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Evaluating teacher performance in implementing differentiated learning using the discrepancy model

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Abstract

This study aims to evaluate teacher performance through the implementation of differentiated learning at SDN Randuacir. The program evaluation was conducted by identifying discrepancies between the government's standards for differentiated learning and the actual implementation at the school. This research employs an evaluative qualitative approach using the Discrepancy Evaluation Model developed by Malcolm Provus, which consists of five stages: design, installation, process, product, and cost-benefit analysis. The subjects of this study were the principal and teachers. Data were collected through interviews, observations, and documentation. The data analysis involved data reduction, data presentation, and conclusion drawing. The findings reveal that discrepancies were present in all stages, including design, installation, process, product, and cost-benefit analysis. These discrepancies were primarily due to the inadequate execution of the design stage. It is concluded that teacher performance has not yet reached its optimal level and needs improvement, particularly in pedagogical, professional, and social competencies.

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1. Introduction

Education is a fundamental element in the life of every individual, as structured education enables the optimal development of a person's potential, talents, and skills (Simbolon, 2023).

Education serves to improve the quality of human resources by fostering students' potential to become faithful, healthy, intelligent, creative, independent, and responsible individuals (Depi & Zahmi, 2024). It is a lifelong learning process aimed at positively influencing an individual's development, which can occur in various places and under different circumstances (Pristiwanti et al., 2022). In summary, education is a continuous learning process designed to cultivate individuals into becoming more capable and beneficial members of society by developing their full potential.

The achievement of educational objectives is influenced by several factors, including teachers, students, educational goals, the environment, and supporting tools. If one of these components encounters problems, the overall educational system may be disrupted (Farkhan et al., 2022). Among these, teachers play a crucial role in the success of educational goals. They serve not only as instructors but also as mentors, classroom administrators, and curriculum developers. Teachers are responsible for managing the teaching and learning process, providing guidance, developing the curriculum, pursuing professional development, and fostering community engagement (Parida et al., 2020). To effectively fulfil these responsibilities, teachers must demonstrate high levels of performance. According to Munawir et al (2023), effective teacher performance involves: (1) planning and conducting quality instruction and assessing students' learning outcomes; (2) developing academic capabilities and personal competencies; (3) acting objectively and fairly; (4) upholding laws, regulations, the teacher code of ethics, and moral and religious values; and (5) promoting national unity and integrity. High-performing teachers are typically more professional, as evidenced by their extensive teaching experience, in-depth knowledge, exemplary moral conduct, effective discipline, strong sense of responsibility, and specialized educational expertise.

Professional teachers are creative, skilled, open-minded in understanding students' potential and character, and capable of designing instruction that suits students' needs and characteristics (Kristiawan & Rahmat, 2018). Differentiated learning is an approach to make learning activities more meaningful by addressing student diversity, enabling students to learn based on their interests, learning styles, and abilities. Differentiated learning can be categorized into three types: content differentiation, process differentiation, and product differentiation. Process and product differentiation address the variety of student learning styles, while content differentiation focuses on accommodating the differences in student ability levels (Rahayu et al., 2023).

Based on interviews conducted at SDN Randuacir, the school employs teachers and educational staff who are competent in their respective fields. This is evidenced by the fact that their educational backgrounds align with their professional roles. The teachers at SDN Randuacir are generally considered experienced, as the majority have more than ten years of teaching experience. Those with less than ten years of experience are mostly recent graduates, indicating that they possess up-to-date knowledge on contemporary teaching practices. However, in practice, only a few teachers have attempted to implement differentiated learning. Several others acknowledged that they have not implemented this approach regularly, and some have not implemented it at all. For those who have applied differentiated learning, it has only been done occasionally and remains limited in scope. Teachers who have yet to adopt this approach cited several reasons, including a lack of comprehensive understanding of the concept of differentiated learning, limited time for

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lesson preparation, and a preference for traditional teacher-centered methods that rely heavily on direct instruction.

