



Creativity in numbers: Uncovering students' potential through diagnostic learning evaluation at SMK Pasundan 4 Bandung

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ABSTRACT

This article discusses the innovative application of diagnostic learning evaluation methods in SMK Pasundan 4 Bandung to uncover students' potential. This article outlines an approach focusing on utilizing technology, data analysis, and student engagement in the evaluation process. This research explores diagnostic methods to provide an overview of student understanding and explore students' creative skills and potential that have not yet been revealed. Data presentation uses a qualitative approach, employing the interactive analysis model, which involves several stages, including data selection, data presentation, and conclusion drawing. Additionally, we employ observation instruments, interviews, and documentary studies. This research shows that diagnostic learning evaluation with a creative approach can transform the learning paradigm at SMK Pasundan 4 Bandung. SMK Pasundan 4 Bandung can produce graduates ready to face the ever-changing business world by involving students in the evaluation process and harnessing modern technology.

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ABSTRAK

Artikel ini membahas penerapan metode evaluasi pembelajaran diagnostik yang inovatif di Sekolah Menengah Kejuruan (SMK) Pasundan 4 Bandung untuk mengungkap potensi peserta didik. Artikel ini menguraikan pendekatan yang berfokus pada penggunaan teknologi, analisis data, dan keterlibatan peserta didik dalam proses evaluasi. Penelitian ini mengeksplorasi metode diagnostik memberikan gambaran terkait pemahaman peserta didik dan menggali keterampilan kreatif dan potensi peserta didik yang belum terungkap. Penyajian data dilakukan dengan pendekatan kualitatif, menggunakan model analisis interaktif yang melibatkan beberapa tahap, yaitu pemilihan data, penyajian data, dan penarikan kesimpulan, serta menggunakan instrumen observasi, wawancara, dan studi dokumentasi. Hasil dari penelitian ini menunjukkan bahwa evaluasi pembelajaran diagnostik dengan pendekatan yang kreatif mampu mengubah paradigma pembelajaran di SMK Pasundan 4 Bandung. Dengan melibatkan peserta didik dalam proses evaluasi dan memanfaatkan teknologi modern, SMK Pasundan 4 Bandung dapat menghasilkan lulusan yang siap menghadapi tantangan dunia bisnis yang terus berubah.

Kata Kunci: Evaluasi pembelajaran; kreativitas; potensi peserta didik; sekolah vokasi bisnis; teknologi pendidikan

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INTRODUCTION

Education is one of the main foundations in shaping highly competitive individuals who can face the challenges of a rapidly changing world. According to Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional, education is a deliberate and structured effort to create a learning environment where students can actively develop their potential, including spiritual and religious aspects, self-control, personality, intelligence, good morals, and the skills needed for themselves and society. La-Adi (2022) states that education is a process of developing individual potential through structured learning experiences, both in formal and non-formal contexts, to maximize individuals' abilities for effective roles in the future.

Learning evaluation has become a central element in the educational process. Evaluation is the structured use of scientific steps to assess a program's design, implementation, and success (Arofah, 2021). According to Junaedi (2019), learning is an effort to teach students through a series of interactions between teachers and students in educational situations to achieve specific goals, involving selecting, determining, and developing appropriate learning methods. Learning evaluation also involves proper management, including investigation, research, and systematic examination of the value of an object (Nurzannah *et al.*, 2019), as well as assessment of the learning process and outcomes of students, including curricular, co-curricular, and extra-curricular activities (Mavianti & Harfiani, 2020). Therefore, Suardipa and Primayana (2020) emphasize that learning evaluation is an important process for assessing student achievement by referring to specific benchmarks in achieving predetermined learning outcomes. However, learning evaluation is no longer just about traditionally measuring students' understanding; now it is about exploring the untapped potential in students, including their creative potential.

