

## Research Article

# Improving Global Competence in Students: Creating a Pro-Validate-Based Learning Assessment Framework

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## Abstract

This study aims to develop a learning assessment framework, Pro-Validate, designed to enhance global competence in students, in line with the principles of the Merdeka Curriculum. Pro-Validate emphasizes assessments that are productive, objective, valid, accountable, fair, and integrated with technology, catering to the needs of modern learning environments. The study utilizes the ADDIE development model to create, validate, and test this evaluation framework in high schools across East Java. The results demonstrate that Pro-Validate effectively provides a comprehensive assessment aligned with learning objectives, fosters student-centered learning, and supports the development of global literacy skills. Validation from education experts and field trials confirm the framework's feasibility and effectiveness, making it suitable for broader implementation. Pro-Validate offers a structured approach to measuring and enhancing student progress in a fair, transparent, and holistic manner, facilitating improved learning outcomes and better preparation for global challenges.

**Keywords:** global competence, pro-validate, learning assessment

## INTRODUCTION

In implementing learning according to the principles of the current *Merdeka* curriculum by providing quality, interactive and contextual learning experiences to students (Sherly et al., 2020). With an independent curriculum characterized by a flexible approach to learning that prioritizes depth over breadth of understanding, and focuses on character building and soft skill development that is responsive to global demands and tailored to the needs and learning abilities of each student (Ministry of Communication and Information, 2020). Therefore, there is a need to organize interactive, inspiring, fun, challenging learning, motivating students to actively participate and providing sufficient space for initiative, creativity, independence according to the talents, interests and physical and psychological development of students (Anggraena et al., 2022). In this context, learning evaluation becomes an important instrument to find out whether learning has functioned well and ideally. This evaluation needs to be able to measure aspects that should be measured and be holistic. By conducting a comprehensive evaluation, educators can gain a better understanding of student progress in achieving learning objectives and improve weaknesses that may exist in the learning process (Yusnita et al., 2021).

A holistic evaluation will provide a more complete picture of student progress as a whole and allow educators to provide more in-depth feedback to improve learning (Subasman, 2019). The current condition of inter-regional education achievement still has gaps, such as the results of the 2021/2022 National Assessment, which still shows significant variations between the islands of Java and eastern Indonesia in the literacy and numeracy scores of students in various regions of Indonesia (Wang et al., 2023).

The existing research on educational assessment within the Merdeka curriculum framework has on the rise and several gaps have emerged that warrant attention. First, many studies focus on the general structure of the *Merdeka* curriculum but fail to address how to practically implement evaluation systems that reflect the curriculum's emphasis on global competencies and soft skills (Sherly et al., 2020; Rizki & Fahkrunisa, 2022; Kusdarini, 2025). For instance, while there is a strong push towards holistic student development, traditional assessment systems continue to focus predominantly on academic achievements, which overlooks the cultivation of essential life skills such as creativity and critical thinking (Birgili, 2015; Dewi et al., 2022). Additionally, studies like those by Yusnita et al. (2021); El Galad et al. (2024) point out that current evaluations often lack flexibility, failing to adapt to the diverse learning needs of students across different regions. The large disparity in educational outcomes, especially between Java and Eastern Indonesia, underscores this gap, suggesting that current assessments are not sufficiently tailored to varying regional contexts and student profiles (Wang et al., 2023).

Therefore, the importance of viewing student abilities in accordance with the development of student competencies and characters comprehensively is very significant. To achieve this, innovation is needed in the evaluation process that is oriented towards student progress. One of the proposed innovations is Pro-Validate. Pro-Validate emphasizes several important principles in designing evaluation designs which emphasize the principles of productive, objective, valid and accountable, fair and integrating Technology according to the needs of today's learners. By applying these principles, Pro-Validate can be an effective framework in developing evaluations that are oriented towards student progress holistically and ensuring that the assessment process supports the achievement of desired competencies and characters in education.

