



EVALUATION OF AN EDUCATIONAL PRODUCT ON PSYCHOMOTOR ACTIVITIES IN SCHOOLS: IMPACTS ON TEACHING PRACTICE

AVALIAÇÃO DE UM PRODUTO EDUCACIONAL SOBRE ATIVIDADES PSICOMOTORAS EM ESCOLAS: IMPACTOS NA PRÁTICA DOCENTE

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ABSTRACT

This study presents the evaluation and validation of an educational product titled "Psychomotor Activities at School," developed within the scope of the PPGEneb Graduate Program. The main objective was to analyze teachers' perceptions regarding the relevance, practicality, and contribution of the material to pedagogical practice. The methodology employed a mixed-methods approach, involving 51 teachers, primarily from the public sector, who evaluated the material through a structured online questionnaire on Google Forms. Both quantitative and qualitative methods were used. The data were analyzed using descriptive statistics in SPSS software, while the qualitative data were processed using IRAMUTEQ software, which employed word cloud analysis and similarity analysis techniques. The results indicated that the product was very well received, with over 80% of participants agreeing with its relevance, clarity, and ability to add value to teachers' knowledge. The material was perceived as a practical resource that provides guidance and promotes pedagogical intentionality. It is concluded that the educational product fulfills its pedagogical purpose by

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strengthening teachers' autonomy and enhancing the planning of psychomotor activities in the school context.

Keywords: Psychomotor skills; Educational Product; Pedagogical Practice; Intentionality; Teacher Training.

RESUMO

Este estudo apresenta a avaliação e validação de um produto educacional intitulado "Atividades Psicomotoras na Escola", desenvolvido no âmbito do Programa de Pós-Graduação em Educação (PPGEneb). O objetivo principal foi analisar as percepções dos professores quanto à relevância, praticidade e contribuição do material para a prática pedagógica. A metodologia empregou uma abordagem mista, envolvendo 51 professores, principalmente da rede pública, que avaliaram o material por meio de um questionário online estruturado no Google Forms. Foram utilizados métodos quantitativos e qualitativos. Os dados foram analisados utilizando estatística descritiva no software SPSS, enquanto os dados qualitativos foram processados utilizando o software IRAMUTEQ, que empregou análise de nuvem de palavras e técnicas de análise de similaridade. Os resultados indicaram que o produto foi muito bem recebido, com mais de 80% dos participantes concordando com sua relevância, clareza e capacidade de agregar valor ao conhecimento dos professores. O material foi percebido como um recurso prático que oferece orientação e promove a intencionalidade pedagógica. Conclui-se que o produto educacional cumpre seu propósito pedagógico ao fortalecer a autonomia dos professores e aprimorar o planejamento de atividades psicomotoras no contexto escolar.

Palavras-chave: Habilidades psicomotoras; Produto educacional; Prática Pedagógica; Intencionalidade; Formação de Professores.

1. INTRODUCTION

Psychomotor education in the school context has established itself as a fundamental element, going beyond the mere acquisition of motor skills to encompass cognitive, emotional, and social dimensions. Psychomotor skills are understood as the efficient integration of motor functions and psychological functions that enable an individual to function in the environment (Silva, 2025). A child's development is intrinsically linked to bodily experiences, in which movement serves as the primary means of interacting with the world, organizing the body's systems, and constructing learning. The acquisition of fundamental motor skills, such as balance, laterality, coordination, and spatial perception,





occurs primarily during childhood and directly affects the child's academic and social performance (Sousa, 2024).

In this context, the teacher's role goes beyond isolated motor instruction, requiring a planning process that incorporates pedagogical intent into every proposed activity. The National Common Core Curriculum (BNCC) reinforces the need for intentional pedagogical practices, which are defined as the conscious and planned organization of experiences that allow children to understand themselves, others, and the world around them (Movement for the Core, 2024). The effectiveness of this intention is often undermined by a lack of support materials that translate the theoretical premises of psychometrics into the dynamic and, at times, challenging reality of the classroom. In this context, the importance of educational products developed in professional graduate programs stands out, as they aim to bridge the gap between academic research and daily teaching practice, serving as tools for the dissemination of knowledge (Mendonça et al., 2022).

The rationale for this study is rooted in the urgent need to provide educators with consistent tools that support their practices and enhance their professional autonomy. The development of an educational product on psychomotor skills does not end with its creation; its true importance is established through its validation by the end users: the educators. The validation of educational processes and products is a process that ensures the quality, relevance to educational reality, and practicality of educational materials (Lucas, 2025). Evaluation ensures that the material is not only a theoretically solid educational resource but also practical and accessible. When the material achieves this objective, it ceases to function as a mere manual prescription and begins to function as an agent of continuous learning, capable of altering the educator's perspective and redefining their role (USP, 2021).

In view of the above, the objective of this study is to analyze the evaluation process and the effects on teaching practice of an educational product focused on psychomotor activities in the classroom. Specifically, we seek to understand how elementary school teachers perceive the applicability of the material, how it contributes to the intentionality of





pedagogical planning, and to what extent it functions as a pedagogical resource capable of redefining the teacher's perspective on psychomotor skills in the school environment.

