

# ICARE-Based Blended Learning Model: Improving Historical Literacy in Indonesian History Education Courses

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**Abstract:** The goals of this research are to: (1) create a rotation blended ICARE learning model to improve historical literacy in Indonesian history education courses; (2) ascertain whether using this model in those courses is feasible; (3) ascertain the degree to which the model is effective in raising the competency of Indonesian history education courses; and (5) ascertain the creative thinking capacity and competency of the Indonesian history education course. techniques for research and development (R&D). The Department of History Education, Faculty of Social Sciences, carried out this study, Unimed, Academic Year 2023/2024, subject on Indonesian History Education from the Independence to Reformation Period. The results showed that: the rotation blended ICARE learning model is very feasible; the rotation blended ICARE learning model improves learning outcomes in Indonesian history education courses very high. 0.63 in the "moderate" category ( $0.7 > (N-gain) \geq 0.3$ ), so it is very effective in improving student learning outcomes; and Historical literacy skills increased during the posttest.

**Keywords:** learning model; ICARE; blended; literacy; Indonesian history education

## 1 Introduction

The ICARE approach is used to build a deep understanding of history through a process of inquiry, connection with daily life, application in real contexts, reflection, and expansion of knowledge. This method helps students become more engaged learners, sharpen their critical thinking abilities, and gain a deeper comprehension of history.

Online and in-person instruction are combined in the blended learning model. In this model, students will attend face-to-face sessions involving group discussions, presentations and other collaborative activities. In addition, students will also use online learning platforms to access learning materials, assignments, and other resources. With this approach, students can learn independently, access materials anytime and anywhere, and interact with fellow students and teachers via online platforms.

The ICARE learning paradigm places a strong emphasis on imparting knowledge and providing opportunities for students to apply what they have learned. Through the introduction and connect stages, students are assisted in developing their own knowledge; in the apply stage,

they can verify the accuracy of the knowledge they have developed; in the reflect stage, students consider the knowledge they have gained; and in the final stage, extend, students are provided with the chance to learn more widely in order to strengthen their comprehension of the learning material [1].

In addition, the ICARE learning model offers a number of benefits to teachers and students. These benefits include: (1) mapping a balanced content structure between theory and practice for teachers and students; (2) having a life skill-based approach; (3) enabling schools to conduct open monitoring and evaluation; and (4) giving teachers opportunities to conduct easily implementable assessments on each lesson [2].

Blended learning is a type of learning that mixes online and in-person instruction, according to Garrison & Vaughan [3]. Optimizing the integration of written communication in online learning and oral communication in in-person learning is the fundamental tenet of the blended learning paradigm. The world's top colleges have adopted this approach since it generally raises the caliber of instruction. As a result, it has become popular and extensively employed.

The ICARE learning model has steps. The advantages and effectiveness of the ICARE learning model can be demonstrated through research conducted by several researchers. One of the results of research conducted by Maryam shows that the application of mathematics learning using the ICARE learning model can improve students' problem solving abilities. However, in its application the ICARE learning model also has weaknesses, namely that it requires a long time to make students understand the problems given.

In implementing the learning process, especially in the Indonesian History Education course, independent learning is still an obstacle. The History education curriculum for Bachelor of History Education, FIS UNIMED in the Indonesian History course from Independence to Reformation is: (1) students can understand and be proficient in using principles, procedures and educational media technology to evaluate learning processes and outcomes, (3) Students are able to assess learning processes and results. (2) Students are able to comprehend, master, and analyze educational media technology procedures and student learning outcomes. Students studying Indonesian history must be capable of independent learning. A mixed learning approach can be used to increase learning freedom. This type of learning was created by fusing online and offline instruction.

### **1.1 The Nature of Indonesian History Education**

Indonesian History Education studies Indonesian history from the period of independence to reformation. Following Indonesia's independence on August 17, 1945, both the political and educational systems underwent transformations. The changes that take place in the realm of education are basic ones, involving the adaptation of educational policies to the principles and values of a sovereign state. These principles are expressed in the educational objectives, the school system, the ideal foundation, and the learning opportunities offered to all Indonesians. History learning is no exception, the direction and goals of learning history change along with changes in government policy. There have not been many studies regarding the history learning curriculum by academic experts [4].

