but also on developing skills and attitudes that are relevant to local and global needs. This is in line with the vision of a more holistic and comprehensive outcome-oriented education (Azman, 2019).

The readiness that teachers must have in implementing the independent curriculum is very diverse. Among them, teachers must have readiness in designing learning and its implementation. "Readiness is the overall condition of a person that makes him ready to respond / answer in a certain way to a situation" (Slameto, 2015: 113). In line with that, Jamjemah et al. (2022) said that readiness is something that is considered as a control tool to enable the achievement of learning objectives. Several previous studies have said that to fulfill the objectives of the Merdeka Curriculum, good teacher readiness is needed in implementing the independent curriculum. In research conducted by Purani and Putra, it was concluded that teacher readiness is important to pay attention to in implementing the independent curriculum because its implementation needs to be carried out optimally, effectively and efficiently and be able to achieve the objectives of the Independent Curriculum (Purani & Putra, 2022).

Teachers' readiness to implement the Independent Curriculum includes a deep understanding of the principles of the curriculum, as well as the ability to develop lesson plans that suit students' needs. Teachers must be able to select and manage various learning tools that support the project-based approach and the development of soft skills, which characterize the Independent Curriculum (MoEC, 2021). In this context, training and professional development are crucial to equip teachers with the necessary skills. The successful implementation of the independent curriculum is highly dependent on how teachers understand and apply it. Teacher readiness includes not only a theoretical understanding of the curriculum, but also the practical ability to develop and implement effective lesson plans.

In addition, the teacher readiness aspect also includes the ability to integrate Pancasila values in daily learning. The Pancasila learner profile that is the focus of the Merdeka Curriculum requires teachers to not only educate academically, but also shape students' characters according to the noble values of the nation. This requires an approach that is more oriented towards the formation of positive attitudes, personalities, and ethics in daily interactions at school (Jojo & Sihotang, 2022).

Teachers' experience in facing learning challenges in an environment with limited infrastructure can be a valuable asset in implementing the Merdeka Curriculum. By understanding the unique characteristics and needs of students at SMAN 1 Pulau Maya, teachers can adapt more relevant and effective learning strategies. This includes the ability to

deal with variations in students' level of understanding and interest in the subject matter. To prepare for the implementation of the Merdeka Curriculum, science teachers at SMAN 1 Pulau Maya conducted study visits at SMAN 1 Pontianak and SMAN 8 Pontianak (driving schools, and prepared themselves by attending webinars, seminars and conducting In House Training (IHT). Involving teachers in the curriculum development process is an important step to harmonize curriculum content with student needs in the classroom (Alsubaie, 2016).

In addition to technical preparation in designing lessons, teacher readiness also includes the ability to collaborate with various parties, including fellow teachers, principals, and local communities. This collaboration is important to support holistic curriculum integration and ensure that all aspects of learning run well in accordance with the vision and mission of the Merdeka Curriculum. Teachers need to understand and master the principles of the Merdeka Curriculum, and have the skills and competencies needed to implement the curriculum (Ropiyah et al, 2024).

Overall, the implementation of the Independent Curriculum at SMAN 1 Pulau Maya presents an opportunity for educational transformation that is more inclusive and adaptive to student needs. However, to achieve this, the readiness of science teachers in adapting the new curriculum is a crucial factor. This research will explore and describe in depth the readiness of science teachers at SMAN 1 Pulau Maya in dealing with these curriculum changes, with the hope of providing valuable insights for the future development of education in Indonesia.

## METHOD

The research method used in this study is descriptive qualitative research. The qualitative approach was chosen because of its focus on data rather than numbers, which allows researchers to collect and analyze data narratively (Sugiyono, 2020). The research was conducted at SMAN 1 Pulau Maya, which is located in Dusun Besar Village, Pulau Maya District, North Kayong Regency, West Kalimantan Province. The research subjects were 3 Natural Science (IPA) teachers who taught chemistry, biology, and physics subjects at the high school.

The research instruments used include observation, interviews, and documentation. Observation is carried out using a teaching module observation sheet and an essay question sheet to assess understanding of the Merdeka Curriculum. The interview technique used is an unstructured interview technique, which allows researchers to adjust questions according to the needs and responses of the research subjects. Meanwhile, documentation involves collecting data from documents such as teaching modules and essay question answer sheets.

