

# Evaluation of Homeschooling Programs Using the Metfessel-Michael Model Improving the Quality of Student Learning

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**Abstract**—Homeschooling education in Indonesia faces challenges such as dependence on parental quality, lack of regulation, and variation in learning outcomes, thus requiring systematic evaluation to improve the quality of student learning. The Metfessel-Michael model offers a comprehensive approach by evaluating context, input, process, and product, thereby supporting curriculum personalization and ongoing feedback. This research aims to integrate these models to overcome the gap between the ideals and realities of homeschooling. The study employed a Systematic Literature Review (SLR) adhering to PRISMA guidelines from 2020 to 2025. A total of 17 articles were selected after identification, screening, feasibility, and inclusion screening, followed by a qualitative analysis based on PRISMA diagrams. The application of the Metfessel-Michael Model enhances academic achievement, student engagement, and social-emotional development through a SWOT analysis, with strengths in flexible curriculum design and opportunities for Montessori integration and blended learning. The weaknesses include variations in outcomes due to parental limitations, while the threat of weak regulation can be addressed with continuous evaluation.

**Keywords**—Program Evaluation, Homeschooling, Metfessel-Michael Model

## Introduction

Homeschooling education is ideally designed as a flexible alternative that personalizes learning to meet students' unique needs, with parents as the primary facilitators in creating a learning environment that supports holistic development. The Metfessel-Michael model supports this idealism through a comprehensive evaluation of contexts, inputs, processes, and products, ensuring an adaptive curriculum that enhances students' motivation and academic achievement. This approach aligns with the principles of continuing education, where personalization and regular feedback foster students who are independent, creative, and socially and emotionally competent.

In Indonesia, the reality of homeschooling presents challenges, including dependence on the quality of parents as educators, low regulatory standards, and variations in learning outcomes between families, as seen in the PKBM Bina Cipta Ujungberung program. Many homeschooling programs experience instability due to a lack of systematic evaluation, particularly in

integrating technology and cooperative methods, which leads to a gap between students' potential and actual achievement.

The application of the Metfessel-Michael Model in homeschooling can lead to positive impacts, including improved academic achievement, increased student engagement, and enhanced social-emotional development, as evidenced by a SWOT analysis that highlights strengths in curriculum implementation. However, without continuous evaluation, weaknesses such as variations in learning outcomes and regulatory threats emerge, which can widen the loss of access to education. Overall, the model promotes continuous improvement, offering opportunities for Montessori integration and blended learning to enhance the quality of learning.

Therefore, this research is necessary to integrate the specific Metfessel-Michael Model into the evaluation of homeschooling programs in Indonesia, aiming to bridge the reality gap and achieve the ideals of quality education. This approach will provide practical recommendations for parents, institutions, and policymakers in improving the effectiveness of students' learning processes. The results are expected to contribute to the development of an adaptive and measurable homeschooling curriculum.

## I. METHOD

This study employed the Systematic Literature Review (SLR) method to analyze the evaluation of homeschooling programs using the Metfessel-Michael Model from 2020 to 2025, adhering to the PRISMA Guidelines. Data were obtained from Google Scholar and Scopus with the keywords "Program Evaluation", "HomeSchooling", and "Metfessel-Michael Model" which resulted in 3,181 articles. The analysis was conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) guidelines. The initial stage involves identifying articles, which are filtered by year of



publication, type of study, and a follow-up search. The researcher then evaluates the subject on the quality and methodology of the article that is considered relevant. The eligibility process continues by reviewing the title, abstract, and complete content of the article to assess its suitability in relation to the study's focus. Of the total articles, 17 articles that met the criteria were included in the analysis stage and further examined.

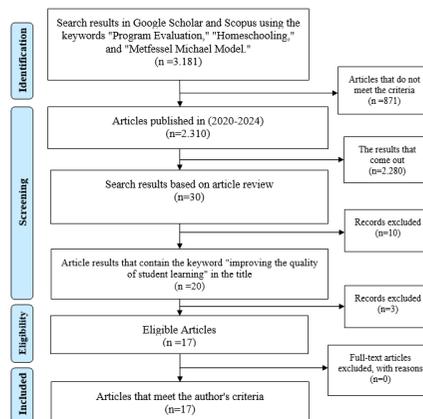


Figure 1. Prism Diagram

## II. RESULTS AND DISCUSSION

The following presents a PRISMA table, which summarizes the selection process and identifies articles that have been systematically reviewed regarding the evaluation of homeschooling programs using the Metfessel-Michael Model. This table outlines the stages, from initial search and screening to feasibility assessment and the selection of relevant articles for further analysis in this study. Thus, this table provides a transparent picture of the literature selection method used to ensure the quality and relevance of the sources used as the basis for the research.