This research discusses history learning as a driving force for government politics, starting from objectives, positions to materials adapted to government ideology. The next study by Suhartono [5] concerns the implications of Soeharto era education policies on the existence of Madrasas.

Learning about history is a process that uses historical lessons to help pupils develop their potential and personalities so they can become informed and respectable members of society [6].

In their research, Batubara dan Aman [7] found that nationalism influenced history education during the early stages of independence, keeping in mind that Indonesia was still fighting for its independence at the time. As political interests shifted with the advent of Suharto's rule, so did the policies and direction of history education, which served to legitimize Suharto's authority.

By implementing the ICARE learning model based on rotation blended learning, it is possible to increase scientific mastery and increase historical literacy. So in this research, the aspect of mastering history in general and especially in courses will increase historical literacy for students.

### **1.2 ICARE Learning Model (Introduction Connect Apply Reflect Extend)**

The learning model that can be applied is the ICARE learning model. ICARE was adopted from the "ICARE" learning system which was developed by the Department of Educational Technology, SanDiego State University (SDSU) United States [8].

Introduction, Connection, Application, Reflection, and Extension are the five essential components of learning experiences for children, adolescents, and adults that make up ICARE, according to Mahalli [9]. Students are guaranteed the chance to apply what they have learnt when the ICARE method is used.

### **1.3 Rotation Blended Learning**

The elements of learning with blended learning were mentioned by Suhartono [12], namely face-to-face learning in class, independent learning outside of class, utilizing online applications or platforms, tutorials, collaboration and evaluation. The teacher's role is only as a facilitator and mediator in managing these learning elements. In the blended learning model, there are two learning models namely; (1) The offline model is carried out face to face with the addition of previously downloaded online media such as videos or images and other information. (2) Hybrid learning is carried out directly connected to online but combined with face-to-face. Online learning can be done using various online platforms such as the home learning portal <https://belajar.kemdikbud.go.id/>, Google Classroom, Edmodo, web, Kipin School and so on.

Station Rotation Blended Learning is a learning method that can reach all regions in Indonesia that is flexible, creative and innovative, internet-based so that it is able to compete in the era of industrial revolution 4.0 and keep up with global technological developments while still upholding character education. Blended learning itself is a learning process that combines traditional (face-to-face) and online learning methods [13]. Station Rotation Blended is expected to encourage students in learning. This is related to student learning motivation. Sometimes learning is considered boring by going online in the form of assignments and assignments only. So Station Rotation Blended can be a new formulation in online learning because it can encourage students to be motivated in the learning process and online assignments in Indonesian History Education courses.

## 1.4 Historical Literacy

Historical literacy is a skill that must be possessed by history teachers in developing history lessons in the classroom. The link between literacy and history learning is actually popular among history teachers in developed countries, but is less familiar to history teachers in Indonesia. The concept of historical literacy is still being developed by various experts in history education and historical science.

The term "competence" was originally used by Scheiber [14] to describe a person's ability to comprehend history from a variety of historical sources, including texts as well as visuals, symbols, and music [15]. For most of the 1970s, Scheiber's advocacy for historical knowledge was seen as lacking solid foundations. Ten years later, the idea of historical literacy is being reiterated once more. It is defined as the degree of familiarity with historical material, or the body of information regarding historical occurrences. "Some information is so basic, so important that all students must know it in order to understand new learning," says the lecturer. In addition "historical knowledge is equivalent to historical literacy".

The summarized concept of historical literacy shows how historical literacy can be seen from various dimensions or benchmarks, with each having sub-dimensions which are described in the table below:

**Table 1.** Historical literacy benchmarks according to Maposa & Wassermann (2009)

Dimensions/Benchmarks of historical literacy	Sub- Dimensions
knowledge	events narratives
conceptual understanding	time causation and consequence motivation significance moral judgment change and continuity empathy
Source Work/Historical Method	sourcing corroboration contextualization analysis evaluation explanation
historical consciousness	
historical language	

Historical literacy is distinguished from literacy in the past by Maposa and

Wassermann. Historical literacy describes what a person would learn from studying history in class, whereas literacy in history refers to the capacity to read and write when studying history in class [16].