Data analysis in this study followed an approach adapted from Miles & Huberman (1994:16), which consists of three main activities: data reduction, data presentation, and conclusion drawing or validation. Data reduction involved organizing, simplifying, and selecting relevant data from observations, interviews, and documentation. Data presentation is done by presenting the main findings in a clear and systematic narrative form. Finally, conclusion drawing or validation is done to confirm the findings that have been obtained from data analysis.

To reduce bias in the research results, data source triangulation is used. Triangulation of data sources is to explore the truth of certain information using various data sources such as documents, archives, interview results, observation results or also by interviewing more than one subject who is considered to have a different point of view (Wijaya, 2018).

The formula calculates the percentage of each component in the teaching module.

$$\% \text{ Component} = \frac{\text{Score obtained by IPA teacher}}{\text{Total Score}} \times 100\%$$

Guidelines for data analysis are presented in the following table.

Tabel 1. Interval Percentage Value of Understanding and Readiness to Develop Teaching Modules

Score interval	Category
$76\% < x \leq 100\%$	Very Ready
$51\% < x \leq 76\%$	Ready
$26\% < x \leq 51\%$	Less Ready
$0\% \leq x \leq 26\%$	Not Ready

(Erviana,2016)

The use of this method is expected to provide a comprehensive picture of the readiness of science teachers in implementing the Merdeka Curriculum at SMAN 1 Pulau Maya. Thus, this study will not only provide in-depth insight into the challenges and preparations needed in adapting the new curriculum, but can also provide recommendations for further development in the context of education in infrastructure-challenged areas such as SMAN 1 Pulau Maya.

## RESULTS AND DISCUSSION

The Deputy Head of the curriculum section revealed that the readiness of SMAN 1 Maya Island in the Implementation of the Independent Curriculum (IKM) refers to the recommendation of the Ministry of Education and Research which has issued a decision of the head of BSKHP no 34H-KR2022 regarding the Implementation of the Independent Curriculum in 2022-2023 from this decision SMAN 1 Maya Island implements the Independent Curriculum in the 2023-2024 school year. From the decision issued by the Ministry of Education and Culture, there are schools that have entered the Independent Learning Curriculum, Independent Learning Curriculum changes and Independent Sharing Curriculum, but until July 2022 schools are still given the opportunity to make changes to the type of Independent Curriculum Implementation category. To implement the Merdeka Curriculum, teachers need to have an understanding of the curriculum structure and readiness in compiling teaching modules.

Febrianto P and friends (2022) said that the implementation of the independent curriculum went well in coastal areas because of the improvement from the years before the independent curriculum. Meanwhile, the research shows that the independent curriculum is running quite well but there are still challenges that must be faced due to geographical and social limitations. Other research says that the independent curriculum runs well because of the readiness of the teacher as the driving force of the curriculum. This readiness is in the form of theoretical readiness and readiness in the form of theoretical readiness (Jemjemah, 2022).

The following are the results of the research conducted in the form of two important aspects, namely the teacher's understanding of the implementation of the independent curriculum and the teacher's readiness to develop teaching modules.

### Science Teachers' Understanding of the Structure and Framework of the Merdeka Curriculum

Independent curriculum is a curriculum with diverse intracurricular learning where the learning process is more optimal and students have sufficient time to better understand concepts and master competencies. Teachers have the flexibility to determine the various teaching tools used in learning so that learning can be tailored to the learning needs and interests of students. Correct, effective, and efficient learning planning is a reflection of educators who are ready to carry out learning. Not only material readiness, but also understanding the needs and characteristics of students and understanding learning objectives. Teachers must understand the concepts, characteristics, and components of the curriculum to be implemented

(Rahmawati, 2022). In this study, the readiness of science teachers is based on an understanding of the curriculum and the readiness of teachers in preparing teaching modules. From the results of interviews, three science teachers 100% have participated in socialization, workshops, seminars regarding the independent curriculum. The following is an explanation of the understanding of science teachers at SMAN 1 Pulau Maya:

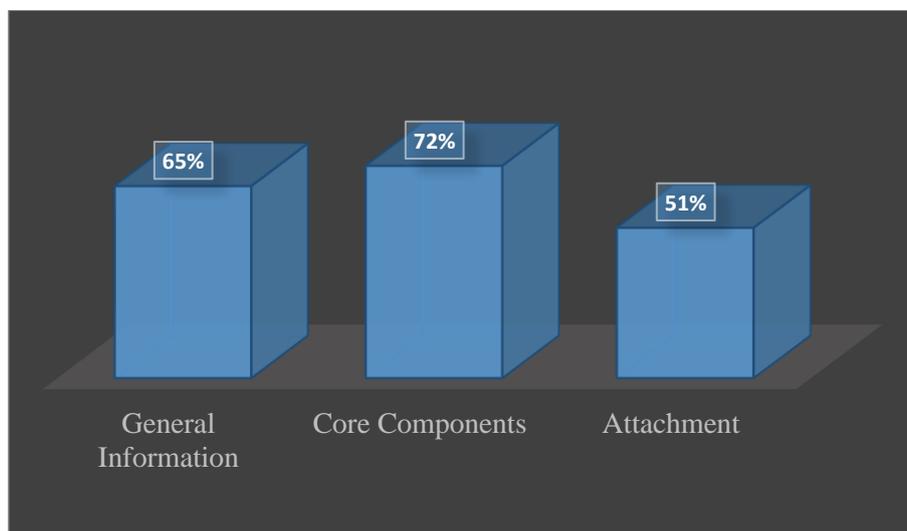


Figure 1. Teachers' understanding of the independent curriculum policy

Based on the figure above, it can be seen that the science teachers' understanding of the Independent Curriculum has a high score. This is because science teachers are able to explain the definition and characteristics of the Merdeka Curriculum, the definition and form of the Pancasila Student Profile Strengthening Project (P5), the structure of the Merdeka Curriculum, Learning Outcomes (CP), the definition and components of teaching modules, the definition of new paradigm learning, and the implementation of the Merdeka Curriculum.

The independent curriculum is a curriculum with diverse intracurricular learning where learning is optimized so that students have enough time to explore concepts and strengthen competencies with characteristics, namely a focus on essential material, flexibility, and improvement in skills and character (Kemendikud, 2021).

According to the chemistry teacher, the Merdeka Curriculum is a curriculum that focuses on learning content so that learning is optimal and students have enough time to explore concepts and strengthen competencies. According to the biology teacher, the Merdeka Curriculum is learning that refers to the approach to students' talents and interests. According to the physics teacher, the Merdeka Curriculum is a curriculum that is oriented towards independent teaching, independent learning. Teachers and students are free in designing classes, methods to evaluation. Meanwhile, the characteristics of the Merdeka Curriculum, science teachers both explained that the Merdeka Curriculum has the characteristics of focusing on essential material, flexibility and improvement in skills and character.

The Pancasila Student Profile Strengthening Project (P5) is a cross-disciplinary project that is contextual and based on community needs or problems in the education unit environment (Kemendikbud, 2022). Chemistry, biology and physics teachers define that P5 is a project-based co-curricular activity to strengthen competence and character and can be carried out in many varied forms, one of which uses the inquiry method.

The structure of the Independent Curriculum contains intracurricular and co-curricular. Apart from Intracurricular and Cocurricular, the Curriculum structure can contain Extracurricular in accordance with the characteristics of the Education Unit. According to chemistry, biology and

physics teachers, the Merdeka Curriculum structure contains intracurricular and co-curricular learning. Intracurricular contains competencies, learning content and learning load, while co-curricular in the form of P5. Furthermore, there is no change in learning hours but it is broken down into intracurricular and co-curricular. Then in the Independent Curriculum there is phase E (grade X) and phase F (grades XI and XII).

Learning Outcomes (LCAs) are the learning competencies that learners must achieve at the end of each phase. Chemistry, biology and physics teachers stated that Learning Outcomes are competencies or targets that learners must achieve at the end of the phase. Then, chemistry and biology teachers explained that CPs are arranged by phase because they pay attention to each phase of learner development, then provide time for learners to master competencies. However, the physics teacher explained that the CP was arranged by phase because it was easy to use by teachers and students.

According to Marlina (2022) Learning Outcomes (CP) are arranged in phases with the aim that learning is in accordance with the ability level of students. Based on an interview with a physics teacher, he said that he did not know the reason why the CP was arranged in phases. It is important for teachers to understand CP in the independent curriculum because CP focuses on subject matter that is considered important and essential for students to master, related to the national structure and national needs in the curriculum and CP emphasizes more on subjects (Aulia, et al 2023).

