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# Innovative Platform for Economics Teachers: Design and Validation of AFEL Platform

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**Research Article**

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## Abstract

**Background/purpose.** Assessment for Learning is an integral part of the learning process that provides feedback and improves teaching methods. Teachers experience problems such as limited conceptual understanding, difficulties in designing instruments, and time constraints. This study aims to develop and validate an innovative platform for economics teachers.

**Materials/methods.** This study used the Design-Based Research method, focusing on the development and validation phases. The development phase is aimed at producing a prototype of the Assessment for Economics Learning (AFEL) Platform, which is carried out through two cycles of Focused Group Discussion. The validation phase is intended to test the feasibility of the platform prototype by presenting 6 experts who work as lecturers with expertise in assessment. The platform feasibility questionnaire was used to find out expert opinions on the platform. Quantitative data is processed using the Aiken formula, and qualitative data are notes and feedback from experts.

**Results.** It is reported that this study has successfully developed the AFEL Platform, which has six syntaxes: (1) Formulating economic lesson objectives and success criteria; (2) Delivering economic lesson objectives and success criteria; (3) Implementing assessment techniques; (4) Feedback; (5) Monitoring student progress; (6) Achieving economic lesson objectives and success criteria. This study has also validated the AFEL Platform which has been tested with the results of V-value = 0.97 > V-table = 0.79.

**Conclusion.** This study has successfully developed and validated an innovative assessment platform that assists economics teachers in organizing assessments for learning.

## 1. Introduction

Assessment in learning is an important component that teachers must implement to support the success of the learning process (Aria et al., 2021; Dayal, 2021; Schildkamp et al., 2020). The existing phenomenon is that assessments are only assumed by teachers as the same routine activities from year to year. This is due to various challenges teachers face in conducting assessments (Al-Mofti, 2020), including a lack of clear understanding of assessment concepts. As a result, teacher-designed assessments are often limited to only low-level cognitive skills. (Cisse et al., 2021; Musa & Islam, 2020). In actuality, assessment has a vital role in learning (Dayal, 2021; Schildkamp et al., 2020) because both are interrelated activities and occur simultaneously (Cowie et al., 2018; DiRanna, 2008).

The difficulties and challenges that teachers encounter in organizing learning assessments are caused by several things, namely: (1) Teachers lack an understanding of assessment; (2) Teachers often do not design assessment tools due to limited understanding of their benefits and insufficient time (Morin et al., 2020; Metin, 2013). According to research by Lora, Rosidin, and Distrik (2020), only 47% of physics teachers in Bandar Lampung understand the concept of Assessment for Learning (AfL), and only 16.9% of them apply it. Teachers should be able to design assessments that measure student performance in classroom assessments and turn them into useful information for making decisions about students, classes, and schools (Brookhart, 2024). Teachers with a low understanding of assessment concepts are predicted to have difficulty in designing and applying AfL.

This phenomenon is also found in economics teachers in high schools in Indonesia, where many teachers still have difficulty in implementing learning assessments. The following are the results of an exploration conducted on 68 economics teachers in Surakarta, Central Java:

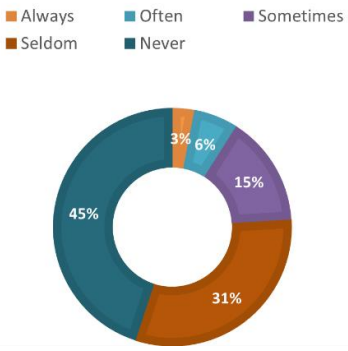


**Figure 1.** Teachers make an assessment plan

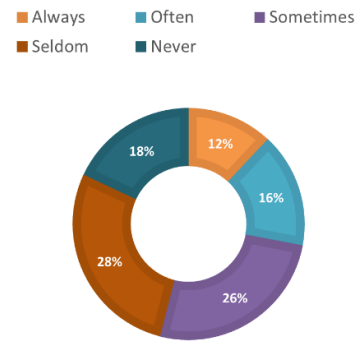


**Figure 2.** The teacher gives feedback to the student

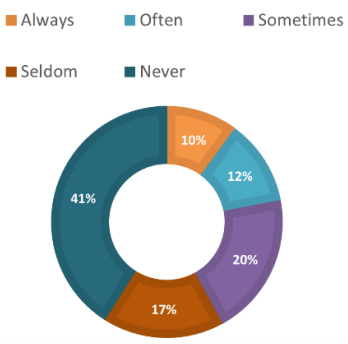


**Figure 3.** The teacher monitors student performance

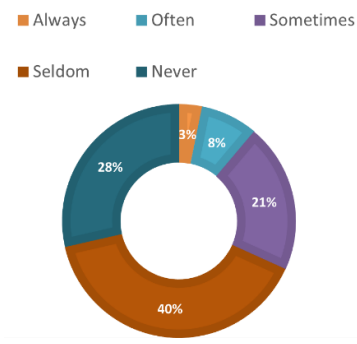


**Figure 4.** Teachers make adjustments next teaching method

The quantitative data is also in line with the Focus Group Discussion (FGD) conducted to explore the reasons why economics teachers have not fully implemented AfL. It was found that economics

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teachers have difficulty in planning assessments because they do not up-skilling and re-skilling related to the assessment concept; this phenomenon is in line with Figure 1, which shows that 45% of teachers do not make AfL plans. It has been reported in Figure 2 that only 12% of teachers always provided feedback to students but only informed the score results, teachers have not provided a description of the direction for each student. In the FGD session, teachers conveyed the limited time to provide qualitative notes on the assessment for each student. Disappointing data is also shown in Figure 3, which shows that 41% of teachers do not monitor student performance because they tend to postpone correcting student exams at the end of the semester. This condition is contrary to the concept of AfL, which plays a role in monitoring student work, so it is increasingly clear that understanding the concept of AFL is still a problem for teachers. Furthermore, Figure 4 reports that only 3% of teachers always used assessments as a basis for developing the next teaching method. However, teachers have not been able to show documentation of these activities, so in the FGD teachers expressed their aspirations that complete administration of AfL activities is needed.