Creativity plays a very important role in the modern business world, which emphasizes innovation. Yanti *et al.* (2023) explain that creativity results from interaction between individuals and their environment, where individuals can influence and be influenced by their environment, so that changes in themselves and their environment can affect their creative potential. Hulu (2020) views creativity as an experience of holistically expressing and realizing an individual's identity, involving relationships with oneself, nature, and interactions with others. In this context, the role of educational institutions becomes crucial, as they act as catalysts for developing students' creative potential in the modern business world. It cannot be overlooked that educational institutions like SMK Pasundan 4 Bandung, committed to preparing the younger generation, need to consider integrating creativity development into their educational programs. Creativity is not only about generating new ideas but also about discovering new methods to address problems and opportunities. This positively impacts solving societal issues, creating profitable business opportunities, and generating new job opportunities (Rusdiana in Ardiansyah, 2020).

This article will discuss an innovative approach that combines two key concepts: diagnostic learning evaluation and the revelation of students' creative potential at SMK Pasundan 4 Bandung. Diagnostic learning evaluation not only measures students' understanding but also understands how students learn, respond to challenges, and solve problems. In line with the opinion of Anshari *et al.* (2023), diagnostic evaluation is an assessment method that

identifies students' strengths and weaknesses, enabling appropriate action. This evaluation can be carried out at the initial stage to assess students' prior knowledge, during the process to identify suboptimal conceptual understanding, and at the final stage to assess students' mastery of the material studied.

In previous years, many studies have explored the role of education, learning evaluation, and creativity development in higher education and secondary schools. According to research by [Fepriyanto et al. \(2021\)](#), evaluasi pembelajaran learning evaluation is identified as key to understanding the effectiveness of teaching and facilitating student understanding. However, this research focuses more on conventional evaluation without emphasizing a diagnostic approach. In contrast, [Wahyuni dan Mukhaiyar \(2022\)](#) studied the implementation of diagnostic learning evaluation at Padang State University. They found that this approach not only improved students' understanding but also identified their needs and creative potential. However, this study did not explore technology implementation in the context of SMK Pasundan 4 Bandung.

This research focuses on implementing diagnostic learning evaluation methods with a highly creative approach to revealing students' creative potential at SMK Pasundan 4 Bandung. This study will explain how the technology enables students to actively participate in the evaluation process and contribute to designing their assessment projects. Thus, students are not merely objects but also subjects in the learning evaluation process, providing space for creative expression and developing independent thinking skills.

This study will present how the diagnostic evaluation approach can assist SMK Pasundan 4 Bandung in preparing graduates with strong creativity, ready to face challenges, and contribute to the competitive business world. In an era filled with technological innovation and dynamic business changes, the role of vocational high schools (SMK) in preparing students to become productive members of society and competent business actors is increasingly important. SMK Pasundan 4 Bandung, as an important part of the education system, has a special responsibility to ensure its graduates are ready to face the complex and challenging business world. For this reason, an effective and efficient assessment and measurement process is needed, commonly called learning evaluation. Thus, this article aims to stimulate further discussion on how the transformation of SMK Pasundan 4 Bandung's education can be realized in this digital era, where creativity and adaptation are key elements in students' success.

LITERATURE REVIEW

Learning Evaluation

Learning evaluation is an integral part of the educational process. Learning evaluation consists of two words, namely evaluation and learning. In this context, [Ndofirepi \(2020\)](#) explains the definition of evaluation as a process of assessing the achievement of results from a series of planned activities to support the achievement of objectives. According to [Suardipa and Primayana \(2020\)](#), evaluation is a structured and continuous process to assess the quality, value, and meaning of something. [Rizal et al. \(2020\)](#) also propose an alternative definition of learning as a deliberate, intentional, and directed effort to cause others to learn

or experience relatively permanent change. This assessment is conducted based on specific criteria and aims to support decision-making.

Learning evaluation is a structured, continuous, and comprehensive assessment process in monitoring, ensuring, and determining the quality standards of learning elements. This is done based on specific evaluations and criteria as a way for educators to account for the implementation of their teaching duties (Maulida *et al.*, 2019). The main purpose of learning evaluation is to measure the extent to which learning objectives have been achieved and to provide useful feedback to improve the quality of education. A good learning evaluation will help improve the learning stages, raising educational standards. This idea is in line with the view expressed by Dunn and Mulvenon (2019) that one of the relevant evaluation methods in this context is diagnostic evaluation. Diagnostic evaluation is a process of collecting data used to identify learning problems and provide insights into student development.