Table 1. Google Scholar and Scopus Search Results

Yes	Author	Title	Method	Results	Summary
1.	Sassy Empress Gaytan-Reyna, Yaneth Yackeline Silva-Mercado, Victor Michael Rojas-Rios, Karina Liliana Gaytan-Reyna (2025)	Montessori Homeschooling: A Proposal for Family Engagement in Preschool Child Educational Care	This study used a quasi-experimental design with comparable groups.	Visual representations of the data underscore these findings, showing a marked increase in educational attention scores and a reduction in score's dispersion in the experimental group.	Montessori-based homeschooling is more effective in improving preschoolers' education than traditional approaches, although its implementation at home has some challenges.

2.	Thufail Ammar Falah, Cucu Sukmana (2025)	Evaluation of the CIPP Model Homeschooling Program PKBM Bina Cipta Ujungberung on Program Effectiveness in Upholding Learning Quality	The implementation method involves making observations.	The Homeschooling Program at PKBM Bina Cipta Ujungberung uses the CIPP evaluation model (Context, Inputs, Processes, Products) and procedures taught in accordance with the needs and desires suggested by students.	The evaluation of the PKBM Bina Cipta Ujungberung Homeschooling Program assesses the effectiveness and feasibility of the program using the CIPP model to meet the provisions and needs of students.
3.	Ajeng Fitriana (2016)	The Effectiveness of the Implementation of Homeschooling Education as an Alternative Education in Developing Children's Potential in Homeschooling, Kak Seto, South Jakarta	Descriptive research using qualitative research	The implementation of homeschooling at Homeschooling Kak Seto in South Jakarta can be considered effective as an alternative educational approach in developing children's potential, achieving effective and optimal learning outcomes through three stages of activities: planning, implementation, and assessment.	Homeschooling is one of the Alternative education, the alternative that is intended is Alternative education for those with all its limitations are that it excludes those who cannot attend learning in formal schools.
4.	Febiyanti, Ayu Desiyanti, Rohmaniatul Fadhillah, Agus Susilo (2021)	Implementation of Character Education Values in Homeschooling	This research employs a qualitative approach, utilizing case studies to investigate the topic.	The results of the study demonstrate that character education is applied in an integrated manner, utilizing fingerprint scans, and supported by a personal approach, with a positive impact on changing attitudes and enhancing homeschoolers' learning outcomes.	Character education at the Bekasi Institute President School is implemented in an integrated manner, utilizing fingerprint scans, and has a positive impact on behavior change and academic improvement among homeschoolers.
5.	Fadhil Hardiansyah (2020)	Social Personal Tutoring Program to Develop Social Skills of Homeschooling Students	The researcher uses a qualitative approach with the Case Study method	The researchers observed that the Personal Social Guidance Program, run by a homeschooling institution, employs several methods in the form of activities.	Social guidance programs run by home education institutions also seem to be very helpful for students in developing their social skills.
6.	Imam Shofwan, Liliek Desmawati, Trijoko Raharjo, Irlan Widya Santosa (2019)	Homeschooling: Nonformal Education Learning Strategy 4.0	The methods used are observation, documentation, and interviews.	This study demonstrates that learning is managed systematically through a life skills-based curriculum, with periodic evaluation, and is delivered using the blended	Learning is managed systematically through a life skills-based curriculum with periodic evaluation, and is delivered using the blended learning method in non-formal learning.

				learning method in non-formal learning settings.	
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### **Integration of the Metfessel-Michael Model Evaluation in Homeschooling Curriculum Design**

Integration of the Metfessel-Michael evaluation model in curriculum design. Homeschooling helps create a more active, directed, and student-centered learning process. This model encourages the use of active learning strategies, such as experiential projects and activities, that allow students to learn through hands-on exploration. This approach proves to be effective because it provides space for children to think critically and delve into topics they are interested in (Guterman et al., 2024). This model also supports learning personalization, which is the process of adjusting the curriculum according to each child's interests, learning rhythms, and unique characteristics. Personalization in Homeschooling can improve motivation and learning outcomes, as students feel more engaged with material that is relevant to them. According to Kafarisa (2019) A flexible curriculum helps children learn comfortably and effectively.