Teaching module is one type of teaching tool that contains a lesson plan, to help direct the learning process to achieve Learning Outcomes (CP). According to chemistry teachers, teaching modules are a number of tools or media facilities, methods, instructions, and guidelines that are systematically designed and have components, namely learning objectives, plans, steps, media and assessments. Then according to biology teachers, teaching modules are lesson plans that contain objectives, steps, media and assessments needed in one topic based on the Flow of Learning Objectives (ATP) and its components consist of general information, CP, ATP, detailed usage plan, meeting details, evaluation and attachments. Meanwhile, according to physics teachers, teaching modules are documents containing objectives, steps, media and assessments with components namely learning objectives, initial and final assessments, steps and learning media.

According to the Ministry of Education and Culture (2021), new paradigm learning ensures learning practices to be learner-centered. In new paradigm learning, the learning development framework is not a linear model but a continuous cycle. New paradigm learning includes mapping competency standards, learning independence and minimum competency assessment so as to ensure more free space for educators to formulate learning and assessment designs according to the characteristics and needs of students. Chemistry teachers explained that new paradigm learning is learning that emphasizes the development of adaptability and lifelong learning. Then, biology teachers stated that new paradigm learning is learning that has a learning development framework rather than a linear model rather than a continuous cycle. Physics teachers explained that new paradigm learning is learning that ensures that learning practices are learner-centered.

Understanding the independent curriculum begins with the socialization stage, namely learning and understanding the structure of the independent curriculum and training independently through the Merdeka Teaching Platform (PMM) (Jamjemah et al., 2022). From the research results obtained, the science teachers at SMAN 1 Pulau Maya can be said to be very good at understanding the Independent Curriculum framework.

## Science Teacher Readiness in Developing Teaching Modules

Teaching modules have a major role to support teachers in designing learning (Nesri & Kristanto, 2020). Teaching modules according to Nurdyansyah & Mutala'liah, (2015) are useful for helping educators in carrying out learning activities. For educators, teaching modules are used to direct all their activities and what should be taught to students in the learning process. Meanwhile, students will be used as guidelines that should be studied during the learning process (Pertiwi et al., 2023).

Teaching modules can also function in individual learning which can be used to organize and supervise the process of obtaining learner information. The teaching module is a module designed to assist learners in achieving learning objectives and obtaining Learning Outcomes (CP) according to each phase and also as a means of learning students independently at their own pace. In addition, Nurdyansyah & Mutala'liah (2015) suggest that teaching modules are learning tools or learning designs based on the curriculum that are applied with the aim of achieving predetermined competency standards.

A complete teaching module consists of three main components, namely general information, core components and attachments. The three components are divided into sub-components, the first is general information consisting of module identity, initial competence, Pancasila Learner Profile, target learners, facilities and infrastructure and learning models. Then, the core component is divided into learning objectives, meaningful understanding, triggering questions, learning activities, assessment, enrichment and remedial. The appendix is divided into student worksheets, reflections, reading materials, glossary and bibliography (Kemendikbud, 2021).

Before preparing teaching modules, science teachers at SMAN 1 Pulau Maya have learned how to develop teaching modules that must meet two minimum requirements, namely meeting the criteria of the Merdeka Curriculum and learning activities in teaching modules must be in accordance with the principles of learning and assessment (Maulinda, 2022). The teaching modules used by science teachers in learning at SMAN 1 Pulau Maya are teaching modules from the center which are then modified according to their needs. For the preparation of the Merdeka Curriculum teaching module, it is still in the process of being prepared by paying attention to the core components of the teaching module which also include learning objectives, assessments, meaningful understanding, triggering questions, learning activities, and student and teacher reflections.

The following is the completeness of the teaching module components prepared by science teachers at SMAN 1 Pulau Maya.