This issue is very urgent and must be addressed immediately so that economics teachers can provide quality teaching services to their students. The solution proposed by this study is the development of the Assessment for Economics Learning-Sistem Perangkat Penilaian Platform (AFEL Platform), which combines AfL theory into a technology-based platform to assist economics teachers in organizing learning assessments. This is a novelty of research because, so far, the use of technology is only limited as a medium for assessment (Rinatamin et al., 2021; S & Sujito, 2014). While platforms for teacher assessments do exist, such as RubiStar (Merillat & Ault, 2010), they are limited to designing assessment rubrics, whereas teachers face broader challenges beyond rubric creation. The main issue discussed in this study is the difficulties experienced by economics teachers in organizing AFL, especially for economics subjects in high school.

The description is expected to provide an initial picture of the uniqueness and novelty of this research, namely a learning assessment platform specifically designed to assist economics teachers in organizing AfL. Thus, the objectives of this study are formulated as follows:

1. To report the results of the development of the AFEL Platform.
2. To validate the AFEL Platform.

## 2. Literature Review

### *2.1. Assessment for Economics Learning (AFEL)*

Assessment is the process of collecting learning information that is used in making decisions (Stiggins, 2017). In line with this, Brookhart and McMillan (2020) detail that the function of assessment is not only to improve student learning outcomes but also to enhance accountability, provide feedback, and diagnose student weaknesses. The concept of assessment is broad, not limited to the timing of implementation, the purpose of implementation, or the users of the information. Theories and concepts of assessment continue to evolve in response to the demands of scientific knowledge. Earl (2003: 21) classifies assessment into three approaches: 1) Assessment of learning, 2) Assessment for learning, 3) Assessment as learning. Assessment of learning is the type of assessment aimed at providing information about student learning outcomes at the end of the learning process. Assessment for learning is an assessment aimed at providing information about the learning process that has taken place, which will then be used as a basis for improving future learning processes. Assessment as learning is assessment conducted by students related to the learning they have undergone, aiming to provide feedback to themselves for the following learning process. These three types of assessment have different objectives, but the information generated from all three assessments complements each other for the achievement of optimal learning goals.

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AfL is an assessment conducted by teachers to obtain learning feedback, which serves as a basis for improving learning practices (Earl, 2003; ARG, 2002; Jones, 2005; William, 2006). AfL involves a range of teacher activities to collect, analyze and interpret evidence of student progress and adjust instruction and learning accordingly (Wolterinck et al., 2022). William (2006) explains that AfL encompasses key practices, such as explaining and sharing learning objectives and success criteria with students, designing effective classroom discussions to reveal evidence of student achievement, providing feedback that promotes learning progress, and empowering students as owners of their learning and as resources for peer learning.

AfL is an important process where feedback from assessment is used effectively by teachers and students to improve the quality of learning (Ali & Mjenda, 2024; Westbroek et al., 2020). Teachers use AfL results to adjust teaching strategies to meet students' needs better (Pang, 2022), while students use the feedback to improve their learning methods (Abd Halim et al., 2024; Hargreaves, 2005). AfL serves as an investigative tool to identify students' knowledge (de Vries et al., 2023), skills (González et al., 2024), and challenges in achieving learning objectives (Burkhardt & Schoenfeld, 2018; Tractenberg, 2021). By identifying areas where students struggle or are confused, teachers can make more informed decisions to refine their teaching methods (Ali & Mjenda, 2024). Finally, AfL not only identifies weaknesses in the learning process but also acts as an instrument to create more adaptive, inclusive, and effective learning for all stakeholders.

In line with the problems presented in the introduction section, this study has formulated the concept of AfL for the assessment of economics learning under the name assessment for economics learning (AFEL). By referring to the AfL syntax theory of Clarke (2014), Jones (2005), William (2006), and also by considering the intersection of each basic syntax and its implementation by economics teachers, the AFEL syntax designed in this study is presented as follows.