Concept of Diagnostic Assessment

Diagnosis in the context of education is a complex process that involves identifying the strengths and weaknesses of learners. Identifying strengths helps provide further material or enrichment, while identifying weaknesses allows for remedial teaching. Diagnosis also helps teachers determine whether the learning process aligns with the curriculum or needs improvement. According to Chewoh and Sarwanto (2021), diagnosis is an effort to find out exactly, make decisions, and reach agreements. Csapó and Molnár (2019) also emphasize that diagnosis focuses on understanding the strengths and weaknesses of learners and providing input for learning improvement.

Diagnostic evaluation is a type of evaluation that aims to identify learners' learning difficulties based on the results of previous formative evaluations. In diagnostic evaluation, several questions are needed that focus on areas that are expected to be obstacles for learners. These questions are varied and specifically designed to identify learning difficulties. Diagnostic evaluation is usually conducted before a lesson begins to explore the knowledge and skills that learners have mastered, namely, whether learners already have certain knowledge and skills to follow other lesson materials. This diagnostic evaluation type is also called a "test of entering behavior."

Diagnostic evaluation is an approach that requires a high level of mechanism and competence on the part of teachers acting as evaluators. If students continue to face difficulties in understanding the learning material that teachers present, then diagnostic evaluation becomes an important step that evaluators must take. Nafisah (2023) explains that diagnostic evaluation aims to diagnose students' learning disabilities and find ways to improve them. Although it appears similar to formative evaluation, diagnostic evaluation has a different structure because it focuses on diagnosing students' learning disabilities, which requires understanding the root causes before corrective actions can be taken. Therefore, formative evaluation must be conducted first to determine the areas students have not mastered.

Functions and Purposes of Diagnostic Evaluation

Diagnostic evaluation in the context of learning activities plays a crucial role with specific purposes and functions. According to Pramesti (2020), the diagnostic function of this evaluation lies in its ability to identify problems that learners may encounter during the learning process. This enables learners to understand better the difficulties, obstacles, or disruptions that may arise when participating in a learning program. Furthermore, diagnostic evaluation focuses on difficulties in the learning process, not just the final results, thereby providing an opportunity to address learners' learning difficulties early on.

Idrus (2019) states that the general purpose of evaluation is to improve learning methods, make improvements and enrichments for students, place them in learning situations that match their abilities, and improve, deepen, and expand the subject matter. Diagnostic evaluation can be conducted whenever needed and helps students improve their learning outcomes by utilizing their potential. To achieve this goal, teachers must be competent in identifying students' strengths and weaknesses and helping them improve their weaknesses while reinforcing their positive aspects. Diagnostic evaluation is also the basis for diagnosing students' weaknesses and strengths. With these diagnostic results, teachers can plan actions and develop learning activities to improve student learning outcomes.

Characteristics of Diagnostic Evaluation

The results of a diagnostic evaluation play an important role in designing effective interventions for learners, both individually and in a classroom context, to evaluate and improve the learning process. Diagnostic evaluations, which often involve diagnostic tests, do not simply provide numerical assessments of learners' abilities, but also provide in-depth and detailed descriptions of the extent to which learners have mastered specific sub-skills.

According to Alderson in his book entitled "Diagnosing foreign language proficiency: The interface between learning and assessment", there are six important characteristics that diagnostic tests should have:

1. Competency Identification

Diagnostic tests must be able to identify indicators of competency that students have mastered or not yet mastered. This means that the test must be able to distinguish between students who are already competent and those who are still facing difficulties.

2. Accuracy in Identifying Difficulties

Diagnostic tests must clearly show the indicators of competence that learners have not yet mastered in their test results. In other words, the test must identify difficulties accurately and not vaguely.

3. Providing Guidance

The diagnostic test results must guide students on the competency indicators they need to improve or review. This test should provide constructive guidance to students.