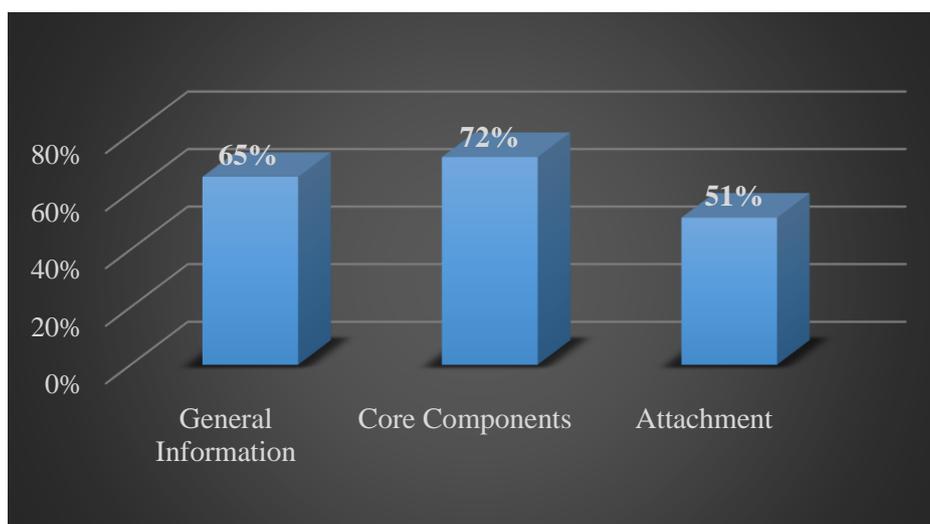


Figure 2. Completeness of teaching module components prepared by science teachers

Based on the figure above, the highest score obtained by the physics teacher is 72% because the physics teacher uses a modified module from the Merdeka Teaching Platform (PMM) if it is categorized, the physics teacher is ready to prepare a good teaching module. The Biology module has a score of 55% of all components. This score is because in the biology module there are many components that have not been listed. Based on interviews with biology teachers, it was said that the teaching module studied was a self-made teaching module based on experience at the Subject Teacher Conference (MGMP) and studying at the Merdeka Teaching Platform (PMM) if it was categorized, biology teachers were ready to compile teaching modules. Meanwhile, the chemistry module contains 67% of all components that must be in the teaching module so that chemistry teachers are categorized as ready to develop teaching modules.

According to Slameto (2015), one aspect of readiness is maturity. In the context of the teaching module, the more components that are written down, the more prepared the teacher is in implementing the Independent Curriculum.

The following are the components that must be in the teaching module and the average teaching module research results calculated based on the research instrument.

### General Information

General information contains teaching module components, namely module identity, initial competence, Pancasila learner profile, target learners, facilities and infrastructure, and learning model.

Tabel 2. General Information

No.	Component	Average (%)	Category
1	Module Identity	75,0	Ready
2	Initial Competency	41,7	Less Ready
3	Pancasila Learner Profile	91,7	Very Ready
4	Target Learners	25,0	Not Ready
5	Facilities and Infrastructure	91,7	Very Ready
6	Learning Model	66,7	Ready
<b>Average</b>		<b>65,3</b>	<b>Ready</b>

Based on table 2, it can be seen that not all components in general information are written in full or get very ready criteria. From table 2, the criteria are very ready to be shown by the Pancasila Student Profile and facilities and infrastructure. But the two components are not written in full, it happens because in the teaching module there is a listing of Pancasila Student Profiles that are not in accordance with the material and facilities and infrastructure that are not in accordance with the learning model.

Furthermore, the ready criteria are shown by the module identity component and the learning model. Both components do not reach the criteria of very ready because in the physics module because it only lists four of the six components contained in the identity of the teaching module then in the biology module learning model includes learning models / strategies from learning resources not in accordance with the latest developments in science, information technology (ipteks) such as the internet.

The initial competency component shows less ready criteria because one of the three modules does not include initial competencies, namely the chemistry module. After an interview with the chemistry teacher, it was found that he had not studied specifically about the components of the teaching module preparation, so there were several components that were not in the teaching module. The chemistry teacher revealed that he would learn more about the components of the teaching module.

The target learner component received unprepared criteria because all science teaching modules prepared by science teachers at SMAN 1 Pulau Maya did not include learner targets. After conducting interviews with science teachers, the data obtained that science teachers do not understand how to write learner targets in accordance with cognitive and non-cognitive diagnostic assessments (not attaching the number) then the school also has not classified the type of learning of students.

