The Interactive *Bahasa Indonesia* Learning Module Innovation for the Basic Education Level in the Global Computation Era

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Abstract

This research aimed to produce *Bahasa Indonesia* learning modules to achieve educational goals efficiently and effectively. It was Research and Development (R & D) proposed by Trianto (2009) with procedural implementation up to 3D, which consisted of the define stage, design stage, and development stage. The validators of the questionnaire were three expert lecturers. Furthermore, the effectiveness test was the test result of the class IVB students at SDN 03 Alai Padang, while the practicality test was carried out on teachers and students. The limited-scale module trial stage was carried out on five students of class IVA, and the small-scale module test was carried out on 28 students of class IV B. The results showed that the validity test of the resulting module was in the category of very valid with an average value of 91.23% both from the aspect of the content or material feasibility 90% and from the presentation and language 96% and design was 87.70%. The results of the module effectiveness test were in the category of effective (98%). The resulting module practical test was categorized as very practical by the teacher, with an average percentage of 95%, and very practical by students, with an average of 98.2%. The innovation of interactive *Bahasa Indonesia* learning modules based on science for the basic educational level in the global computing era meets the criteria of valid, practical, and effective. This interactive *Bahasa Indonesia* learning module based scientific can be used as a learning resource on poetry subjects for fourth-grade students in elementary school.

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Introduction

Innovation is a new thing from science and provides benefits to human life. In innovation development, knowledge is to run as it should. Luecke (2003) stated that innovation is a process to actualize, combine, or mature knowledge or idea, which is then adjusted to get a new value for a product, process, or service. Learning at the basic educational level requires teachers to be able to innovate in learning through the development of teaching materials, such as learning media or learning modules. At this time, teachers also faced an independent curriculum focused on essential content so that students have enough time to explore concepts and strengthen competencies (Habibi et al., 2022; Mukminin et al., 2019; Rakimahwati et al., 2022; Velasco et al., 2022). So far, in the learning *Bahasa Indonesia* process in the fourth grade at SDN 03 Alai Padang, teachers tend to use textbooks, such as material books, package books, and Student Worksheets (LKS). Other learning resources, such as learning media or learning modules, have not been used by teachers because making them requires time, effort, and thought. If teachers can create teaching materials in the form of modules, educational goals will be achieved efficiently and effectively and help students to understand the subject more. It can also improve student learning outcomes to achieve the Minimum Mastery Criteria (KKM) with a score of 80 for Bahasa Indonesia in the fourth grade of the school.

How to increase the value of student learning outcomes, it is time for teachers to create modules to help students and facilitate the learning process. According to Daryanto (2013), a module is a form of completely packaged and systematic teaching material that contains a set of planned and designed learning experiences to help students master specific learning objectives. Does the module consist of learning objectives, learning materials, and evaluation? It is because the module functions as an independent learning tool so that students can learn independently at their own pace. Susanti (2017) stated that a module is a specifically designed, systematic, and equipped teaching material with instructions that include learning experiences by organizing subject matter that allows it to be studied independently or guided. It means creating a valid, practical, and effective *Bahasa Indonesia* learning module about writing poetry can increase the value of student learning outcomes. The material in the module uses the 2013 revised 2018 Curriculum (Mukminin et al., 2019) with basic competency 3.6. Exploring the content and message of poetry presented orally and in writing for enjoyment with indicator 3.6.1., exploring the contents of the poetry text in writing form, and 3.6.2. for the poetry's message.

To be more dynamic, teachers use modules in *Bahasa Indonesia* learning, using a scientific-based approach. According to Marjuki (2020), the scientific approach is the stage of learning activities to help students acquire knowledge and skills based on scientific procedures. Masnun (2016) added that it is a standard concept that accommodates, inspires, strengthens, and underlies thinking about how learning methods are applied based on definite theories. The conclusion is that a scientific approach is an approach that emphasizes students' understanding and ability to understand learning materials. It focuses on students rather than teachers who only provide material. Students must be active in learning, and

teachers must teach students to be more independent, especially in learning Bahasa Indonesia.

Bahasa Indonesia learning is learning that helps students learn other subjects because it can be an introduction to the material that will be delivered (Nazurty et al., 2019). According to Khair (2018), learning *Bahasa Indonesia* means teaching students about good and correct *Bahasa Indonesia* skills according to their goals and functions. Furthermore, Hidayah (2015) stated that teaching *Bahasa Indonesia* can be interpreted as an educator's effort to change the students' behavior in using *Bahasa Indonesia*. It can be achieved if teachers teach students based on the objective of learning *Bahasa Indonesia*. Susanto (2014) stated that learning Bahasa Indonesia in elementary schools aims to make students enjoy and utilize literary works to develop personality, broaden life horizons, and increase knowledge and abilities. In learning *Bahasa Indonesia*, there are four language aspects. They are listening, speaking, reading, and writing.