4. Direct Use

The diagnostic test results must be directly usable by students to improve their competency achievement. This means that students must be able to understand the test results and use them as a basis for personal improvement.

5. Quick Results

Students should know their diagnostic test results right after they finish the test. This lets them respond quickly and focus their efforts in the right direction.

6. In-Depth Measurement

Diagnostic tests should measure students' competency achievements in depth, not just provide a superficial overview. This means that tests must reveal students' level of understanding in detail to align corrective actions with actual needs.

Step-by-Step Diagnostic Evaluation

Diagnostic evaluation involves several steps that must be followed. First, this step involves identifying students likely to face learning difficulties. Second, this step requires the allocation of learning problems faced by students. Third, this process involves determining the factors that may be causing learning difficulties. Fourth, alternative assistance is estimated to overcome these problems. Fifth, ways to overcome the problems are determined. Furthermore, a follow-up is carried out to ensure that the assistance provided is successful.

Anshari *et al.* (2023) argue that diagnostic evaluation can be conducted in several stages, namely the initial stage, during the process, and the final stage of learning. In the initial stage, diagnostic evaluation is used to assess prospective students' initial abilities and prerequisite knowledge before they begin learning. This helps determine what students must master before they begin their lessons.

During the process stage, diagnostic evaluation is important for monitoring students' understanding of the lesson material. Teachers can identify which parts of the material have not been mastered well by students, so they can provide assistance and support early in the learning process, preventing students from falling too far behind. Meanwhile, in the final stage, diagnostic evaluation is used to assess the extent to which students have mastered all the material they have learned during the learning period. This helps in evaluating the students' overall mastery of the subject matter. Thus, diagnostic evaluation is an important tool used in various stages of learning to understand and improve students' understanding and abilities in the educational process..

METHODS

The method used in this study is a case study method that uses a qualitative approach and adopts an analytical model. The research process will involve the following stages:

1. Data Reduction

The initial stage of this study will involve data selection, where relevant and significant data will be identified and sorted. This data will be the main focus of further analysis.

2. Data Display

The selected data will be presented using appropriate methods, such as tables, diagrams, or narratives, to facilitate understanding. This presentation will help researchers identify patterns and relationships that may exist.

3. Conclusion Drawing/Verification

The final stage of the research will involve drawing conclusions from the presented data. This conclusion drawing will involve an in-depth analysis process to understand the

implications of the findings. Furthermore, these conclusions will be verified to ensure their validity and relevance.

This study used three main instruments in the data collection process. The three instruments are:

1. Observation

Observation will be conducted to directly observe how the diagnostic learning evaluation method with a creative approach is applied in the classroom. This will allow researchers to understand how students participate in the learning process.

2. Interview

Interviews will be conducted with two to three teachers involved in implementing the creative diagnostic learning evaluation method. The interviews will include in-depth questions about their views on the impact of this method on the development of students' creativity and their practical experiences in applying it.

3. Document Analysis

Document Analysis will involve analyzing documents such as lesson plans, test results, and student projects related to the creative diagnostic evaluation method. These documents will support the findings from the observations and interviews.

This research method will enable researchers to gain an in-depth understanding of the influence of diagnostic learning evaluation methods with a creative approach on the development of creativity among students at SMK Pasundan 4 Bandung. Researchers will collaborate with an entrepreneurship teacher as the main informant. This entrepreneurship teacher is expected to provide in-depth insights into their experiences applying these evaluation methods. This study will use several indicators to measure the effectiveness of the evaluation method, namely student participation in the evaluation process, changes in teacher perceptions, the use of modern technology in evaluation, and student responses to the creative diagnostic evaluation method. Data analysis will be conducted using the interactive analysis approach by Miles and Huberman. This process involves data selection, data presentation, and conclusion. Thus, the results of this study are expected to provide valuable insights in the context of education at SMK Pasundan 4 Bandung.