## METHOD

### Research Design

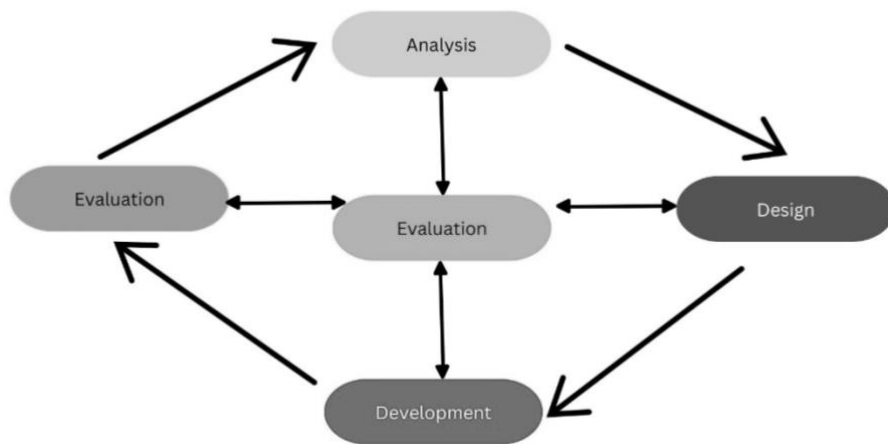
This research includes development research and is continued by implementing innovations that have been developed in several specific high schools in East Java. This research began with a survey of teachers in East Java about the evaluation design that has been carried out and is linked to student progress. The results of the survey will be used as material for developing an evaluation design that refers to Pro-Validate for student progress. The steps in the research flow using the ADDIE development model are as shown in Figure 1.

Based on the provided diagram, the development process consists of five key stages, starting with the Analysis Stage. The first component of this stage is the Problem Analysis in Economics Learning, which involved identifying and analyzing the challenges and opportunities within students' economic learning across several schools in East Java. This analysis highlighted key issues and served as the foundation for discussions aimed at finding appropriate solutions to the problems identified in Economics learning. The second component is the Curriculum and Material Analysis,

where the curriculum implemented at select schools in East Java, namely at MAN 2 Blitar and SMA Negeri 8 Malang, was evaluated. This was crucial for designing the evaluation framework and ensuring alignment with the appropriate learning outcomes and objectives. Additionally, an assessment of Economics learning materials was conducted, reviewing relevant textbooks and resources to ensure their suitability for the targeted learning goals. The third component is the Analysis of Students' Characteristics in Learning Capacity, which involved analyzing the students' characteristics and learning abilities. Data was gathered regarding the current state of the learning process, teaching methods, and the use of learning media, aiming to gain insights into how students interact with the material and identify areas for improvement in fostering their learning capacities

**Figure 1**

*Stages of research and development*



A common challenge in economics education is the persistently low interest in learning among students. In addition, the integration of technology-based learning media has been found to have a significant impact on student engagement and learning outcomes. This data serves as a key determinant in shaping the content and material included in the learning media. The next phase is the Design Stage, which focuses on formulating clear evaluation objectives and skill development that is aligned with student progress. The following stage is the Development Stage, where the initial version of the evaluation design product, Pro-Validate, is created. This is followed by Preliminary Field Testing, which involves conducting small-scale trials in a select group of high schools within the Malang Raya City area through direct observation. The Implementation Stage follows, where Pro-Validate is trialed on students at SMA Negeri 8 Malang and MAN 2 Malang. Before the learning media is used in class, both the content and the media are subject to expert validation. This is followed by the Material and Design Evaluation, which involves expert validation of both the educational content and the media to assess whether the developed product is suitable for use in learning contexts. The experts provide valuable feedback through questionnaires, which serve as the basis for further refinement of the product.

### **Presence of Researchers**

In the research to be conducted, the researcher acts as an instrument as well as a data collector, so that in conducting research, the researcher will be directly involved in

the research subject. The researcher in this study as a planner, implementer, data collector, data analyst, data interpreter, to becoming a reporter of research results. The researcher was present directly at the research location by conducting a survey of the needs of learning evaluation characteristics to the research subject, namely Economics Teachers in the Industrial Revolution 4.0 era.

### Research Location

The research location is where the research is conducted so that researchers can see or find the facts that occur. The research location will be conducted at SMA/MA in East Java which is selected based on the sample selection procedure.

### Data Types and Sources

The types of data used by researchers are primary data and secondary data. The primary data source in this study was obtained from economics teachers through interview techniques, while secondary data was obtained from economics subject scores, articles to scientific journals related to the research topic. The primary data obtained from this study are interview data regarding the procedure for determining evaluation instruments that have been developed by teachers. The secondary data obtained from this study are data regarding the results of the evaluation of high school students' economics learning in East Java.