Writing is a form of thoughts and feelings by pouring heart contents into written form so that other people as readers can know the meaning (Astrid et al., 2019; Fajaryani et al., 2021). Rosmaya (2018) stated that writing is a process of delivering information in symbols that can be read and understood by the author and others. Furthermore, according to Khulsum, Hudiyono, and Sulistyowati (2018), writing is to express opinions, ideas, and thoughts through written media so others can read. For someone who will write, ideas and ways are needed so that they are conveyed to the reader. Mujianto, Pangesti, and Sudjalil (2019) stated that someone who wants to write must at least master what to write (content/ideas) and how to write (writing techniques). In writing poetry, it is necessary to interpret the content and know the elements.

According to Tiarina (2012), poetry is making an entertaining work of art because writing poetry means creating a world. Additionally, Oktavia (2013) stated that poetry is an expression to evoke feelings in which it contains elements in the form of emotions, imagination, ideas, and figurative words. Thus, poetry is a work of art that uses words, rhymes, and rhythms as a place to convey emotions, feelings, and messages and create expressions and imagination. People can show what they feel, think, and imagine to others through poetry so that they bring expressions when reading. In poetry, there is a mandate. It is a message, idea, or advice that someone wants to convey to others, both orally and in writing. It is very closely related to cause and effect. Writing poetry can make students actively express their ideas and feelings. Firmansyah (2020) stated that in creative writing and poetry, the students are expected will be sensitive and empathetic to their environment and act the best in their lives. Based on observations in class IVB at SDN 03 Alai Padang on the 9th of March 2022, the teacher dominates in providing Bahasa Indonesia learning and looks conventionally one-way. It resulted in students only listening to what the teacher said, and they found it difficult to write poetry even though it was only one stanza. The data on the writing poetry score in class IVB with 28 total students, and minimum mastery criteria of 80, 19 passed, and nine students did not pass. The highest score was 87, and the lowest score was 71.

Methodology

This research used a 4D development model (Define, Design, Develop, and Disseminate). Under the flow of Thiagarajan named 4-D (Four-D Models). According to Trianto (2009), Thiagarajan's development flow is a model that consists of 4 stages of development, such as define, design, develop, and disseminate, or adapted into a 4-P model consisting of definition, design, development, and deployment. However, this research was carried out only up to 3P due to limited ability and time.

The define stage consists of curriculum analysis, needs analysis, student analysis, and concept analysis. The purpose of this analysis is to define the details of the program or design. The design stage prepares a scientific-based *Bahasa Indonesia* learning module on theme six and sub-theme one about exploring the content and message of poetry. Presentation of the module in the form of printed teaching materials made using Microsoft Office Word 2007 with the Comic Sans MS font type and font size adjusting. The development stage includes the validity of scientific-based modules through a questionnaire given to three expert lecturers in material, language, and design modules. The module practicality was carried out through a questionnaire to students and teachers of class IVB SDN 03 Alai Padang. For the effectiveness of the module, it used evaluation test questions.

This interactive *Bahasa Indonesia* learning module innovation based on science at the basic education level in the global computing era is practical and effective. It also helps students in learning without being accompanied by a teacher. This module is limited to the standard competencies discussed in the 2013 Curriculum with Basic Competencies 3.6. Exploring the content and message of poetry presented orally and in writing for enjoyment with indicator 3.6.1. Exploring the contents of the text of the poetry presented in writing, and 3.6.2 for the message of the poetry.

Findings

The result of the validity, practicality and effectiveness test of the *Bahasa Indonesia* learning module on poetry subject at SDN 03 Alai Padang was as follows.

Module validity test results

The validity test was carried out by three expert lecturers consisting of two colleagues, lecturers from the Indonesian Language and Literature Study Program, and a lecturer from the Informatics and Computer Engineering Education Study Program. The results of the validity test are as follows.

Table 1. *Results of module validity analysis*

No	Validator	Score	Category
1	Material	90 %	Very Valid
3	Language	96 %	Very Valid
2	Design	87,70 %	Valid
Average		91,23 %	Very Valid

Table 1 shows that the percentage of module validity, in general, was 91.23% in the category of very valid. From the content or material feasibility aspect, the scientific-based Bahasa Indonesia learning module developed was very valid by the validator with a value of 90%. In terms of presentation and appearance (design), the module was valid by the validator with a percentage value of 87.70%. It was also stated as very valid in the language aspect, with a 96% validity percentage. Based on the validity results of the three validators for the scientific-based *Bahasa Indonesia* learning module, it obtained 91.23% with the category of a very valid.