Given these conditions, it is essential to evaluate teacher performance using the Discrepancy Evaluation Model. This model aims to identify gaps between government policies regarding differentiated learning and their actual implementation in classrooms. The evaluation covers five stages: design, installation, process, product, and cost-benefit analysis. If the evaluation reveals discrepancies of more than 50%, improvements in teacher performance are deemed necessary (Mustafa, 2021). The Discrepancy Model was chosen for its several advantages: (1) It is simple and easy to apply, as it compares program implementation with established standards; (2) It emphasizes the importance of information management, classroom learning processes, and data systems that link student characteristics with learning outcomes; (3) It fosters continuous collaboration between evaluators and program planners or developers; and (4) It incorporates formative evaluation to make adjustments and improvements from the early stages of program development and implementation (Siagian et al., 2022).

By using this model, the study will analyse the gap between the government's instructional design and the actual design implemented by teachers at SDN Randuacir. The installation stage will also be assessed, particularly whether human resources and available infrastructure are functioning in alignment with policy requirements. During the process stage, the focus will be on how teachers conduct classroom instruction and whether their implementation aligns with the intended design. Similarly, the product and cost-benefit outcomes will be analysed to determine whether the learning results and resource allocations correspond with the expected outcomes or reveal significant discrepancies.

2. Method

This study employs evaluative research, utilizing a qualitative descriptive approach and the Discrepancy Evaluation Model. According to Divayana et al. (2022), the discrepancy model can be used to describe evaluation components, including definition, installation, process, product, and cost-benefit analysis. This study aims to identify discrepancies in teacher performance during the implementation of differentiated learning across the stages of design, installation, process, product, and cost-benefit analysis. The research participants consisted of the school principal and teachers from SDN Randuacir. Data collection methods included interviews, observations, and document analysis. Interviews were conducted with the principal and teachers at the school. Observations involved direct examination of instruments related to lesson planning, implementation, and follow-up activities conducted by teachers. Document analysis was carried out by reviewing diagnostic assessment sheets, teaching modules, instructional media, learning materials, and evaluation results. The subjects of this research were the principal and teachers at SDN Randuacir. Through this qualitative study, the researcher aimed to investigate whether discrepancies arise at each stage of differentiated learning as implemented by the teachers.

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3. Results

The Discrepancy Evaluation Model is used to measure the gap between established standards and the realities encountered in the field. This model evaluates discrepancies across five key stages: design, installation, process, product, and cost-benefit analysis.

3.1 Design stage

In the design stage, four indicators are analysed for potential discrepancies: the design of diagnostic assessments, program design, lesson planning design, and evaluation design. Each indicator is assessed by comparing the government standards with actual implementation observed in the field.

Table 1. Government design standards versus actual implementation in the field

Indicator	Government Design	Field Implementation
Diagnostic Assessment	• Conducted at the beginning of the semester or the start of a new topic. • Based on the analysis of previous formative test results and a collaborative review to categorize students according to their potential. • The diagnostic assessment is developed by considering prerequisite components, intended learning objectives, targeted learning outcomes (CP), and other relevant instruments. • Serves as the foundation for designing instructional strategies.	• Implementation is not yet structured and depends on the availability of time. • Based on classroom observations and peer discussions, but lacks in-depth analysis to categorize students according to their potential. • Diagnostic assessments have not been developed in alignment with prerequisite components, learning objectives, expected learning outcomes, and other relevant instruments. • Not yet used as a basis for designing instructional strategies.
Program	The government program related to the formulation of learning outcomes (Capaian Pembelajaran/CP): a. Phase A for Grades 1–2 b. Phase B for Grades 3–4 c. Phase C for Grades 5–6	The selection of learning outcomes (Capaian Pembelajaran/CP) is adjusted according to the appropriate phase.
Lesson Planning	• Determined based on the results of diagnostic assessments that have been analysed and categorized according to students' potential and characteristics. • The selection of appropriate instructional models and methods (strategies) is based on the identified needs of students through diagnostic assessment analysis.	• Lesson planning is not yet based on the results of diagnostic assessments. • Instructional models and methods are selected based on previously used teaching modules, with minor adjustments as needed. • Differentiated learning has not yet been designed; teaching still follows a traditional, whole-class approach.