2. METHODOLOGY

This is a mixed-methods study (quantitative and qualitative), of a descriptive and evaluative nature, focused on the analysis of an educational product developed within the scope of the Graduate Program in Basic Education Teaching (PPGEneB).

The study population consisted of teachers working in public and private schools. The sample was selected using non-probabilistic convenience sampling, based on the researcher's network of contacts, and was subsequently expanded using the snowball sampling technique, in which participants shared the material with other teachers.

Initially, the material was sent to 148 teachers, resulting in the final participation of 51 participants, who voluntarily responded to the assessment instrument during the data collection period, set at 10 days.

An electronic questionnaire, created on the Google Forms platform, was used as the data collection instrument. It was made available via a link along with the educational product in PDF format (e-book).

The questionnaire consisted of 14 questions, including: 1 question regarding consent to participate in the study; 4 questions designed to characterize the participants' profiles; 8 multiple-choice questions related to the evaluation of the material's structure and content; and 2 open-ended questions aimed at collecting observations, suggestions, and contributions from the evaluators.

Participation was anonymous and voluntary, and participants were instructed to answer the questionnaire after reading and reviewing the material.

Data collection was conducted by sending the educational product in PDF format via the WhatsApp messaging app, accompanied by a link to access the electronic questionnaire. The process took place over a 10-day period.





For the analysis of quantitative data, descriptive statistics were used, with the calculation of relative frequencies (percentages), using the Statistical Package for the Social Sciences (SPSS) software, version 23.0.

Qualitative data analysis was conducted based on the qualitative data analysis assumptions proposed by Ludke and André (2018), which involve the organization, categorization, and identification of patterns and trends in the data, followed by the construction of inferences at higher levels of abstraction.

For the processing and handling of textual data, the IRAMUTEQ software (Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires), developed by Ratinaud (2013), was used. The program enables statistical analysis of texts and was used in this study to perform similarity analysis and word cloud analysis, allowing for the organization and graphical visualization of term frequencies.

The textual corpus was structured into a single .txt file, in accordance with the software's guidelines, and analyzed interpretatively through Content Analysis, as proposed by Bardin (2009). This approach enabled the integration of quantitative results (frequency of words and terms) and qualitative results (interpretation of the meanings present in the participants' discourses).

3. RESULTS

Table 1 presents the number of participants and the profile of the teachers who participated in the evaluation of the educational product, with more than half of the evaluators (58%) being over 46 years of age, predominantly female (98%), and 90.2% being professionals working in the public sector, most of whom have extensive teaching experience, with more than 21 years in the classroom.





Table 1 – Profile of Evaluators

No. of PARTICIPANTS	Invited 148 (100%)			Participated 51 (34.46%)	
AGE	18 to 25 years	26 to 35 years	36 to 45 years	Over 46	
	-----	3.9%	37.3%	58%	
GENDER	Female			Male	
	98%			2%	
FIELD OF EXPERTISE	Private			Public	
	9.8%			90.2%	
LENGTH OF SERVICE	Up to 5 years	6 to 10 years	11 to 15 years	16 to 20 years	21 years or older
	----	3.9%	25.5%	21.6%	49%

Source: Author's own

Table 2 presents data regarding the 7 questions on the construction, relevance, presentation, and teachers' perceptions of the educational product. The percentage of teachers who evaluated the product and stated they fully agreed with the proposal was above 80.4%, with particular emphasis on the questions regarding comprehension and adding value to teachers' knowledge, which received total agreement from 94.1% of evaluators, and 96% regarding guidelines for safety precautions during psychomotor activities.



It is also important to note that, among the evaluators, there was no total disagreement regarding the importance of the educational product, and those who partially disagreed or did not take a position represented a minimal portion of the evaluators—only 2% across three questions; however, we must consider those who partially agreed, particularly regarding the book's content leading them to a new perspective on psychomotor skills and the guidelines and information on how to create their own activities (19.6%), as this prompts reflection on the importance of improving the product to achieve a more significant percentage regarding the quality of the information contained in the material.

Table 2 – Product Evaluation

Question	Strongly Agree	Partially agree	Neither agree nor disagree	Partially disagree	I strongly disagree
It piques the teacher's interest.	88.2%	11.8%	-	-	-
Comprehension is clear and easy	94.1%	3.9%	2%	-	-
The guidelines contained in the book offer a new perspective on psychomotor skills.	80.4%	19.6%	-	-	-
Information about care and performing activities makes sense.	96%	2%	2%	-	-
The content adds value to the teacher's knowledge	94.1%	5.9%	-	-	-
The distribution of activities reflects the reality experienced by the teacher	88.2%	7.8%	2%	2%	-
With the guidance and information in the book, you would be able to create your own activities	80.4%	19.6%	-	-	-