Module practicality test results

The practicality test of the scientific-based *Bahasa Indonesia* learning module was carried out on teachers and students of class IVB at SDN 03 Alai Padang. It was to determine the level of practicality of the resulting module. The results of the practicality test of the module were carried out on the teacher briefly as follows:

Table 2. *Analysis results of module practicality test on teachers*

No	Assessment Aspects	Practicality Percentage (%)	Criteria
1	Ease of Use	98 %	Very Practical
2	Learning Time Effectiveness	90 %	Very Practical
3	Benefits	95 %	Very Practical
Average		95 %	Very Practical

Based on table 2, the percentage of the practicality of the scientific-based *Bahasa Indonesia* learning module in sub-theme one about exploring the content and message of poetry by the teacher was 95% in the category of very practical. It was based on the indicators assessed by the teacher that the modules developed were easy to use and beneficial for learning *Bahasa Indonesia* in the fourth grade at SDN 03 Alai, Padang. In addition, besides being assessed by the teacher, the module practicality was also assessed by the fourth-grade students at SDN 03 Alai Padang. The results of the practicality test of the module were carried out on students briefly as follows:

Table 3. *Analysis results of the small-scale student module practicality test*

No	Assessment Aspects	Practicality Percentage (%)	Criteria
1	Student Interest	98 %	Very Practical
2	Usage Process	96,75 %	Very Practical
3	Increased Student Creativity	96,25 %	Very Practical
4	Benefits	100 %	Very Practical
5	Evaluation	100 %	Very Practical
Average		98,2 %	Very Practical

Table 3 shows the percentage of the practicality of the scientific-based *Bahasa Indonesia* learning module in sub-theme one about exploring the content and message of poetry by fourth-grade students at SDN 03 Alai Padang on a small scale of 98.2% in the category of very practical.

Module effectiveness test results

The module effectiveness test is carried out by analyzing the data obtained from the student test results. Student mastery is measured based on the individual score obtained by students. The module is effective if the student reaches 75% of the minimum mastery criteria. If the individual completeness is greater than or equal to the minimum mastery criteria, the student means complete. The minimum mastery criteria of *Bahasa Indonesia* determined by SDN 03 Alai Padang was 75. The results of the effectiveness test of the scientific-based *Bahasa Indonesia* learning module are as follows:

Table 4. *Module effectiveness test results through small scale pretest and post-test*

No	Learning Outcomes	Number of Students	Completed	Not Completed	Percentage of Classical Completeness
1	Pretest	28	9	19	40%
2	Post-test (Module)	28	28	0	100%

Table 4 shows the learning outcomes of class IVB students at SDN 03 Alai Padang was 40% with a percentage of classical completeness to improve student learning outcomes. Hence, the module was in the *Bahasa Indonesia* learning process. Student learning outcomes were fantastic after using the module tested through the post-test. It obtained a classical completeness percentage of 98% from 100% completeness.

Discussion

The discussion of the scientific-based *Bahasa Indonesia* learning module in the fourth grade was carried out after there were data on the results of the effectiveness test, practicality test, and module effectiveness test as a product produced in this research. The results of the validity test of the *Bahasa Indonesia* learning module based on the three validators described that the module developed was very valid, with an average of 91.23%. This learning module is suitable for the learning process. The content or material feasibility aspect was better because the results of the data analysis of the validity of the scientific-based *Bahasa Indonesia* learning module by expert lecturers were based on three aspects of assessment consisting of content or material feasibility, presentation, design, and language aspects.

Analysis based on the results of the module validity test describes that the developed module is appropriate and beneficial for the learning process. The module is very valid by the material validator with a value of 90%. It shows that the material in the module is appropriate for the 2013 revised 2018 curriculum, can support the achievement of standard competencies, has been suitable for students' needs, developed self-reliant students, and helps students' understanding. In the language aspect, the percentage of validity is 96%. It indicates that the

module developed has an easy-to-read font and size, the information conveyed is clear, uses good and correct *Bahasa Indonesia* rules (based on EBI), uses effective and efficient sentences, and is easy to understand by students. In terms of presentation and appearance (design), the module developed is valid by the validator with a percentage value of 87.70%. It shows that the module has an identity and clarity of objectives to be achieved, a concise presentation sequence, attractive presentation and appearance, appropriate images presented in the module with the poetry material, and appropriate colors and sizes.