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Indicator	Government Design	Field Implementation
	• Plans include the implementation of differentiated learning, encompassing differentiation of content, process, product, and learning environment.	
Evaluation	• Conducts both formative and summative assessments. • Designs differentiated evaluations tailored to students' learning styles, talents, and interests.	• Conducts both formative and summative assessments. • Evaluations are not yet differentiated.

Based on the explanation above, it can be concluded that the teachers at SDN Randuacir have not yet fully implemented the design stage in accordance with the government standards. Teachers have not conducted in-depth diagnostic assessments to identify the diversity of learners. At the design stage, there are discrepancies in several indicators, namely: (1) diagnostic assessment design, (2) lesson planning design, and (3) evaluation planning design.

3.2 Installation stage

The installation stage addresses the readiness and completeness of the components needed for the program to function effectively. This stage covers two leading indicators: human resources (HR/SDM) and facilities and infrastructure. The human resources (HR) at SDN Randuacir are categorized into internal and external HR. Internal HR includes the principal, teaching and non-teaching staff, and students. External HR includes third parties that collaborate with the school, such as the local health centre (*puskesmas*), village office, school committee, and other potential partners.

For internal HR, the discussion focuses on the principal and the teachers. The school principal plays a crucial role in the school's progress and success, serving as both an educator and a leader. As an educator, the principal is responsible for improving the professional competence of teachers and educational staff. As a leader, the principal oversees all school programs and ensures their effective implementation. Furthermore, the principal is accountable for the success of the students (Safitri & Mappincara, 2021). At SDN Randuacir, the principal is fulfilling these roles quite well. The principal provides opportunities for teachers to develop their competencies through training and supporting activities. The principal is also directly involved in classroom instruction, particularly for students who struggle with reading. However, one shortcoming is the lack of systematic supervision of teachers' lesson planning, which has resulted in some teachers not preparing lessons adequately.

Teachers, as internal HR, play a crucial role in facilitating students' learning according to their nature and needs, helping them achieve their learning goals. Teachers at SDN Randuacir generally have the educational background and work experience (most over seven years) necessary to fulfil their roles. Some younger teachers bring current knowledge of educational practices. Despite this, many teachers still lack understanding of differentiated learning, diagnostic assessment development and analysis, and comprehensive lesson planning. Only a small number consistently engage in proper initial planning.

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In terms of facilities and infrastructure, these are divided into resources within the school and those sourced externally. SDN Randuacir has sufficient internal facilities, although some, such as a science laboratory, are still lacking. Teachers attempt to fill these gaps by creating instructional media, but these are often limited and temporary in nature. Externally, the school benefits from its proximity to several businesses and government institutions. These collaborations include the use of sports fields, monthly health check-ups, and participation in the P5 (Project to Strengthen the Profile of Pancasila Students) program, which involves activities such as tree-planting. However, external facilities have not yet been integrated effectively into meaningful instructional activities.

3.3 Process stage

This stage focuses on two indicators: the implementation of differentiated learning and the follow-up process. For instruction, it is assessed whether teaching is based on students' interests and talents and whether it follows the appropriate instructional sequence (syntax). For follow-up, the focus is on whether the assessments conducted by teachers are differentiated.

At SDN Randuacir, differentiated learning is not yet based on diagnostic assessment analysis. Teachers rely on classroom observations and peer discussions but fail to document, analyze, or categorize students based on these observations. As a result, instruction remains traditional mainly and whole-class in nature. Teachers do not consistently write strategies, models, and methods in the lesson plans that align with students' interests, talents, and needs. Consequently, many teachers are not implementing instruction according to the recommended syntax.

On the other hand, formative and summative assessments are conducted regularly, at least once a month, following each instructional unit. However, these assessments primarily consist of multiple-choice, short-answer, and essay formats and are not yet designed to accommodate differentiated instruction.