### Core Component

The core component contains learning objectives, meaningful understanding, triggering questions, learning activities, assessment as well as enrichment and remedial.

Tabel 3. Core Component

No.	Component	Average (%)	Category
1	Learning Objectives	91,7	Very Ready
2	Meaningful Understanding	58,3	Ready
3	Sparking Question	58,3	Ready
4	Learning Activities	91,7	Very Ready
5	Assessment	100,0	Very Ready
6	Enrichment and Remedial	33,3	Less Ready
	<b>Average</b>	<b>72,2</b>	<b>Ready</b>

Based on table 3, it shows that learning objectives, learning activities and assessments obtain very ready criteria. However, in the learning objectives section, the biology module does not include learning objectives that can develop soft skills. Then, in the learning activities section of the physics module includes a learning flow design relevant to the 21st century learning approach and displays syntax that is less in accordance with the approach used.

Meaningful understanding and triggering questions show ready criteria. However, in the meaningful understanding section, the physics module does not display information about the benefits that students will get after participating in learning and the biology module does not display triggering questions, namely questions about several important things in a learning material. Based on interviews with physics and biology teachers, the absence of these two components is because teachers have only studied teaching modules in general and are still learning because of the first year of implementing the Independent Curriculum.

The enrichment and remedial section shows less ready criteria because two of the three modules do not include these components. While one other module enrichment and remedial is not in accordance with the development of students and material. Based on interviews with science teachers, they have not learned that the teaching module must include enrichment and remedial components. Science teachers thought that the core components in the teaching module only reached the assessment.

### Appendix

The appendices contain learner worksheets, reflections, reading materials, glossary and bibliography.

Tabel 4. Appendix

No.	Component	Average (%)	Category
1	Learner Worksheet	58,3	Ready
2	Reflection	58,3	Ready
3	Reading Material	88,9	Very Ready
4	Glossary	25,0	Not Ready
5	Bibliography	25,0	Not Ready
	<b>Average</b>	<b>51,1</b>	<b>Ready</b>

Based on table 4, it shows that reading materials have the highest score with very ready criteria, but the biology module has a low score because the design of the teaching material structure in the learning design is not in accordance with the learning objectives and indicators.

Learner Worksheets (LKPD) and reflection are included in the ready criteria but in the LKPD section the chemistry module designs LKPD based on information technology and concrete objects not in accordance with concrete operational development. While the reflection component of the biology module does not display reflections for educators and students.

All science modules at SMAN1 Maya Island do not include a glossary and bibliography so that they fall into the criteria of not ready. Based on interviews with science teachers, it is explained that science teachers think that preparing modules only reaches the evaluation, in fact the complete teaching module components released by the Ministry of Education and Culture have a glossary and bibliography. The science teacher stated that he had to learn about the components of a complete teaching module in depth and would evaluate himself in the first year of the implementation of the Independent Curriculum at SMAN 1 Pulau Maya.

The following is the average value of the three general components that must be included in the existing science teaching module at SMAN 1 Pulau Maya.