The analysis based on the results of the practicality test of the module by the class IVB's teacher at SDN 03 Alai Padang obtained a practicality percentage of 95% in the category of very practical. Practicality is the level of ease experienced by the teacher in learning for students who use a product or teaching material and by students when absorbing learning material. The practicality of teaching material can be seen from the questionnaire filled out by students after learning to use the teaching material. The practicality test is to determine the extent to which students' understanding and implementation of the teaching materials were made. In this research, the module is under the teachers' views through a questionnaire that developed module has ease of use and is beneficial for learning *Bahasa Indonesia* in the fourth grade of elementary school. It is based on the teacher's view through a questionnaire that the developed module is easy to use and appropriate for learning *Bahasa Indonesia* in the fourth grade of elementary school. The analysis is based on the results of the practicality test of the module assessed by class IVB students at SDN 03 Alai Padang, with a percentage of 98.2%, in the category of very practical. It describes that the module is good, attractive, and beneficial in learning *Bahasa Indonesia* about exploring the content and message of poetry. This learning module supports the achievement of standard competencies based on students' needs, empowers students, and motivates students in *Bahasa Indonesia* learning. It means the module is practical to use as a learning resource on poetry for fourth-grade students at elementary school.

Analysis based on the module effectiveness test result through student test results is 100% in the effective category. Furthermore, effectiveness is a measure that states how far the target in quality, quantity, and time form has been achieved with the principle that the greater the percentage of the target achieved, the higher the effectiveness is. The effectiveness test is carried out on students through tests in the form of questions based on the material in the module. After carrying out the module effectiveness through a test to answer questions related to the module material, the student's score is above or equal to the minimum mastery criteria for *Bahasa Indonesia* of the fourth-grade elementary school students at SDN 03 Alai Padang. It shows that the science-based *Bahasa Indonesia* learning module has a very good feasibility level. It means this module is beneficial in the learning process for fourth-grade elementary school students.

Conclusions

Based on the development of the research results of the scientific-based *Bahasa Indonesia* language learning module on theme six of sub-theme one about exploring the content and message of poetry. The testing process of a scientific-based *Bahasa Indonesia* module is the define stage through curriculum analysis, needs analysis, and student analysis. The design stage is preparing a scientific-based learning module under standard

competencies and indicators in the 2018 revision of the 2013 curriculum. The design is created as attractive as possible by adding pictures and color. The development of scientific-based *Bahasa Indonesia* learning modules is carried out through validity, practicality, and effectiveness process. Furthermore, the module can be used as teaching material for fourth-grade students in elementary school.

Teachers are expected to be able to use this scientific-based *Bahasa Indonesia* learning module as a learning resource than the main book and worksheets on poetry material in the fourth grade. Teachers use this module under the integrated scientific teaching steps of the module. Students should read this module at school and home for a better understanding of the poetry material. Other researchers can use this research as a reference in developing *Bahasa Indonesia* learning modules with different materials and classes in elementary schools and can also see the validity, effectiveness, and practicality standards of a learning resource under this research.

Disclosure statement

The authors declare that they have no affiliations with or involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

References

Astrid, A., Marzulina, L., Erlina, D., Harto, K., Habibi, A., & Mukminin, A. (2019). Teaching writing to efl student teachers: Teachers' intervention and no teachers' intervention through peer feedback writing techniques. *Universal Journal of Educational Research, 7*(9), 1901-1908. doi:10.13189/ujer.2019.070908

Daryanto, D (2013). *Menyusun modul bahan ajar untuk persiapan guru dalam mengajar (Develop a module of teaching materials for teacher preparation in teaching)*. Yogyakarta: Gava Media.

Fajaryani, N., Mukminin, A., Hidayat, M., Muhaimin, M., Haryanto, E., Nazurty, N., . . . Harto, K. (2021). Cultural capital and argumentative writing in english: Challenges and strategies used by efl student teachers. *Qualitative Report, 26*(10), 3029-3045. doi:10.46743/2160-3715/2021.4784

Firmansyah, A. (2020). Penggunaan media film dokumenter dalam pembelajaran menulis puisi (The use of documentary film media in writing poetry learning). *DEIKSIS: Jurnal Pendidikan Bahasa dan Sastra Indonesia, 7*(2), 60-65.

Habibi, A., Razak, R. A., Yusop, F. D., Muhaimin, M., Asrial, A., Mukminin, A., & Jamila, A. (2022). Exploring the factors affecting pre-service science teachers' actual use of technology during teaching practice. *South African Journal of Education, 42*(1) doi:10.15700/saje.v42n1a1955

Hidayah, N. (2015). Penanaman nilai-nilai karakter dalam pembelajaran Bahasa Indonesia di Sekolah Dasar (Cultivating character values in learning Bahasa Indonesia in elementary schools). *TERAMPIL: Jurnal Pendidikan dan Pembelajaran Dasar, 2*(2), 190-204.