## RESULT

From the stages carried out in the research, it can be seen in Table 1. The table presents the characteristics of the respondents, categorized by gender and learning styles from two schools: Senior High School 8 Malang and MAN 2 Blitar. The gender distribution shows that 45.71% of male students come from Senior High School 8 Malang, and 31.42% from MAN 2 Blitar, while 54.29% of female students are from Senior High School 8 Malang and 68.57% from MAN 2 Blitar. Regarding learning styles, 51.43% of students from Senior High School 8 Malang are visual learners, while 60% of those from MAN 2 Blitar prefer visual learning. Kinesthetic and audio learners also show varying percentages across both schools.

**Table 1**  
*Characteristics of respondents*

Indicator	Schools	Amount	Percentage (%)
Gender			
Man	Senior High School 8 Malang	16	45.71
	MAN 2 Blitar	11	31.42
Woman	Senior High School 8 Malang	19	54.29
	MAN 2 Blitar	24	68.57
Learning Styles			
Visual	Senior High School 8 Malang	18	51.43
	MAN 2 Blitar	21	60
Audio	Senior High School 8 Malang	7	20
	MAN 2 Blitar	9	25.71
Kinesthetic	Senior High School 8 Malang	10	28.57
	MAN 2 Blitar	5	14.29

**Table 2**  
*Results of pro-validate based evaluation development*

<b>Research Stages</b>	<b>Research Result</b>
Needs Analysis/content evaluation	Identifying teacher and student needs related to Pro-Validate based evaluation. Analyze the suitability of evaluation content with learning objectives and competency achievements.
Product Design	Designing a Pro-Validate based evaluation model that suits learning needs. Prepare an initial draft of the evaluation instrument.
Product Validation	Conduct validation of product design and content by education and evaluation experts. Validation scores indicate the product is suitable for use with minor revisions.
Product Trial (Initial)	Conducting limited trials on students and teachers in several schools. Collecting initial data on product effectiveness and applicability.
Product Revision	Revise the product based on feedback from initial testing. Refine evaluation instruments to increase clarity and suitability to user needs.
Final Field Test	Implementing the revised product on a wider scale. Assessing the impact and effectiveness of the product in real learning settings.
Final Product Revision	Carry out the final revision based on the results of the field test. Prepare for the implementation of the final product on a wider scale and integrate it into the existing evaluation system in the school.

Table 2 outlines the development process of a Pro-Validate-based evaluation model. It begins with a needs analysis, identifying the specific needs of teachers and students, and ensuring that the evaluation content aligns with learning objectives and competencies. During the product design stage, an initial draft of the evaluation instrument is created. Product validation is carried out by experts, confirming that the product is suitable with minor revisions. Following the initial trial phase, feedback from students and teachers leads to necessary revisions. A final field test assesses the product's effectiveness in real learning environments, followed by a final revision before full-scale implementation in the school's evaluation system

**Table 3**  
*Validation results from material experts*

<b>No</b>	<b>Assessment Aspects</b>	<b>Mark</b>	<b>Maximum Value</b>
1	Relevance of material to learning goals	33	40
2	Accuracy	7	10
3	Serving equipment	9	15
4	Suitability of presentation	9	15
5	Conformity of language to rules	23	25
	Total validation value	81	105

Table 3 presents the validation results from material experts, assessing various aspects of the evaluation material. The aspects include the relevance of material to learning goals (33/40), accuracy (7/10), serving equipment (9/15), suitability of presentation (9/15), and conformity of language to rules (23/25). The total validation score achieved is 81 out of 105, indicating that the material largely meets the required

standards but may require some revisions in specific areas to improve accuracy and presentation suitability.

**Table 4**  
*Validation results from evaluation development*

Assessment Indicators	Material Assessment Aspects	Score	Max. Score
Productive	Time Efficiency	4	5
	Content Relevance	4	5
	Encouraging Active Learning	4	5
	Clear Instructions	4	5
	Feedback Opportunities	4	5
Objective	Bias-free	3	5
	Clear Assessment Rubric	4	5
	Measurable Results	4	5
	Clarity of Questions	4	5
	Fair Difficulty	4	5
Valid and Accountable,	Content Validity	3	5
	Content Validity	4	5
	Based on Clear Criteria	4	5
	Data Transparency	4	5
	Traceable Sources	4	5
Adil and Accurate	Review and Revision Process	3	5
	Equivalence in Assessment	4	5
	Assessment Consistency	4	5
	Access Considerations	3	5
	Truth of Information	4	5
Technology Integration	Adaptive Difficulties	4	5
	Access to Technology	3	5
	Utilization of Digital Resources	4	5
	Automated Feedback	4	5
	Data Security	4	5
Total Score		91	120

Table 4 shows that the stages in the research have met the requirements that the evaluation product developed can be widely applied. This can be seen from the validation value of evaluation development having a value close to the maximum score, both in productive, objective, valid and accountable, fair and accurate indicators and technology integration indicators.