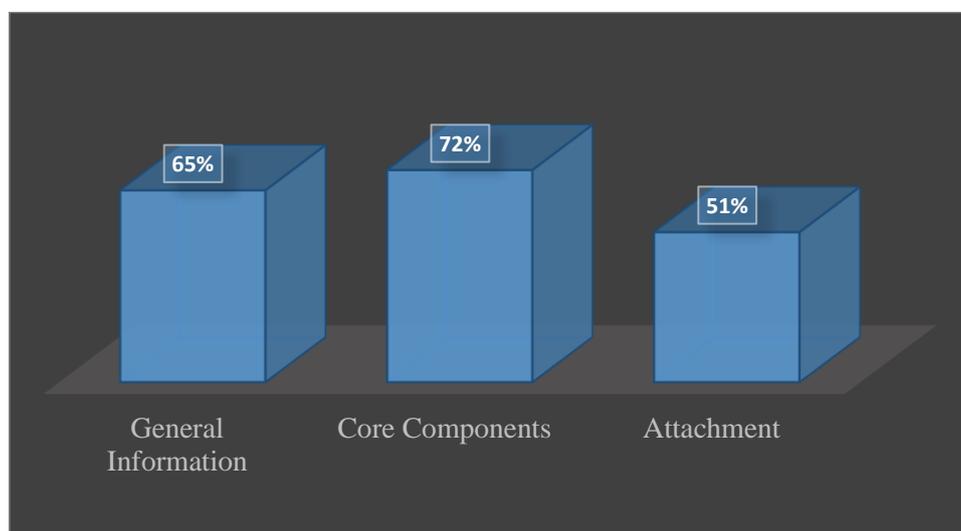


Figure 3. Average general components in the science teaching module

Based on the figure above, the common component that has the lowest score is the appendix. The appendix contains student worksheets, reflections, reading materials, glossary and bibliography. All science modules at SMAN 1 Pulau Maya do not include a glossary and bibliography. This is important to note because a good teaching module is a teaching module that has complete components and with a glossary it is easy for users to find the meaning of words and also with a bibliography people believe that the teaching module is not prepared carelessly.

Based on the explanation above, it is concluded that the more complete the teaching module components prepared by the teacher, it is indicated that the more prepared the teacher is in preparing the teaching module. The readiness of teachers in compiling teaching modules has an average percentage of 65%, so science teachers at SMAN 1 Pulau Maya are in the ready category for compiling teaching modules. With such teaching module readiness, science teachers at SMAN 1 Pulau Maya still need training in making teaching modules by learning independently or being given training by the local government. This is important to note because the teaching module is the initial learning plan that will be implemented and contains all the steps that will be taken.

For the readiness of facilities and infrastructure, lesson plan readiness, and learning assessment readiness, interviews were conducted with science teachers who obtained the results, namely that the readiness of facilities and infrastructure, the readiness of lesson plans, and the readiness of learning assessments owned by science teachers at SMAN 1 Pulau Maya are ready to implement the Merdeka Curriculum.

Overall, science teachers at SMAN 1 Pulau Maya are ready to implement the Independent Curriculum. For various deficiencies that exist, science teachers will try to make the Independent Curriculum run properly.

## CONCLUSION

Based on the results of data analysis, it can be concluded that science teachers at SMAN 1 Pulau Maya have a very good understanding of the independent curriculum with an average score of 98. Then the readiness of science teachers in preparing teaching modules is included in the ready category, as evidenced by the average percentage of readiness to prepare teaching modules of 65%, but with this readiness science teachers still need to learn more about important components in teaching modules, especially in components such as learner targets, glossaries and bibliographies. So it can be concluded that science teachers at SMAN 1 Maya Island are ready to implement the Independent Curriculum.

## RECOMMENDATIONS

It is better to pay more attention to the aspects of readiness in implementing an independent curriculum because in this study only raised two important aspects of readiness in implementing an independent curriculum. For further research, aspects such as facilities and infrastructure can be added. Then for teachers at SMAN 1 Pulau Maya should conduct ongoing training on the preparation of teaching modules because training or workshops will be very helpful in improving their skills and knowledge about important components in teaching modules.

## ACKNOWLEDGEMENTS

The author's first thanks to the KIP Lecture scholarship which has paid from the beginning of the author's lecture until the completion of his undergraduate education, then the author also thanks the school, namely SMAN 1 Pulau Maya, for accepting the author in this study. Then, the author would like to thank the science teachers at SMAN 1 Pulau Maya, namely Mr. Randy (physics teacher), Mrs. Asmarita (Biology teacher) and Mrs. Seshi (Chemistry Teacher) for helping to provide research data quickly.

## BIBLIOGRAPHY

- Alsubaie, M. A. (2016). Curriculum Development: Teacher Involvement in Curriculum Development. *Journal of Education and Practice*, 7(9), 106-107
- Aulia, N., & Keguruan, F. (2023). Analisis Kurikulum Merdeka dan Kurikulum 2013. In *Jurnal Literasi dan Pembelajaran Indonesia* (Vol. 3, Issue 1).
- Azman, Z. (2019). Pendidikan Islam Holistik dan Komprehensif. *Edification Journal: Pendidikan Agama Islam*, 1(1), 81-95.