Students can explore digital teaching material pages as follows:

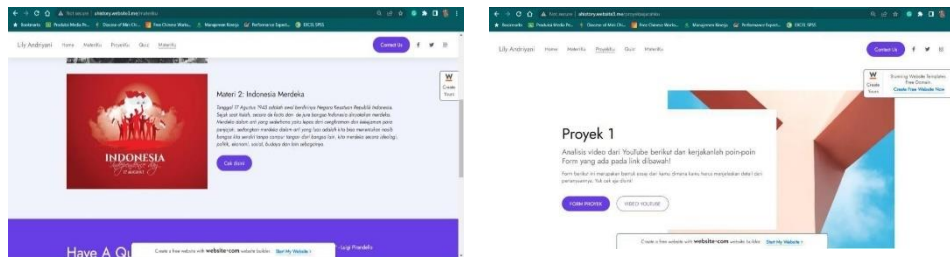


Fig. 1. Early display of history digital teaching materials

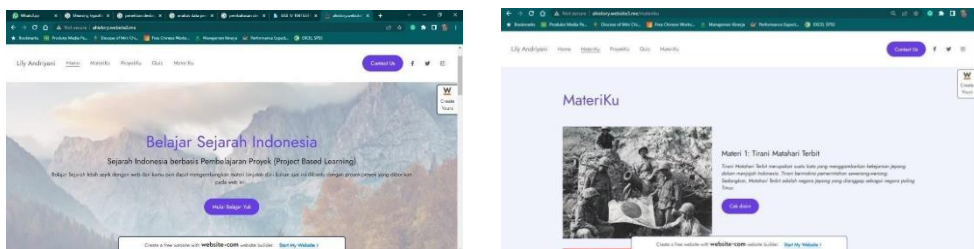


Fig. 2. Material History of struggle I and the project

The research aims to address the following issues: (1) How to create an ICARE learning model based on rotation blended learning to raise historical literacy in Indonesian history education courses; (2) Is the model suitable for use; (3) Is it practical to use; and (4) Is the model effective in enhancing learning outcomes in Indonesian history education courses; and (4) What are the thinking abilities and competencies of Indonesian History Education courses.

## 2 Method

The 4D model, a cyclical process that evolves over time and is continuous across the full instructional design and implementation process, was used to generate this research, which is classified as research and development (R&D). Thiagarajan [17] states that it is divided into four stages of development: define, design, develop, and distribute.

During the academic year 2023–2024, the Department of History Education, Faculty of Social Sciences, Unimed conducted a study on Indonesian History Education from the Independence to Reformation Period. Development research focuses on a group of specialists, including experts in instructional design, visual design, learning materials, and learning media. Students and lecturers are subjects of development study in validation groups, individual trials, small group trials, and field experiments.

Data analysis of validation findings from learning design experts, media experts, and material experts is included in media validity analysis. The study employed a Likert scale questionnaire for data collection, which involved delivering questionnaires to three types of respondents: material experts, media experts, and learning design experts. Using the following research criteria, the respondents evaluated the quality of the ICARE model teaching materials based on rotation blended learning in the Concept Indonesian History Education course:

**Table 1.** Questionnaire assessment criteria

Criteria	Score
Very good	5
good	4
Enoughp	3
Not good	2
Very bad	1

(Source: Arikunto [18])

The average score received is computed based on the assessment findings for every respondent. The average score is then transformed into a qualitative value by applying the following formula and fundamental rules to ascertain the validity level:

$$P = \frac{\sum x}{\sum x^1} \times 100\%$$

Information:

P = large percentage

$\sum x$  = Number of Validator Answer Scores

$\sum x^1$  = Total Highest Answer Score

**Table 2.** Classification of eligible media

No	Percentage	Eligibility Level	Qualitative Category
1.	80%-100%	Very Eligible	No Revision
2.	60%-79%	Eligible	No Revision
3.	40%-59%	Fairly Eligible	Partial Revision
4.	20%-39%	Less Eligible	Revision
5.	0%-19%	Very Inadequate	Revision

(Source: Arikunto [18])

According to the above classification table, if the average media validation percentage provided by all validators is greater than or equal to 60%, the media is deemed appropriate for usage.

The efficacy of learning media is assessed using data on the increase in the degree to which targets are reached from the beginning before treatment (initial ability test, or pre-test) to the target learning outcomes after treatment (post-test).

$$\text{Classical Completeness} = \frac{\text{Number of Students Who Completed}}{\text{Number of Research Subjects}} \times 100\%$$

After manual calculations using the N-Gain formula are performed, the effectiveness of the media is tested if  $\geq 85\%$  of the students in that class have finished their study.