Khair, U. (2018). Pembelajaran Bahasa Indonesia dan Sastra (BASASTRA) di SD dan MI (Indonesian Language and Literature Learning (BASASTRA) in elementary school and Islamic elementary school). *AR-RIAYAH: Jurnal Pendidikan Dasar*, *2*(1), 81-98.

Khulsum, U., Hudiyono, Y., & Sulistyowati, E. D. (2018). Pengembangan bahan ajar menulis cerpen dengan media storyboard pada siswa kelas X SMA (Development of teaching materials for writing short stories using storyboard media for class X senior high school students). *Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya, 1*(1), 1-12.

Luecke. (2003). *Managing creativity and innovation*. Boston: Harvard Business School Publishing.

Marjuki. (2020). *181 Model pembelajaran paikem berbasis pendekatan saintifik (181 paikem learning model based on a scientific approach)*. Bandung: Remaja Rosda Karya.

Masnun, M. (2016). Penerapan berbasis saintifik dalam pembelajaran tematik terpadu (Scientific-based application in integrated thematic learning). *Al Ibtida: Jurnal Pendidikan Guru MI, 3*(1), 93-115.

Mujianto, G., Pangesti, F., & Sudjalil, S. (2019). Penerapan model sinektik berbantuan LKPD dalam pembelajaran menulis cerpen kelas IX MTS Muhammadiyah 1 Malang (The application of the synectic model assisted by LKPD in learning to write short stories for class IX MTS Muhammadiyah 1 Malang). *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya, 5*(1), 182-194.

Mukminin, A., Habibi, A., Prasojo, L. D., Idi, A., & Hamidah, A. (2019). Curriculum reform in indonesia: Moving from an exclusive to inclusive curriculum. [Kurikularna prenova v Indoneziji: Prehod od izključujočega k vključujočemu kurikulum] *Center for Educational Policy Studies Journal, 9*(2), 53-72. doi:10.26529/cepsj.543

Nazurty, Rustam, Priyanto, Nurullaningsih, Pratiwi, A., Sarmandan, Habibi, A., Mukminin, A. (2019). Learning strategies in reading: The case of indonesian language education student teachers. *Universal Journal of Educational Research, 7*(11), 2536-2543. doi:10.13189/ujer.2019.071133

Oktavia, R. D. (2013). Penggunaan media gambar tiga dimensi untuk peningkatan keterampilan menulis puisi bebas pada siswa Sekolah Dasar (The use of three-dimensional media pictures to improve free poetry writing skills in elementary school students). *Jurnal Penelitian Pendidikan Guru Sekolah Dasar, 1*(2), 1-10.

Rakimahwati, Ismet, S., Zainul, R., Roza, D., & Mukminin, A. (2022). The development of the educational game to improve logical/ mathematical intelligence. *Journal of Higher Education Theory and Practice, 22*(7), 11-19. doi:10.33423/jhetp.v22i7.5266

Rosmaya, E. (2018). Pembelajaran menulis teks eksposisi dengan menggunakan pendekatan kooperatif tipe investigasi kelompok di SMP (Learning to write expository texts using a cooperative approach of group investigation type in junior high school). *DEIKSIS: Jurnal Pendidikan Bahasa dan Sastra Indonesia, 5*(1), 111-127.

Susanti, R. (2017). Pengembangan modul pembelajaran PAI berbasis kurikulum 2013 di kelas V SD Negeri 21 Batubasa, Tanah Datar (Development of Islamic education learning modules based on 2013 curriculum in class V at SD Negeri 21 Batubasa, Tanah Datar). *JMKSP. Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan, 2*(2), 156-172.

Susanto, A. (2014). *Teori belajar dan pembelajaran di sekolah dasar (Learning theory and learning in elementary school)*. Jakarta: Kencana.

Tiarina, Y. (2012). Pengajaran puisi dengan metode discovery-inquiry (Teaching poetry using the discovery-inquiry method). *Komposisi: Jurnal Pendidikan Bahasa, Sastra, dan Seni*, *10*(2), 127-132.

Trianto. (2009). *Mendesain dengan pendekatan pembelajaran inovatif-progresif (Designing with an innovative-progressive learning approach)*. Jakarta: Kencana Prenada Media Grup.

Velasco, E. V., Ibarra, F. P., & Mukminin, A. (2022). The readiness on the implementation of the special program for information and communication technology. *Journal of Higher Education Theory and Practice, 22*(3), 79-89. doi:10.33423/jhetp.v22i3.5083

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