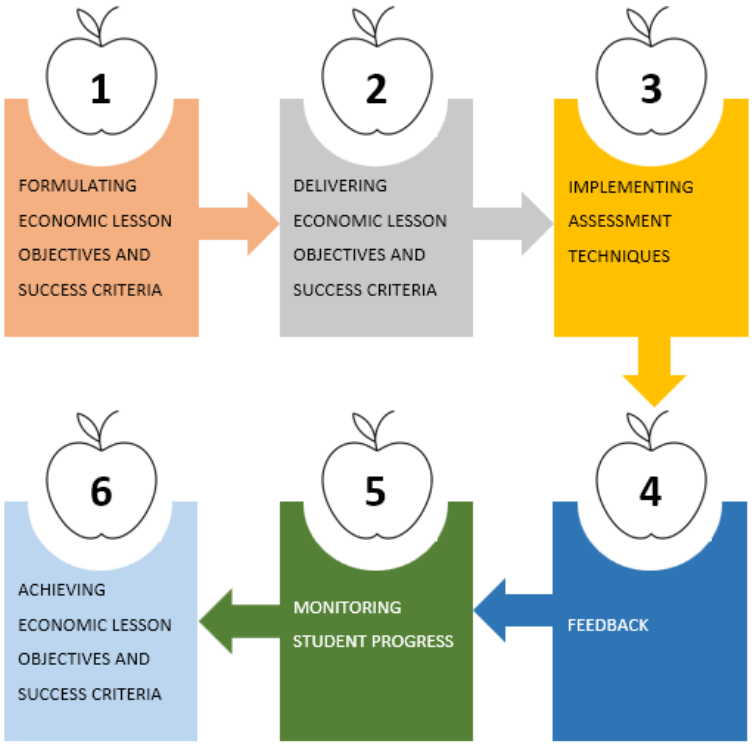


**Figure 5.** Syntax of AFEL

The AfL syntax is a coherent, inseparable and mutually sustainable unit. The six syntaxes are the uniqueness of this study because they are specifically designed for economics teachers in organizing learning assessments.

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### 2.2. AFEL Platform

A platform is defined as a collection of technologies that provide the foundation for other applications, processes, or technologies to operate and develop, and functions as a space that allows software systems to run (Hafifah Perdiyanti & Puspaningtyas Faeni, 2021). The use of platforms in electronic devices is not one-way; instead, it enables users to interact and collaborate within those electronic devices (Nurbekova et al., 2023). The innovation in the use of platforms continues to grow massively across various fields, such as banking, administration, transportation, religion, and education. In the field of education, the concept of a platform in learning is understood as an electronic device that supports various learning activities (Stoian et al., 2022). In line with this, the use of educational platforms includes integrated interactive online services that provide learning information to teachers, students, parents, and other parties involved in learning (Jewitt et al., 2010).

AFEL Platform is an electronic device intended for teachers' internal use in designing and administering assessment tools such as blueprints, rubrics, assessment results, feedback, monitoring, comments, and summaries. Furthermore, the platform was integrated with the AFEL concept. AFEL Platform serves as an internal teacher worksheet to design, implement, and manage economics learning assessments. This platform can be utilized for economics learning assessments in senior high schools without being tied to any specific curriculum, as the focus of the AFEL Platform is directed at assessing economics learning that encompasses various materials or topics from senior high school economics subjects. The operational structure of the Platform AFEL, designed in this research, is divided into three main menus, as illustrated in Figure 6.

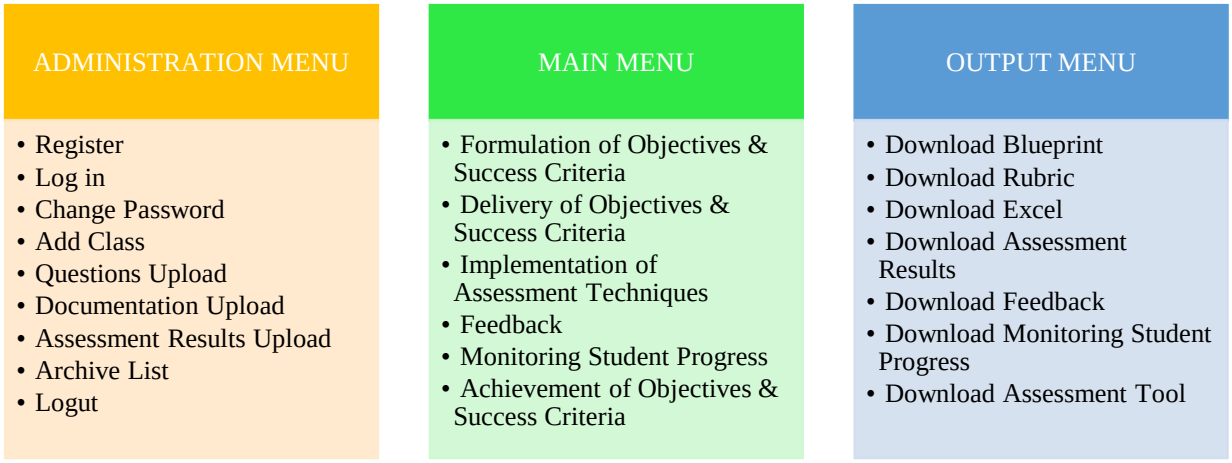


Figure 6. Menu classification on the AFEL platform

The administration menu is designed to manage the identity of economics teachers and archive the class identities to be assessed. The main menu represents the essential syntax of the AFEL Platform, which consists of six syntax of the assessment for economics learning. The output menu provides downloadable outputs for teachers, such as a series of assessment tools generated by the platform. There are four unique features that only this platform has, namely: 1) AFEL syntax already refers to the AfL concept; 2) AFEL platform has embedded economic material for high school; 3) AFEL platform has provided a menu for designing blueprints and rubrics for each assessment domain; 4) Teachers can access and download assessment worksheets.