The increase in student learning outcomes following treatment was measured using the normalized gain test (N-Gain). The following formula can be used to determine the normalized gain score:

$$N\text{-Gain} = \frac{\text{Posttest score} - \text{pretest score}}{\text{Maximum score} - \text{Pretest score}} \times 100$$

The n-gain calculation findings are then analyzed as follows to determine the efficacy of the media being developed:

**Table 4.** N-gain Score Classification

N-Gain score intervals	Classification
$g > 0,7$	High
$0,3 \leq g \leq 0,7$	Moderate
$g < 0,3$	Low

(source: Hake [19])

The N-gain score's impact on students' learning capacities can be understood in the following ways:

**Table 5.** Categories of N-gain effectiveness interpretation

Percentage (%)	Interpretation
< 40	Ineffective
40 - 55	Less Effective
56 – 75	Moderately Effective
>76	Effective

(source: Hake [19])

### 3 Results and Discussion

#### 3.1 Results

An ICARE model teaching module for the Indonesian History Education course is created by this research, and it is based on rotational blended learning. Research and development is the form of research that is used, and it consists of four stages: product design, validation and evaluation, needs analysis, and the final stage.

**Table 6.** Material Expert Validation Results

No	Aspect	Indicator	Score	Percent tase	Criteria
1.	Self aspect Instruction	Learning objectives are in accordance with the competencies.	4	80%	Good
		The material in the module is in accordance with core competencies and basic competencies.	5	100%	Very Good
		The material is presented coherently.	5	100%	Very Good
		The material is presented coherently.	4	80%	Good
		Illustrations are presented according to the material content in the module	4	80%	Good
		The task's context and the student's surroundings may have an impact on the issues raised.	4	80%	Good

No	Aspect	Indicator	Score	Percent tase	Criteria
		The module's language is simple enough for pupils to understand.	4	80%	Good
2.	Self Contained Aspect:	Suitability of module material with core competencies and basic competencies.	5	100%	Very Good
		The competency material presented contains core competency units and basic competencies.	5	100%	Very Good
3.	Stand Alone Aspect	It is possible to study module content independently of other modules.	4	80%	Good
		It is possible to study the module content without using any additional media.	4	80%	Good
4	Aspects Adaptive	The material in the module is in accordance with developments in science and technology.	5	100%	Very Good
5.	User Aspect Friendly	Module material can be studied anywhere and anytime.	4	80%	Good
AVERAGE			4,38	88%	Very Good

**Table 7.** Media Validation Results

No	Aspect	Indicator	Skor		%	Criteria
			Expert 1	Expert 2		
1.	Design	Kemudahan akses pada media (terdapat <i>tools</i> yang membantu)	4	5	90	Very Good
		Practical and easy to observe layout	4	4	80	Good
		Color selection contrast	4	4	80	Good
		Proportion of material to learning objectives	5	4	90	Very Good
		The proportion of font sizes for titles, subtitles and supporting text for modules is more dominant and professional compared to the size of website pages	4	4	80	Good
2.	Layout	Compatibility of components with expected layout	4	5	90	Very Good
		Appropriateness of the size of the use of letters in teaching materials	4	4	80	Good
		Regularity and selection of appropriate images that suit the teaching material page	4	4	80	Good
3.	Graphics	The suitability of video content with the images or visuals used with the context told in digital teaching materials	4	4	80	Good
		The image or visual content in the video selection is clear and easy for students to understand according to their age	4	4	80	Good
4.	Communi cate	The material in the teaching materials is conveyed well	4	3	70	Enough
	Visual	Display learning videos on interesting digital teaching materials	4	4	80	Good



No	Aspect	Indicator	Skor		%	Criteria
			Expert 1	Expert 2		
		The suitability of the projection between images, videos and writing is able to explain the material being taught	5	4	90	Very Good
		AVERAGE	4,15	4,07	82,3	Good

Based on Table 6, Table 7, Material Expert Validation Results, and Table 7, Media Validation Results, the validation results are as follows:

**Table 8.** Expert Validation Results

No	Expert Validation	Score	Percentage	Criteria
1	Material	4,38	88%	Very Good
2	Media	4,11	82,3%	Good
	Average	4,24	85%	Very Good

The average validator assessment of website products that support the development of ICARE model teaching modules based on rotation blended learning in Indonesian history education courses is 85% with Very Good criteria. This shows the feasibility of the product.