RESULTS AND DISCUSSION

From the results of an interview with the informant, namely the Entrepreneurship Teacher at SMK Pasundan 4 Bandung on October 23, 2023, as shown in **Figure 1** as documentation, it was revealed that involving students in diagnostic evaluation has had a positive and significant impact on their participation in the learning process. Additionally, it was mentioned that previously, students tended to be passive in evaluating their progress, but since being actively involved in diagnostic evaluations, they have become more engaged and active. According to the informant, students are now more proactive in seeking further understanding from teachers based on the evaluations they conduct themselves. This indicates that involving students in evaluations can motivate them to take on a greater role in their learning.



Figure 1. Group Photo with the Informant
Source: 2023 Research

The informants also emphasized that diagnostic evaluation has brought about significant changes in the role of teachers at school. Previously, they may have been more like conveyors of information, but now they are more focused on empowering students to take control of their learning. The evaluation process is no longer the end of learning, but rather the beginning of a discussion involving students in formulating questions about their results and guiding them to reflect on ways to improve. This creates a more collaborative and responsive learning environment aligned with individual student needs. **Figure 2** illustrates the learning environment at SMK Pasundan 4 Bandung.



Figure 2. Learning Environment at SMK Pasundan 4 Bandung
Source: Researcher 2023

The use of modern technology has also changed the way teachers manage diagnostic assessments. Digital tools facilitate the rapid and accurate collection and analysis of assessment data. Teachers can provide students with faster and more specific feedback, helping them design more focused learning plans. This technology also supports distance learning and student collaboration, creating an inclusive learning environment that supports diversity.

However, students' responses to diagnostic assessments vary. Most feel that they have been helped, able to identify their strengths and weaknesses to improve their learning performance. Meanwhile, there are also students who initially felt uncomfortable with the assessments but, over time, began to see them as a tool for personal growth. Diagnostic assessments also help students become more independent and goal-oriented in their learning.

The results of this interview clearly show that involving students in diagnostic evaluation has a significant impact, not only limited to their participation in learning, but also changing the role of teachers and the dynamics of overall learning management. This investigation underscores the crucial role of technology in enhancing the efficiency and effectiveness of evaluation, creating breakthroughs that empower the learning process. Additionally, the varied responses from students highlight the complexity of their perceptions toward the diagnostic evaluation process, emphasizing the importance of understanding the diversity of students' perspectives to holistically improve the quality of education.

Discussion

Students' Participation in the Evaluation Process

Education is not a process that only involves teachers and students; it also requires the active participation of students in the evaluation process. When students are involved in evaluation, they can take an active role in assessing their learning progress. Student participation in the evaluation process can also increase their motivation to learn and help them understand their strengths and weaknesses. Arrahmah (2018) states that active student participation in evaluation can increase their learning motivation, help them understand their strengths and weaknesses, provide valuable feedback, and improve their understanding of the learning material for further development. Therefore, it is important for teachers to encourage and facilitate student participation in the evaluation process as an integral part of their learning experience.

Student participation in the diagnostic evaluation process has a very positive impact on improving their understanding of the learning material. Through student participation, we can support the identification of their learning needs. This process involves collecting initial information about students' understanding of the learning material, which allows students to actively express their understanding and identify areas that require more attention in teaching. In addition, student participation provides opportunities for self-reflection, self-understanding, and understanding of the material, allowing students to understand their strengths and weaknesses better. With a deeper understanding of themselves, students can take appropriate steps to improve their understanding.

Diagnostic evaluation also facilitates the setting of more specific learning objectives. With an initial understanding of their level of comprehension, students can set realistic goals and direct their efforts toward achieving a better understanding. This helps students plan their learning journey more effectively. In addition, student participation in diagnostic evaluation also activates student-centered learning. They are not only the objects of assessment, but also involved in identifying their learning needs. This encourages more independent and student-centered learning, where students have greater control over their learning process.

Involving students in diagnostic evaluation also improves communication between teachers and students. Students can express their understanding more openly to teachers, while teachers can provide more accurate and specific feedback based on students' understanding. This creates more effective interaction in the learning process. Thus, student participation in the diagnostic evaluation process is not only an assessment tool but also an important means of improving the quality of learning and student development. By involving students in

diagnostic evaluation, a more inclusive, responsive, and effective learning environment is created.