The integration of assessment and periodic feedback is also a crucial component of the Metfessel-Michael Model-based curriculum. Regular evaluations help parents understand their child's development and adjust learning strategies if needed. The importance of continuous evaluation, showing that regular monitoring can improve the quality of learning (Gracia et al., 2022). Students also appreciate the feedback because it helps them identify the skills they have developed and areas that need improvement (Neuman, 2020). The principle of continuous improvement in effective learning practices always involves a process of reflection and improvement (Eadie et al., 2021).

### **Benefits of the Metfessel-Michael Model to Improve the Quality of Student Learning in Homeschooling**

The Metfessel-Michael model is a comprehensive evaluation framework that can be applied to assess and improve homeschooling programs. This model emphasizes the importance of evaluating contexts, inputs, processes, and products, which are aligned with assessment needs in Homeschooling. In the context of evaluation, the family's motivation for choosing homeschooling is very diverse, ranging from dissatisfaction with formal schooling to special needs for gifted children. According to Nejatifar (2023) Homeschooling is often an alternative for gifted students due to its greater flexibility and the ability to customize learning. Landscape Homeschooling continues to evolve with increasingly diverse characteristics, making context evaluation crucial for understanding the position and goals of families in

educating their children at home (Jolly & Matthews, 2018).

In terms of input evaluation, the quality of learning materials and the readiness of facilities have a significant impact on the effectiveness of Homeschooling. According to Kafarisa (2019) Modules structured using a structured instructional design approach can improve the validity, practicality, and effectiveness of learning. The results of this evaluation also affirm the importance of integrating technology in learning. Usage of E-learning and Learning Management System (LMS) can strengthen collaboration between parents, teachers, and students, and create a more systematic learning process in the context of Homeschooling (Inayatulloh et al., 2023).

Through process evaluation, a variety of teaching methods, including cooperative learning, have been demonstrated to enhance students' academic and social skills. According to Shofwan (2021), Cooperative Learning in Homeschooling effectively increases interaction, participation, and motivation to learn. Additionally, parental involvement in the learning process has been proven to be a key factor. Homeschooling, particularly when combined with a Montessori-based approach, enables the active role of the family to significantly enhance the quality of the child's learning experience, especially in fostering students' independence and emotional engagement (Gaytan-Reyna et al., 2025).

At the product evaluation stage, students' academic achievement in homeschooling tends to depend on the learning goals set by the family. Academic success in Homeschooling cannot be directly equated with that in traditional schools because the evaluation standards differ. On the other hand, the evaluation of non-academic products shows positive results, especially in the development of creativity and social competence (Neurman & Guterman, 2016). Homeschooling students exhibit higher levels of creativity and social skills than their formal school counterparts, particularly when they are given ample space for exploration in their learning.

Programs Homeschooling can be continuously improved through structured feedback mechanisms and professional development of educators. According to Oon (2017), the Student Evaluation of Teaching (SET) instruments can provide reliable information on the quality of teaching, which can be adapted to the context of homeschooling. In addition, continuous coaching in the VAEL program has proven to be effective in improving the quality of pedagogical practice through Individual coaching and directed

reflection. By applying these principles in homeschooling, the quality of the program can be continuously improved, thus creating a more optimal learning experience for students (Eadie et al., 2021).

**Impact Assessment of the Application of the Michael-Metfessel Model in Homeschooling**

An impact assessment of the application of the Metfessel-Michael Model in Homeschooling is carried out through various metrics that comprehensively describe student development. One of the leading indicators is academic achievement. Through standardized tests and subject-specific assessments, parents and educators can get a quantitative picture of students' abilities. According to Neuman (2016), academic achievement in Homeschooling is highly dependent on the clarity of learning objectives and the suitability of the strategies applied, making academic measurement an essential part of impact evaluation.

In addition to academic achievement, the level of student involvement during the learning process is also an important indicator. Surveys and observations can be used to find out the extent to which students are active, motivated, and emotionally and cognitively engaged in learning activities. According to Guterman (2024), learning engagement is a key feature of Homeschooling, which is effective because students learn through meaningful and flexible experiences. Homeschooling that provides a space for guided exploration can increase creativity and social competence, both of which are closely related to student engagement.