- Erviana, Y. V. (2016). Kesiapan Guru Sekolah Dasar dalam Pelaksanaan Pembelajaran Tematik-Integratif pada Kurikulum 2013 di Kota Yogyakarta. *JPSD: Jurnal Pendidikan Sekolah Dasar* Vol. 2, No. 2
- Febrianto P., Bahri B, dan Susarno L. (2022). Implementasi Kurikulum Merdeka Belajar di Sekolah Dasar Wilayah Pesisir. *Jurnal Masyarakat Maritim*, 06(2)
- Jamjemah, J., Djudin, T., Erlina, E., & Hartoyo, A. (2022). Analisis Kesiapan Guru Dalam Melaksanakan Pembelajaran Kurikulum Merdeka Di Sdn. 47 Penanjung Sekadau. *Jurnal Pendidikan Dasar Perkhasa: Jurnal Penelitian Pendidikan Dasar*, 8(2), 119–127. <https://doi.org/10.31932/jpdp.v8i2.1722>
- Jojo, A., & Sihotang, H. (2022). Analisis Kurikulum Merdeka dalam Mengatasi *Learning Loss* di Masa Pandemi Covid-19 (Analisis Studi Kasus Kebijakan Pendidikan). *Edukatif: Jurnal Ilmu Pendidikan*, 4(4), 5150-5161.
- Kemendikbud. (2022). *Konsep dan Komponen Modul Ajar*. Jakarta: Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi
- Marlina, T. (2022). Urgensi dan Implikasi Pelaksanaan Kurikulum Merdeka pada Sekolah Dasar/Madrasah Ibtidaiyah. In *Prosiding Seminar Nasional Pendidikan Ekonomi* (Vol. 1, No. 1, pp. 67-72).
- Maulida, U. (2022). Pengembangan modul ajar berbasis kurikulum merdeka. *Tarbawi: jurnal pemikiran dan pendidikan islam*, 5(2), 130-138.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An expanded sourcebook*. sage.
- Nesri, F. D. P., & Kristanto, Y. D. (2020). Pengembangan Modul Ajar Berbantuan Teknologi untuk Mengembangkan Kecakapan Abad 21 Siswa. *Aksioma: Jurnal Program Studi Pendidikan Matematika*, 9(3), 480-492.
- Nurdyansyah, & Mutala'iah, N. (2015). Pengembangan Bahan Ajar Modul Ilmu Pengetahuan Alam Bagi Siswa Kelas IV Sekolah Dasar. Program Studi Pendidikan Guru Madrasah Ibtidaiyah Fakultas Agama Islam Universitas Muhammadiyah Sidoarjo, 41(20), 1–15.
- Pertiwi, P. D., Novaliyosi, N., Nindiasari, H., & Sukirwan, S. (2023). Analisis Kesiapan Guru Matematika dalam Implementasi Kurikulum Merdeka. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(3), 1717–1726. <https://doi.org/10.54371/jiip.v6i3.1435>
- Purani, N. K. C., & Putra, I. K. D. A. S. (2022). Analisis Kesiapan Guru dalam Penerapan Kurikulum Merdeka Belajar di SDN 2 Cempaga. *Jurnal Pendidikan Dasar Rare Pustaka*, 4(2), 8–12. <https://doi.org/10.59789/rarepustaka.v4i2.125>.
- Priantini, D. A. M. M. O., Suarni, N. K., & Adnyana, I. K. S. (2022). *Analisis Kurikulum Merdeka Dan Platform*. 8, 238–244.
- Rahmawati, R. F. (2022, August). Analisis Kesiapan Guru dalam Pelaksanaan Kurikulum Merdeka di TK ABA V Gondangmanis Kudus. In *ICIE: International Conference on Islamic Education* (Vol. 2, pp. 1-10).
- Ropiyah., Suriswo., & Mulyono, T. (2024). Analisis Kesiapan Guru dalam Implementasi Kurikulum Merdeka di SMK 2 Slawi. *Journal Of Education Research*, 5(1), 408-416
- Sugiyono. (2020). *Metode Penelitian Kualitatif*. Alfabeta: Bandung
- Slameto, S. (2015). Rasional dan Elemen Perubahan Kurikulum 2013. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 5(1), 1-9.

- Wafi, A. (2017). Konsep Dasar Kurikulum Pendidikan Agama Islam. *EDURELIGIA: Jurnal Pendidikan Agama Islam*, 1(2), 133- 139. <https://doi.org/10.33650/edureligia.v1i2.741>
- Wijaya, H. (2018). Analisis data kualitatif model Spradley (etnografi).