3.4 Product stage

The product stage evaluates student achievement, typically measured through teacher assessments. In practice, teachers at SDN Randuacir do not document evaluation results in detail. Student achievement is only represented by a final score recorded on the report card. Teachers often fail to maintain qualitative records or journals that accurately reflect students' progress beyond numerical scores.

3.5 Cost-benefit analysis stage

Cost-benefit analysis can be conducted using methods such as the Benefit-Cost Ratio (BCR). This method assigns scores to each indicator based on the urgency level, where higher urgency results in higher scores. If the cost score exceeds the benefit score, the program is considered unsuccessful. Conversely, if the benefit outweighs the cost (i.e., BCR > 1), the program is deemed successful. If BCR < 1, the program is considered unsuccessful or in need of improvement (Wahyuni et al., 2020).

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$$BCR = \frac{\sum_{t=0}^{T} Mt}{\sum_{t=0}^{T} Bt}$$

Where:
T = project duration
t = time
M = cost
B = benefit

At the cost stage, the focus is on indirect costs. There are three indicators analyzed within indirect costs: teaching hours or workload, utilization of facilities and infrastructure, and training to support teacher professionalism. Regarding teaching hours, teachers at SDN Randuacir have an average teaching load of 24 hours per week. Facilities and infrastructure are funded through the BOS (School Operational Assistance) fund using the ARKAS application. The budget allocated for facilities and infrastructure is maximized to create a comfortable learning environment. Finally, for the training indicator, teachers actively participate in the Teacher Working Group (*Kelompok Kerja Guru*, KKG) to receive training aimed at enhancing their professional quality. Based on the data above, an economic estimate was calculated for each indicator in comparison to the actual field conditions.

Table 2. Cost Scoring

Indicator	Economic Estimate (in million)	Total Cost
Direct costs		
Facilities and infrastructure to support learning	27,9	27,9
Indirect costs		
Time and expenses incurred	3,5	7,5
Teacher training	1	
The teacher's psychological condition	2	
Time lost due to turnover	1	
Total cost		34,9

At the benefit stage, student achievement, student participation, and reduction of disparities will be assessed. Student achievement is evaluated based on the results of student assessments. Student participation is measured through attitude scores and direct classroom observations. Meanwhile, the reduction of disparities is determined by comparing student evaluation results from one learning phase to the next. Based on the data above, the benefit scoring obtained by the teachers at SDN Randuacir is as follows:

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Table 3. Benefit scoring

Indicator	Economic Estimate (in million)	Total Cost
Student Achievement	15	28
Student Participation	10	
Reduction of Disparities	3	

Based on the data above, it was found that the cost exceeds the benefit, resulting in a Benefit-Cost Ratio (BCR) of less than 1, indicating that the cost outweighs the benefit. Accordingly, it can be concluded that the teachers' performance in implementing differentiated learning falls short of meeting the expected standards.

4. Discussion

4.1 Design stage

At this stage, a gap exists between government standards and the reality in the field. This is due to teachers not fulfilling several indicators according to government standards. For the diagnostic assessment indicator, teachers are expected to conduct diagnostic assessments and analyse the results to identify students' prior knowledge, talents, interests, and potential, enabling teachers to determine appropriate teaching strategies. However, this has not been implemented (Antika et al., 2023). This single gap causes other indicators, such as differentiated learning planning (tailored to student needs) and evaluation planning, also to remain unfulfilled. The existing gaps indicate that teachers' performance, particularly in pedagogical competence, requires improvement and enhancement.

4.2 Installation stage

In this stage, gaps are found in the existing indicators. Regarding human resources (HR), a gap occurs because teachers, given their educational background, competencies, and work experience, should be capable of preparing differentiated learning plans in accordance with government standards. With well-designed strategies, teachers can better meet students' needs and tap into their potential. Infrastructure is a crucial indicator, as it supports teachers in achieving learning objectives. Therefore, infrastructure must be adequately planned, procured, utilized, maintained, and inventoried (Suranto et al., 2022). Teachers and the principal at SDN Randuacir have planned the infrastructure quite well, although the current facilities still do not fully meet the classroom learning needs.