Pre- and post-testing is the method used to measure effectiveness. In the Indonesian History Education course, the ICARE model teaching module based on rotation blended learning was administered to the students during the pretest. In contrast, the posttest was administered following the students' instruction and learning process utilizing the ICARE model teaching module based on rotation blended learning in the History Education course. Java.

The measurement findings of thirty students, which were derived from the pretest and posttest results, were processed using paper-based techniques. Both before and after pupils receive makeup teaching, questions are asked. Next, the results of the pretest and posttest are evaluated and interpreted using the N-Gain Score criterion table, as shown in Table 9 below:

**Table 9.** N-Gain Score Criteria

Criteria	Boundary
High	$N\text{-Gain score} \geq 0.7$
Medium	$0.3 \leq N\text{-Gain score} \leq 0.7$
Low	$N\text{-Gain score} \leq 0.3$

The N-Gain-Gaine is a tool used to compare pupils' actual gains or achievement scores to their maximum potential gains or scores. Students who received a total score of 30 on the pretest averaged 49.90, whereas those who received a score of 79.18 on the posttest had an N-Gain of 0.63 in the medium group. Overall, the findings showed that there was a considerable improvement in learning outcomes when the Indonesian History Education course used the ICARE model teaching module, which is based on rotation blended learning.

### 3.2 Discussion

They found it really impressive that they were able to learn about Tyranny of the Rising Sun and Independent Indonesia through the use of digital history teaching tools. The use of digital learning in education has advanced thus far, though not fully for all subjects—history in particular.

Besides that, the teaching module of the ICARE model based on rotation blended learning in the Indonesian History Education course can be linked to student character education in its implementation. This refers to character in Strengthening Character Education (PPK), under the supervision of the Ministry of Education and Culture [20].

In an effort to apply the station rotation blended learning method, each educator also has a responsibility to be able to instill five character values in all students through the educational process inside and outside the classroom [21]. Therefore, educators are needed who have been certified by a station rotation blended learning program training institution. The training is carried out in stages until the teaching staff has skills in using computers and the internet. Educators are also taught active and applicable face-to-face learning methods. The training will produce educators who are qualified, creative, innovative, and, of course, ready to apply station rotation blended learning in a professional manner.

History lessons, which so far have only been considered mere memorization, can in fact be packaged in a more interesting way if the teacher can be creative and actively capture students' interests. Historical films are one of the learning media that are very likely to be used by history teachers. Historical films are a variety of audio-visual documents, including films, documentaries, and TV series [22]. The use of historical films can improve students' ability to process information and can present strong messages about the past. However, the use of historical films as a learning medium must be done carefully by teachers [23].

Through the use of film, it is hoped that students will be able to process existing information from the contents of the film so that they can analyze and be able to classify which data or information is in accordance with facts and reality. Not only that, students can develop their thinking processes. Therefore, the use of film media can explain a process and explain a skill, and all students can learn from the film while at the same time developing the ability to process student information [24].

## **4 Conclusion**

On the basis of assessments from material experts, the feasibility of the ICARE model teaching module media based on rotation blended learning in the Indonesian History Education course obtained an average score of 3.8. Media experts obtained a mean score of 4.13. The course lecturers had an average score of 3.42, and the first trial's outcomes received an average score of 3.77. The mean value for Trial II was 4.12. Thus, the media module received an average value of 3.84 based on the information gathered from the evaluations of lecturers, media experts, material experts, and trial I and trial II. using sound standards.

Based on the results of the study, the use of the rotation blended learning ICARE model in the Indonesian History Education course increased students' historical literacy during the posttest.

Based on the results of research conducted by learning using the ICARE teaching module model based on rotation blended learning in the Indonesian History Education course, The effectiveness of student learning has increased in the experimental class; the average posttest

score is 75.55. Meanwhile, the posttest score using 82 control class lecture methods was 68.30 on average. The difference in the average difference between the two classes resulted in an increase in the value between the experimental classes, which was greater than the value in the control class.

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