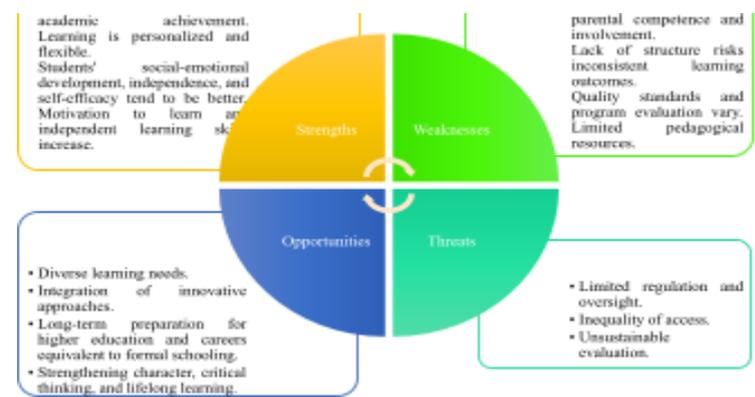
Feedback from parents is another crucial source of data for evaluating the effectiveness of this model. Parents' daily observations regarding their children's abilities, learning motivation, and the difficulties they face provide qualitative information that cannot be obtained through academic tests alone. According to Neuman (2020), the perspectives of students and families are essential elements in understanding the effectiveness of homeschooling, as they are directly involved in the daily learning process. According to Gracia (2022) Parental involvement in monitoring and evaluating learning, particularly in home-based or online learning, has a significant impact on student achievement.

All of these metrics support the principle of continuous improvement that is also emphasized in the Metfessel-Michael Model. Periodic evaluations enable the refinement of learning strategies to keep pace with the evolving needs of students. According to Eadie (2021) Effective learning practices require a continuous cycle of reflection and adjustment to produce optimal learning outcomes.

**Impact of Homeschooling Program Evaluation Based on the Metfessel-Michael Model (SWOT Approach)**

The following diagram illustrates the impact of the homeschooling program evaluation using the Metfessel-Michael Model, based on a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis. This diagram summarizes the various positive and negative aspects that arise from evaluating a homeschooling program using the Metfessel-Michael Model, ranging from strengths to threats.

Table 2. SWOT Chart



In terms of Strengths, the application of homeschooling analyzed through the Metfessel-Michael Model showed a consistent positive impact on students' academic achievement. Homeschooling students tend to achieve higher standardized test scores than their formal school counterparts, primarily when learning is conducted in a structured and planned manner. According to Eldeep (2024), curriculum flexibility and personalized learning contribute significantly to increased motivation and academic achievement. In addition, the social-emotional development of students, where homeschooling students generally exhibit self-efficacy, learning independence, and better psychological well-being (Raikes, 2014).

Weaknesses in the effectiveness of homeschooling are highly dependent on the quality of parental involvement and the consistency of program implementation. According to the Metfessel-Michael Model, unstructured homeschooling or a lack of planning tends to result in unstable academic achievements. The variation in learning outcomes is quite wide between families, especially when parents have pedagogical limitations or educational resources. This condition highlights that without systematic support, homeschooling can experience weaknesses in

continuous evaluation and the standardization of learning quality (Abdulaziz, 2022).

Homeschooling has excellent potential in meeting diverse learning needs by adjusting learning methods, materials, and learning tempos according to student characteristics. The Metfessel-Michael model supports the use of home learning environments as spaces for adaptive educational innovation, including the integration of Montessori approaches and family-based learning. Additionally, long-term opportunities are evident in students' readiness for higher education and the workforce, where homeschooling graduates demonstrate a level of college participation and academic success comparable to that of their peers in formal schools. This opens up space for the recognition of homeschooling as an alternative to education that is equal in quality.

Threats, the main challenge of homeschooling lies in the limitations of regulations and quality control. The Metfessel-Michael model suggests that the positive impact of homeschooling can be diminished if program evaluation is not conducted systematically and continuously. In addition, inequality of access to learning resources and professional support has the potential to widen the gap in learning outcomes between homeschooling participants.

### III. CONCLUSION

The application of the Metfessel Michael Model in evaluating homeschooling programs can improve the quality of student learning in a more directed, measurable, and individualized manner. This model helps strengthen the planning, implementation, and assessment of learning, resulting in positive outcomes for the academic achievement, learning motivation, and social-emotional development of homeschooling students. However, the effectiveness of homeschooling remains highly dependent on parental involvement, the availability of learning resources, and adequate regulatory support. Without continuous evaluation and systematic supervision, variations in learning outcomes between families can widen, potentially creating gaps in access to quality education. Therefore, the use of the Metfessel Michael Model in evaluating homeschooling programs is recommended as a strategic step to assist parents, institutions, and policymakers in designing curricula that are adaptive, accountable, and oriented towards improving the quality of student learning. This model can serve as a practical reference to ensure that homeschooling is not only an alternative to formal education but also equivalent in quality to traditional schools and relevant to the demands of child development in the current era.

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