Additionally, teachers and the principal have yet to fully utilize external assets (external infrastructure) to support students in achieving meaningful learning experiences. External facilities have been integrated into school activities, such as outreach programs, particularly in P5 activities. While teacher performance in this area is adequate, they need to improve their professional and social competencies. Developing these competencies is expected to help teachers maximize their ability to provide students with meaningful learning experiences.

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4.3 Process stage

Gaps are present at every indicator in this stage. In the implementation of differentiated learning and evaluation, gaps arise because teachers have not applied differentiated learning based on diagnostic assessment results. Differentiated learning involves four key aspects: process, content, product, and environment. To determine the appropriate differentiation and implement the strategy effectively, diagnostic assessment results are necessary (Shidiq & Ardiansyah, 2023). However, in practice, teachers have not conducted diagnostic assessments, and learning modules are not designed based on such assessments. Consequently, the implementation does not reflect differentiated learning; instead, it tends to be classical and lacks a student-centered approach. Therefore, it can be concluded that teachers' pedagogical competence needs improvement. This is essential for enabling SDN Randuacir's teachers to fulfil their roles more effectively and to meet students' potential.

4.4 Product stage

A gap exists at this stage due to the absence of documentation reflecting students' progress based on their achievements. Student achievement can be measured through evaluation results. Several factors can affect achievement, including: (1) students with low ability; (2) materials and strategies that are not aligned with student needs; (3) imbalance between taught materials and available time; and (4) learning and teaching processes that do not align with objectives. Through achievement analysis, teachers and schools can take follow-up actions to assist students (Wibowo et al., 2022). Teachers at SDN Randuacir need to improve their professionalism to document their students' evaluation results adequately.

4.5 Cost-benefit analysis stage

This stage involves analysing costs, including direct and indirect costs. Direct costs are those that can be directly allocated to a specific product, project, or service, whereas indirect costs cannot be directly attributed to a particular product or service (Aulia et al., 2017). The direct costs incurred by SDN Randuacir to support differentiated learning are mainly for providing infrastructure. Indirect costs include teacher training outside of working hours, time spent planning and administering lessons, time lost covering for absent colleagues, and the psychological burdens on teachers. The total cost amounted to 34.9 million IDR, while the benefits earned were 28 million IDR. It can be concluded that the costs exceed the benefits, caused by several factors: (1) not all teachers have attended training, as it is done alternately, so not all teachers receive differentiated learning training; (2) not all teachers apply differentiated learning according to the training provided; and (3) teachers have not utilized available time to analyse students' needs and achievements, thus failing to address students' needs and problems adequately.

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5. Conclusion and Implications

Based on the analysis of teacher performance at SDN Randuacir using the discrepancy evaluation model across five stages—design, installation, process, product, and cost-benefit analysis—it was found that gaps exist at every stage. This is primarily because teachers did not fully implement the design stage in accordance with government guidelines. Additionally, teachers lack understanding of the concepts of differentiated learning and diagnostic analysis. They face difficulties in analysing student diversity through diagnostic assessments; consequently, both planning and implementation during the design and process stages have not incorporated differentiation concepts. Furthermore, teachers have heavy teaching loads, leaving insufficient time to carry out all stages effectively.

Considering these findings, it can be concluded that teacher performance is still suboptimal. The underlying causes include underdeveloped pedagogical, professional, and social/personal competencies, as well as insufficient discipline in completing administrative tasks.

To improve teacher performance, the principal can conduct a needs analysis to identify appropriate training programs. Such training should be accessible to all teachers, rather than being limited to a select few. Therefore, the principal may consider revitalizing and actively utilizing existing learning communities (kombel). Additionally, the principal can establish Standard Operating Procedures (SOPs) to enhance teacher discipline in fulfilling their duties and responsibilities, thereby sustaining and improving their overall performance.

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