## 3. Methodology

This study is categorized as Design-Based Research, which aims to design, develop, and validate products as solutions to problems (Plomp, 2013). The difficulty of economics teachers in implementing AfL is the main problem in this study; by developing and validating the product, it is hoped that it can produce a feasible, innovative assessment platform. Design-Based Research has

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several main characteristics (Akker et al., 2006; Plomp, 2013) namely theory-oriented, iterative, and practitioner involvement. The focus on theory is used as the basis for developing platform products to be in accordance with assessment theory. Iterative is intended to repeat the cycle in developing the platform. Practitioner involvement is carried out by involving economics teacher practitioners as collaborators in developing the platform. The study was conducted by referring to the Design-Based Research stages developed by Reeve (Reeves, 2006) with a focus on two phases, namely product development and validation. The development phase is aimed at producing a prototype of AFEL Platform, and the validation phase is intended to test the feasibility of the platform prototype.

### *3.1. Participants*

This study was conducted for seven months in Surakarta, Central Java, Indonesia. Participants involved in this study consisted of researchers, practitioners, and experts in the field of learning assessment and educational technology. Researchers are fully responsible for the concept of the AFEL Platform product, which has been studied using current theories and several relevant previous studies. The selection of practitioners and experts in this study refers to the core problem of this study, namely the difficulty of economics teachers in organizing assessment for learning. Thus, nine economics teachers were selected as practitioners and six lecturers as experts who were involved and collaborated in the development and validation phase. The rationale for the selection was based on the teacher's pedagogical competency score and the expertise of the lecturers. This is a limitation of the study in determining respondents.

### *3.2. Data Collection and Analysis*

This study is included in educational design research, which more precisely uses Design-based Research with a focus on two phases, namely product development and validation. The following is a summary of the two phases of this study:

Table 1. Summary of development and validation phases

| | DEVELOPMENT PHASE | VALIDATION PHASE |
|---|---|---|
| Purposes | Produce a prototype AFEL Platform | Testing the feasibility of the AFEL Platform |
| Participant | Researchers and Practioners | Researchers and Experts |
| Activities | • Literature review<br>• Designing the AFEL Platform Prototype<br>• FGD: researchers and practitioners<br>• Qualitative data analysis of FGD results | • Designing platform feasibility questionnaire for experts<br>• FGD: researchers and experts<br>• Qualitative data analysis of FGD results<br>• Quantitative data analysis of Aiken test |
| Time | • June – November 2024 | • December 2024 |

The development phase was conducted with FGD between Researchers and Practitioners. A structured discussion guide was used as an instrument to collect information and suggestions from practitioners. Data analysis was conducted by reviewing and following up on suggestions from practitioners that were positive and in line with the literature review on assessment for learning in realizing the AFEL Platform.

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The validation phase was conducted with FGD between Researchers and Experts. The instrument used in this phase was a questionnaire designed by Researchers with the approval of Measurement Experts. The validated aspects include: 1) Platform appearance, consisting of 10 items. 2) Assessment theory, consisting of 30 items. 3) Educational technology theory, consisting of 20 items. The entire instrument, totaling 60 items, was analyzed using Aiken's formula (Aiken, 1985) to determine the validity of each item based on the scores provided by the validators.

Formula Aiken

$$V = \frac{\sum S}{n(c-1)}$$

V : Aiken's validity index, a value that indicates content validity.

∑S : The sum of the scores given by the expert for each item after deducting the minimum score of the scale.

S = r – lo

r : The score given by the expert.

Lo : Minimum score on the scale

n : Number of experts who gave the assessment.

c : Maximum Score

## 4. Results

### *4.1. AFEL platform development phase*

The activities carried out at this phase are conducting a literature review to integrate the core of theory assessment for learning into the platform. The result of these activities is the AFEL Platform, which consists of three operational menus: the administration menu, the main menu, and the output menu. The platform is accessible free of charge to economics teachers as long as they have internet access via the URL https://afel.online/login. Figure 7-9 below is a preview of the interface for these three menus:

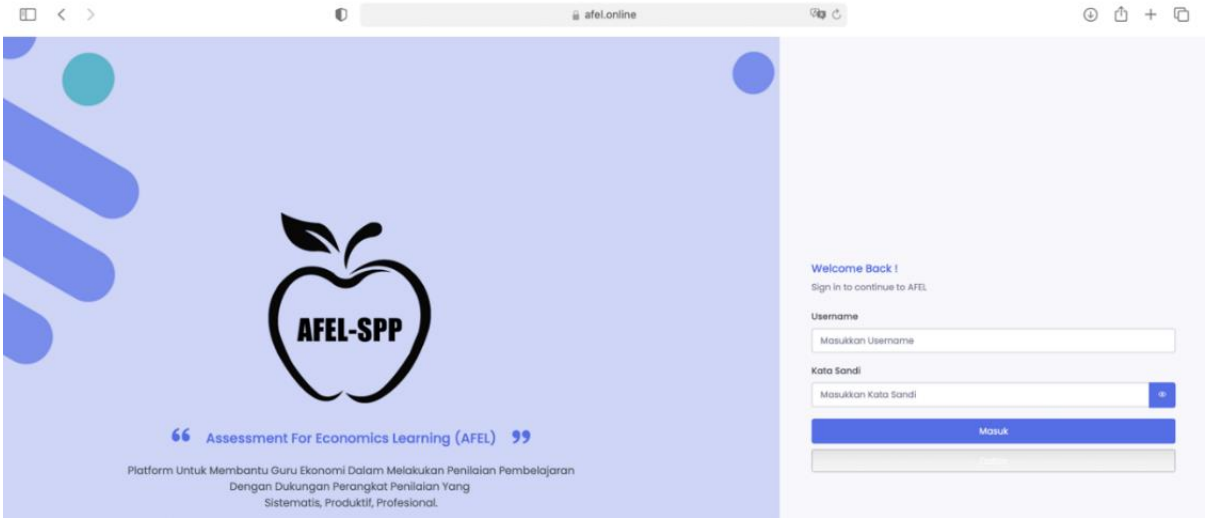


**Figure 7.** Snapshot of the administration menu of the AFEL platform

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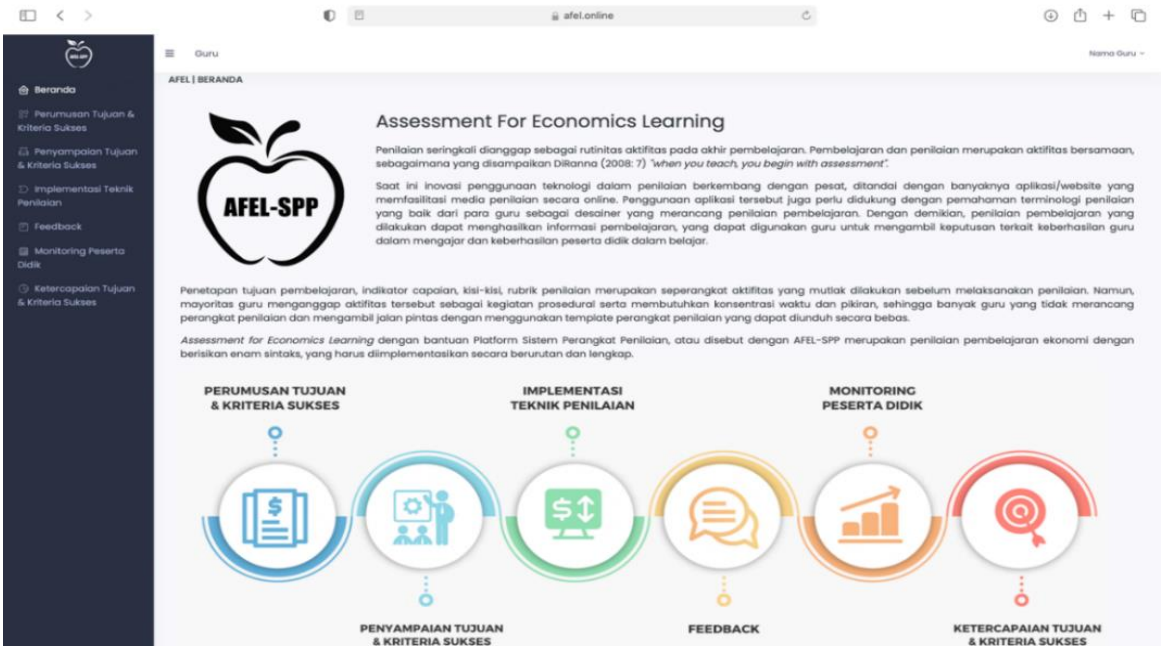


**Figure 8.** Snapshot of the main menu of the AFEL platform

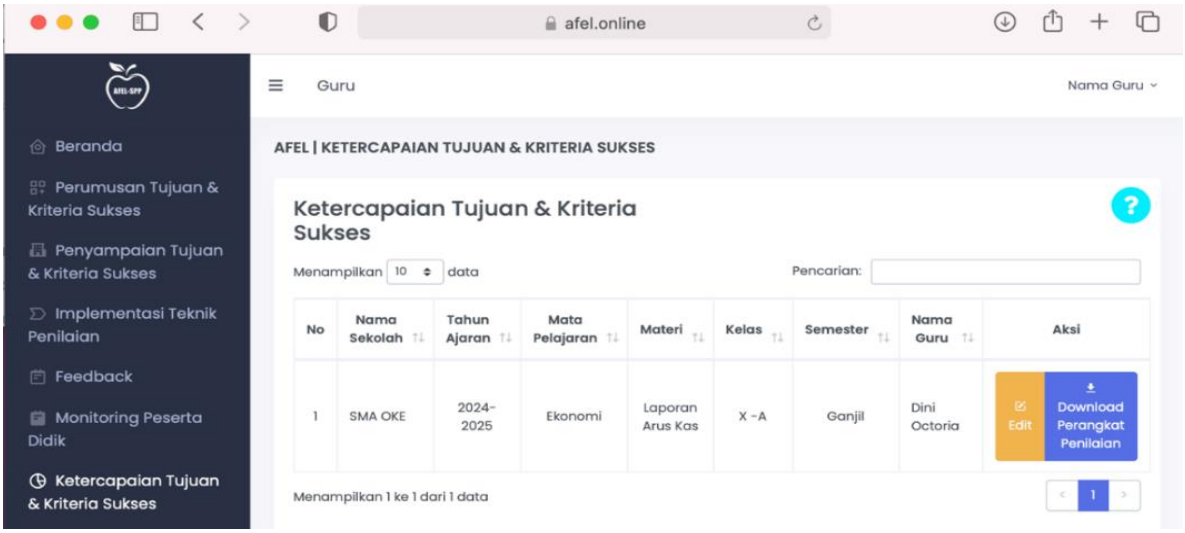


**Figure 9.** Snapshot of the output menu of the AFEL platform

The development phase continued with a Focus Group Discussion (FGD) involving practitioners as the users of the AFEL Platform. The FGD was conducted in two cycles because the first cycle revealed several notes and suggestions for improvement from the practitioners regarding challenges in using the platform. The first cycle of the FGD was held on July 17, 2024, attended by nine practitioners. All practitioners responded positively to the presence of AFEL Platform, recognizing it as a solution for economics teachers who have long faced difficulties in organizing well-structured assessment practices for economics learning. However, the practitioners, as users, identified several challenges they encountered while using the platform. The uniqueness of this platform lies in the feedback and student monitoring features, for this reason experts suggest that the platform needs to provide a reference for the contents on the menu. The goal is that teachers who are not yet accustomed to inputting the contents can be stimulated by the ideas that have been presented on the platform.