A study conducted by [Wahyuni \(2023\)](#) shows that student participation in diagnostic evaluation has several advantages, such as providing teachers with feedback and helping to identify students' weaknesses in the material being taught. Additionally, this can boost learning motivation, allow students to reflect on their learning activities and achievements, and provide opportunities for more efficient learning adjustments. Therefore, teachers play a crucial role in supporting student participation in the diagnostic evaluation process to enhance learning effectiveness.

Changes in Teachers' Perceptions

Changes in teachers' perceptions are important in the context of education. As educators, teachers need to consider and change their perceptions of teaching methods, curriculum, and students. When teachers can change their perceptions, they can develop more effective approaches to teaching and better meet the learning needs of their students. [Sunarni dan Karyono \(2023\)](#) suggest that teachers who can change their perspectives will be more receptive to innovation in the education context and will also be better prepared to face new challenges in the teaching process. Therefore, teachers are expected to continue developing and changing their perceptions to provide students with a more optimal learning experience.

Changes in teachers' perceptions of diagnostic evaluation have had a positive impact in the context of learning. Teachers now better understand the importance of diagnostic evaluation as a profound tool in understanding students' learning needs. With this understanding, teachers are able to plan learning that is more tailored to the individual needs of students, increase interaction with students, apply more targeted learning methods, and encourage reflection and renewal in learning approaches. All of this leads to a more effective and beneficial learning experience for students.

[Putri and Purnama \(2023\)](#) mention that teachers who can change their perceptions of diagnostic evaluation tend to use a more holistic and responsive approach to students' learning needs. They can seek additional information about students, group students based on their abilities and difficulties, and identify the factors causing students' failure in the learning process. Teachers are also more likely to provide effective feedback and make appropriate adjustments to their teaching. Therefore, it is important for teachers to continue developing and changing their perceptions of diagnostic assessment to enhance the effectiveness of learning in the classroom. The importance of diagnostic assessment in learning is increasingly emphasized, and teachers now have stronger tools to understand student progress and develop more appropriate learning strategies. With a more active role in diagnostic assessment, teachers can create a more responsive and effective learning environment, aiming to improve student understanding and provide more personalized and targeted education.

Modern Technology in Evaluation

By combining and linking research results with previously outlined theories, it can be seen that the use of various digital evaluation tools, such as Quizizz, Kahoot, and Google Forms, at SMK Pasundan 4 Bandung has a positive impact on the efficiency and effectiveness of the learning evaluation process. The concept of efficiency in technology is evident through the rapid and organized collection of data, minimizing manual involvement in teacher assessment. With the implementation of digital evaluation tools, it is evident that evaluation results can be generated in a manner that is more appropriate and relevant to the learning conditions at SMK Pasundan 4 Bandung.

Furthermore, a strong understanding of the learning material by students, as highlighted by [Noermanzah et al. \(2019\)](#), is crucial in achieving optimal evaluation results. Using digital evaluation tools, such as Quizizz and Kahoot, allows students to actively engage in the learning process, strengthen their understanding of the material, and encourage critical and creative thinking skills. As [Sari and Yarza \(2021\)](#) and [Aswir et al. \(2020\)](#) state, this positively impacts teachers at SMK Pasundan 4 Bandung.

As highlighted by [Daryanes et al. \(2022\)](#), Kahoot training is important in using digital assessment tools at SMK Pasundan 4 Bandung. The researchers found that Kahoot training is essential because many teachers are still unfamiliar with the tool. This training not only enhances their knowledge but also their skills in using the digital assessment tool. In a virtual environment, teachers can more effectively assign tasks, conduct quizzes, and assess student performance ([Dewanty & Farisya, 2023](#); [Hapsari et al., 2021](#)). This indicates that technology not only serves as an evaluation tool but also facilitates the entire learning process, creating engaging and meaningful learning experiences.