## DISCUSSION

The results of the study show that the main goal of this study, which is to develop a Pro-Validate-based evaluation product in supporting the improvement of the quality of economic learning at the high school level, has been achieved. This can be seen from the results of each stage have reflected the success of the evaluation product in creating relevant learning evaluations, have a good level of effectiveness and are also able to be integrated into the learning process directly. From the results of the implementation of the development of this evaluation product, it was found that the evaluation process that has been used is still using the traditional evaluation process, and is not able to fully support the achievement of the desired learning objectives. The results of this study are

also strengthened by the results of other studies that state that a good evaluation, the evaluation must be relevant to the learning objectives that have been designed, so that the evaluation is used as a tool in helping students to achieve maximum understanding, both cognitive, affective and psychomotor (Waikelak et al., 2023; Chang et al., 2023).

In addition, the results of this study also show that the development of Pro-Validate-based evaluation product design has met the specific needs of the evaluation needed by students and teachers, so that it is expected to make a good contribution to the mastery of learning outcomes. The use of experts and end-users in the process of product validation and testing, also illustrates how important it is to develop product validation instruments that will be used later. Therefore, after conducting the expert validation process, it is known that the validation results of the development of this evaluation product show that the product developed has been declared suitable for use, although there are minor revisions in support of this argument related to the need for the involvement of experts in improving the quality of the development of this evaluation instrument. This is in accordance with the results of the study which emphasizes how validation carried out by experts in their fields is one of the most crucial steps in ensuring that in addition to the development of evaluation instruments must achieve optimal accuracy, it must also have practical applicability in the context of learning (Wani et al., 2022; Elangovan & Sundaravel, 2021).

The results of the study also show that the results of field tests, evaluation products developed have provided an effective response in improving the quality of economic learning, despite different methods, models and learning styles. The results of this study are in accordance with the results of the study which shows that evaluation can be used as a tool in improving the learning that students participate in (Syafrizal, 2023; Ramadhan & Inayati, 2024). In addition, the results of the study also show that the results of the development of this evaluation tool are not only a tool in achieving learning goals, but also show that the potential for Pro-Validate-based evaluation can be adapted and used as an evaluation tool that has a focus on global literacy. Therefore, the Pro-Validate model developed and designed in this study is expected to provide more specific and measurable feedback, and can help students improve their ability to better understand the material and be able to internalize the learning material optimally. This is in line with the opinion of the Organization for Economic Cooperation and Development which states that global literacy plays a very important role in the world of modern education (OECD, 2020). This means that the integration of technology with innovative approaches in evaluation processes and tools will effectively prepare students to be able to compete in a global environment.

## CONCLUSION

The findings of this study not only provide practical benefits for improving learning evaluation in schools, but are also supported by previous literature and research that shows how important evaluation is for relevance, validation, and feedback. This study provides a solid basis for the use of Pro-Validate evaluation in various national and international educational contexts by relating these findings to the existing literature. The Pro-Validate-based approach allows teachers to conduct more accurate, measurable, and relevant evaluations to learning objectives, improving student engagement and learning outcomes. This also means that this model can be used in other fields, especially in areas of learning that require global literacy. The study was limited. First, the results have not

been thoroughly tested on other subjects because the focus of the research is still on economics. Second, because product testing was only conducted on a small scale with a relatively small sample size from two schools, the results may not yet fully demonstrate how effective Pro-Validate evaluation is in a broader context. In addition, the study has not fully investigated the participation of students with more diverse learning styles, such as students with special needs. Further research is needed to address these limitations and apply this evaluation model to a variety of other educational contexts.

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Not applicable

### **Competing interests**

The author has declared that there are no conflicts of interest

### **Data availability**

The data were provided upon request to corresponding author

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