The researchers coordinated further to address these challenges and summarized the feedback and subsequent follow-up actions in the Table 2 below:

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**Table 2.** Follow-up results from FGD cycle 1 in the development of the AFEL platform

| | PRACTITIONER INPUT | FOLLOW-UP RESULTS |
|---|---|---|
| Practitioner 1 | *"The practitioner encountered some difficulties in operating the platform because it was not accompanied by a tutorial book for using the platform."* | The researcher addressed this feedback by creating a User Tutorial Book for the AFEL Platform. |
| Practitioner 2 | *"The practitioner suggested that the naming of the platform's menus and submenus should be labeled with names that align with the curriculum nomenclature used in Indonesia."* | The researcher could not accommodate this suggestion because the AFEL Platform was designed with menu and submenu names that are not tied to a specific curriculum. |
| Practitioner 3 | *"The practitioner found the term 'blueprint' in the platform's menu unfamiliar and suggested finding a more familiar term for teachers."* | The researcher addressed this feedback by translating the term 'blueprint' into 'kisi-kisi' (a more familiar term in Indonesian). |

The second cycle was conducted on August 28, 2024, with the same nine practitioners who participated in the previous FGD. The basis for implementing this second cycle was to follow up on feedback from the practitioners during the first cycle. All practitioners expressed enthusiasm about the positive changes made to the platform, particularly with the addition of a tutorial book, which helped teachers complete all syntax of the AFEL process. Teachers who previously struggled with creating blueprints and assessment rubrics felt greatly assisted, as they could now design both documents simply by clicking on menus specifically customized to display economics lesson materials for high school. Referring to the practitioner's response in cycle 2, it is known that practitioners have felt helped by the presence of the AFEL Platform. From the findings of these two cycles, it can be reported that this study has successfully developed a prototype of the AFEL Platform, which has been positively received and well-received by representatives of economics teachers.

### *4.2. Validation testing phase for the AFEL platform*

The validation phase was conducted in early December 2024 by six experts. The following presents the results of the content validity coefficient (V-value) for each question item obtained using the Aiken formula.

**Table 3.** Results of content validity coefficient (V-value) each item using Aiken's formula

| ITEMS | V | ITEMS | V | ITEMS | V | ITEMS | V | ITEMS | V | ITEMS | V |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.00 | 11 | 1.00 | 21 | 1.00 | 31 | 0.96 | 41 | 1.00 | 51 | 1.00 |
| 2 | 0.96 | 12 | 1.00 | 22 | 0.92 | 32 | 1.00 | 42 | 0.92 | 52 | 1.00 |
| 3 | 0.92 | 13 | 0.96 | 23 | 1.00 | 33 | 0.96 | 43 | 1.00 | 53 | 0.96 |
| 4 | 1.00 | 14 | 0.96 | 24 | 0.92 | 34 | 1.00 | 44 | 0.92 | 54 | 1.00 |
| 5 | 0.92 | 15 | 1.00 | 25 | 1.00 | 35 | 0.92 | 45 | 1.00 | 55 | 1.00 |
| 6 | 0.96 | 16 | 0.96 | 26 | 0.92 | 36 | 1.00 | 46 | 0.92 | 56 | 0.92 |
| 7 | 0.92 | 17 | 0.96 | 27 | 0.92 | 37 | 0.96 | 47 | 1.00 | 57 | 1.00 |
| 8 | 1.00 | 18 | 1.00 | 28 | 0.92 | 38 | 1.00 | 48 | 0.92 | 58 | 0.96 |
| 9 | 0.92 | 19 | 1.00 | 29 | 0.92 | 39 | 0.92 | 49 | 1.00 | 59 | 1.00 |
| 10 | 1.00 | 20 | 0.96 | 30 | 0.92 | 40 | 0.96 | 50 | 0.96 | 60 | 1.00 |

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The Table 3 shows that each item has met the criteria of feasibility because the calculated V-value > V-table, where the V-table in this measurement is 0.79. This coefficient is used to measure the extent to which each question item reflects the construct or concept referred to in the research instrument. All questionnaire items have accommodated components related to platform appearance, assessment theory, and educational technology theory. In addition to the quantitative calculations, experts also provided written comments for the improvement of the platform. The Table 4 below is a summary of the experts' notes and the follow-up actions taken by the researcher.

**Table 4.** AFEL platform testing phase follow-up results

| | EXPERT INPUT | FOLLOW-UP RESULT |
|---|---|---|
| Expert 1 | *"The feedback menu needs to be accompanied by examples of writing feedback entries, so that it can be a reference for teachers in writing feedback on student learning responses."* | The researcher has improved the platform by providing two examples of writing feedback on symbol (i). |
| Expert 2 | *"The student monitoring menu needs to be accompanied by an example of writing the monitoring form, so that it can be a reference for teachers in writing monitoring of the learning carried out."* | Researchers have improved the platform by providing two examples of writing student monitoring on symbol (i). |

The six experts gave positive responses to the presence of the AFEL Platform because it helps teachers conduct structured learning assessments according to AfL theory. Figures 10 and 11 below show snapshots of two menus available on the platform.