However, it is important to remember that the use of technology must be directed toward achieving specific learning objectives, in line with the statement that an evaluation tool is considered effective if it can produce evaluations that align with the conditions being evaluated ([Gusenbauer & Haddaway, 2020](#)). Therefore, careful planning and a deep understanding of integrating technology with effective teaching methods remain crucial in maximizing the benefits of learning technology.

In conclusion, this study provides valuable contributions to developing technology-based learning evaluation strategies at SMK Pasundan 4 Bandung. By combining relevant theories and concrete research results, it can be concluded that learning technology serves as an evaluation tool and becomes an integral part of the learning process, helping create an innovative and efficient learning environment.

Student Responses to Evaluation

By linking the theories outlined earlier, it is evident that student responses to evaluation at SMK Pasundan 4 Bandung reflect psychological and educational concepts. Student responses encompass not only physical aspects but also emotional and cognitive aspects ([Suranten, 2020](#)). The importance of understanding student responses to diagnostic evaluations is also related to the rights and obligations of students as members of the school community, as defined by Arikunto in [Harmain \(2021\)](#). Teachers must pay attention to and respond holistically to students' responses to create a conducive learning environment.

In the context of education, students' responses to diagnostic assessments have a significant impact. Diagnostic assessments, as described by Arifin (2014), are important steps in supporting decision-making and improving the quality of learning. Positive student responses to diagnostic assessments can help teachers identify students' learning difficulties and provide constructive feedback. However, students' responses to assessments are not always uniform. There is variation in students' experiences, reflecting the importance of a sensitive and thorough approach to students' needs and feelings. Some students may initially feel uncomfortable, but may see the positive value in the diagnostic evaluation process over time.

Thus, the study results at SMK Pasundan 4 Bandung indicate that diagnostic evaluation functions not only as a tool for measuring learning outcomes but also as a tool for student self-development. Teachers need to understand the diversity of student responses and implement diagnostic evaluation as a tool that supports student growth and development, not as a form of assessment or punishment. With the appropriate approach, diagnostic evaluation can be valuable in the educational context, helping students recognize their potential and design constructive improvement strategies.

CONCLUSION

Diagnostic learning evaluation with a creative approach, involving student participation, utilizing modern technology, and encouraging changes in teacher perceptions, can bring positive changes to the educational paradigm at SMK Pasundan 4 Bandung. Involving students in the evaluation process allows them to actively assess their learning progress, increase their motivation to learn, and help them understand their strengths and weaknesses. Diagnostic evaluation also helps teachers plan learning more suited to students' needs. Modern technology in evaluation helps teachers collect data quickly and in an organized manner, provides faster feedback, and enables students to understand their strengths and weaknesses better. Changes in teachers' perceptions of diagnostic evaluation also positively impact the development of more effective learning strategies. This article sparks further discussion about educational transformation in the digital age, focusing on how creative diagnostic evaluation and modern technology can enhance the quality of learning at SMK Pasundan 4 Bandung. This is an important step toward preparing graduates ready to face the challenges of the ever-changing business world.

Further research could explore the impact of student participation in diagnostic assessments, including differences between student age groups and subject areas. Developing creative assessment models, such as interactive technology or game-based assessments, could be a focus of research to make assessments more engaging. Case studies of technology implementation in diagnostic assessments across various schools could provide insights into the extent to which technology can enhance the effectiveness of assessments. Teachers need training to change their perceptions of diagnostic evaluation and to use technology effectively. Using appropriate methods, measuring student responses to diagnostic evaluation is also important. Evaluating the impact of educational transformation in the digital age should be an important part of this research. Collaboration with other schools to implement similar concepts and involve various stakeholders is key to developing this idea.

AUTHOR'S NOTE

On this note, the author would like to emphasize that there are no conflicts of interest that may affect the objectivity or integrity of this article. In addition, the author firmly states that this article is free from plagiarism, and all material used has been properly cited and referenced following applicable academic standards. The author would like to express his gratitude to all those who have supported and contributed to the research and writing of this article. May this article provide benefits and positive contributions to the development of education in the digital age.

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