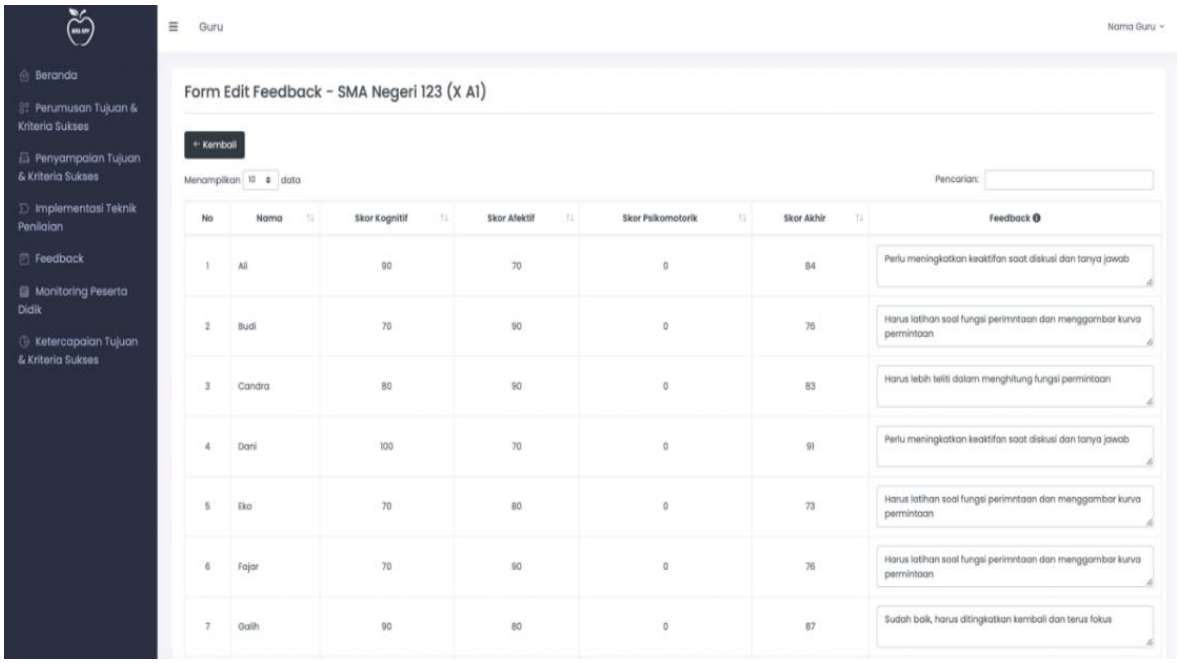


**Figure 10.** Snapshot of feedback menus on the AFEL platform

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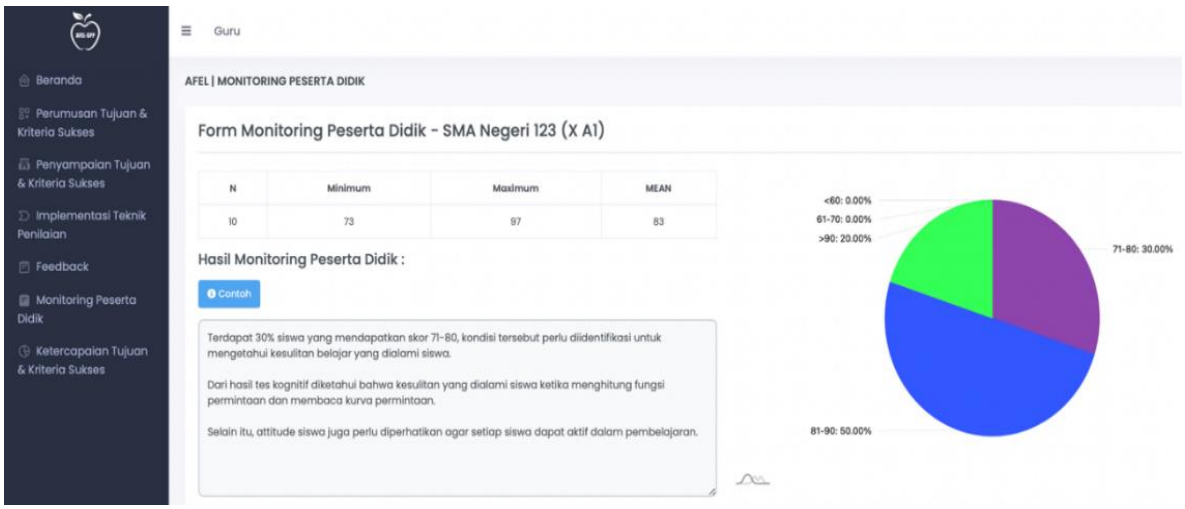


**Figure 11.** Snapshot of student monitoring menus on the AFEL platform

This image further emphasizes that the integration of AfL theory is a key feature of this platform. The presence of this platform packages the six AFEL syntaxes in a practical, structured, and user-friendly way for economics teachers to conduct learning assessments, as long as the teacher has internet access.

## 5. Discussion

The study results indicate that the study objectives have been achieved. The development phase has successfully designed the AFEL Platform, which consists of six syntaxes: 1) Formulating economic lesson objectives and success criteria; 2) Delivering economic lesson objectives and success criteria; 3) Implementing assessment techniques; 4) Feedback; 5) Monitoring student progress; 6) Achieving economic lesson objectives and success criteria. AFEL Platform is designed to assist economics teachers in conducting learning assessments in a more structured, practical, and user-friendly manner. This is particularly important because many teachers have faced difficulties in creating blueprints and assessment rubrics. The presence of this platform will address these issues because teachers can directly input blueprints and rubrics in the first syntax. The platform is already presented with various choices of test instrument types in each assessment domain. The platform has also provided space to write achievement criteria in compiling rubrics. These blueprints and rubrics became valuable guides for teachers in conducting AfL and significantly improved their performance (Abdellatif et al., 2024; Rini & Purnawarman, 2019; Tractenberg, 2021; Villarroel et al., 2018).

Furthermore, economics teachers who have had difficulty providing feedback have been helped by the presence of the AFEL Platform. Feedback is an important element in learning (Kutasi, 2023; Taras, 2003; Vu & Nga, 2023). Practitioners have found it easy to organize learning assessments. The presence of the AFEL Platform has provided a special space in the fourth syntax that makes it easier for teachers to record written feedback for each student. This feature allows teachers to monitor individual student progress in economics lessons (Carless, 2022), and identify specific learning difficulties faced by students (Malecka et al., 2022). This is in line with the characteristics of effective feedback, which provides constructive feedback to students about their learning (Cavalcanti et al., 2021; Rukanuddin et al., 2021; Williams, 2024) and offers teachers insights into their teaching practices (Boud & Dawson, 2023; Henderson et al., 2021; Panhoon & Wongwanich, 2014; Selvaraj et al., 2021).

In addition, the output of the AFEL Platform also presents a well-organized assessment worksheet because it has compiled various documents consisting of blueprints, rubrics, instruments, results and achievements individually and in groups presented with pie charts, up to teacher reflections. The AFEL Platform has provided easy access for its users. With only internet access,

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teachers can access its features to manage and assess learning more effectively. The technology packaging of the AFEL Platform has a significant impact on practioners as it saves time in planning, implementing, and reporting learning assessments. This aligns with the goals of educational platforms, which are effectiveness (Haslina & Lilimiwirdi, 2022; Ramachandran & Babu, 2021) and time efficiency for teachers (Alojaiman, 2021; Wienand et al., 2024).

This study also validates AFEL through the testing phase. In this phase, quantitative and qualitative testing is carried out to assess how feasible this platform can be used by economics teachers. The elements of platform feasibility are reviewed from platform appearance, assessment for learning theory, and educational technology theory. The results of the quantitative testing showed that V-values for each item tested were more than V-tabel, indicating that the platform successfully met the standards set in the testing. This provides evidence that Platform AFEL can be used as a valid and effective tool for assessment in economics learning.

Furthermore, qualitative feedback from experts involved in this study also confirmed the success of the platform. Experts assessed that the AFEL Platform has succeeded in providing solutions to various challenges experienced by teachers in conducting assessments. One of the main challenges experienced by economics teachers is time constraints and compiling assessment activities in an assessment worksheet that can be accessed at any time. By using the AFEL Platform, economics teachers can manage learning assessments systematically in accordance with the basic theory of AfL.

In the context of education, validating AFEL Platform is crucial to ensure that the platform can truly contribute positively to the learning process. This validation not only ensures that the platform meets the technical and functional standards set but also that it can provide tangible benefits to both teachers and students. The validation process involved various parties, including education experts, who provided valuable insights and feedback to improve the platform's quality. Therefore, the results of this validation increase confidence that AFEL Platform will be a highly useful tool in the field of education, especially for economics subjects.

Overall, the objectives of this study have been successfully achieved. The AFEL Platform has not only been successfully developed with features that are useful for teachers, but has also been proven to be validated by experts as an effective platform for assessment in economics learning. This development and validation phase shows that technology contributes to improving the quality of learning, especially in facilitating structured assessment activities.

## 6. Conclusion

The first conclusion, the AFEL Platform has been successfully developed. The development of the AFEL Platform is based on a comprehensive literature review of various basic AfL theories and input from practicing economics teachers as platform users. Economics teachers can access this platform for free at https://afel.online/login. The second conclusion, the AFEL Platform has been successfully validated by experts in learning assessment and educational technology. The results of quantitative calculations show that the V-Value for each item of the platform feasibility questionnaire shows a value more than the V-table. In line with that, qualitative notes from experts also claim that the Platform is feasible to use.

Based on these results, the AFEL Platform is expected to be implemented by economics teachers. The platform's six syntaxes support teachers in applying AfL and assist them in archiving and reporting assessment activities through well-organized outputs available in the platform's interface. Meanwhile, we acknowledge the limitations of this study that must be considered. The platform is specifically designed for economics teachers at the senior high school level in Indonesia and cannot be utilized by teachers of other subjects, as the content in the platform's menus is specifically tailored to economics materials. Although the platform is freely accessible, it requires a stable internet

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connection. Additionally, the platform is presented in Indonesian, the primary language used by economics teachers in Indonesia. For future developments, the AFEL Platform could be made available in dual languages, English and Indonesian.

## 7. Suggestion

Future research suggestions are to test the effectiveness of the AFEL platform in diverse contexts and with broader populations. Further researchers are also expected to explore, adapt, and modify the platform for use by teachers from other disciplines.

## Declarations

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