Source: own work





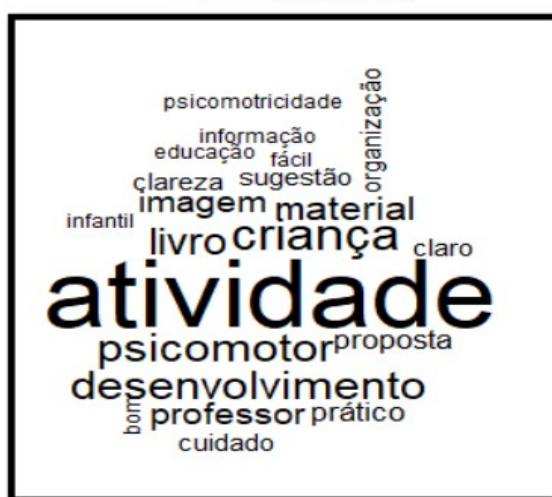
In order to identify the teacher's perception of the educational product, two subjective questions were posed to determine what most caught their attention in the book and what it represented in the evaluating teacher's pedagogical practice.

The responses were compiled into a single text and analyzed using the IRAMUTEQ software (Interface de R pour l'Analyse Multidimensionnelle de Textes et de Questionnaires), producing results in the form of a word cloud and similarity analysis, as presented in the tables below:

Figure 1 presents the evaluating teachers' perceptions when answering the question: "What caught your attention most in the book 'Psychomotor Activities at School'?" which, after analysis, highlights the word "activity" as the central focus and the words "child, development, psychomotor" in the background, corroborating the quantitative analysis, particularly for questions 7, 9, and 10, where the percentage of agreement with the content was 94.1% and 96%.

The graphical representation highlights the proposed activities and their contribution to children's psychomotor development, with a connection between teaching practice, pedagogical organization, and the centrality of the child.

Figure 1 - Word Cloud



Source: Author's own

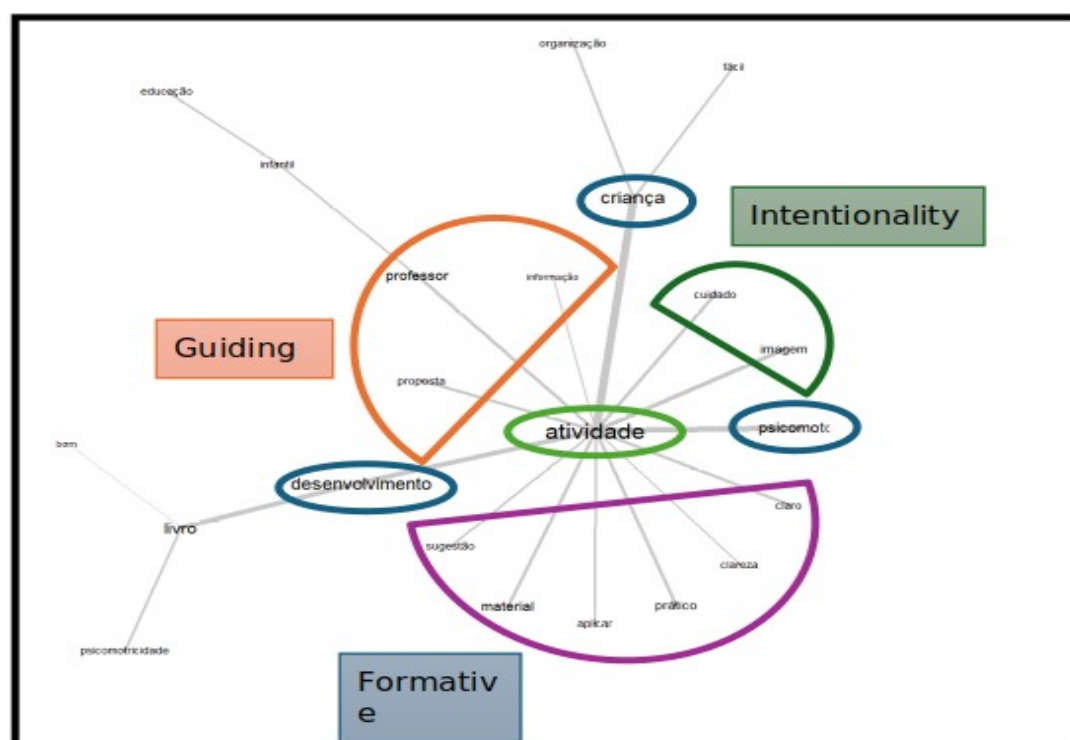


The similarity analysis based on the responses of the evaluating teachers clearly demonstrates the impact caused after reading the book and the contributions to teachers' knowledge and children's development, as the word “activity”—which most captured the teachers' attention—reveals an understanding of the primary objective behind the creation of this educational product.

As can be seen, the word “activity” is connected by three main lines to the words “child, development, and psychomotor,” and between them, branches connecting to other foundational terms that underpin the book's creation: to serve as a guiding tool for teachers, contributing to their professional development to promote children's development through planned, appropriate, engaging, fun, and—above all—pedagogically intentional activities.

Figure 2 – In one or two words, what did this book add or represent for you in your teaching practice?

Figure 2 – Similarity Analysis



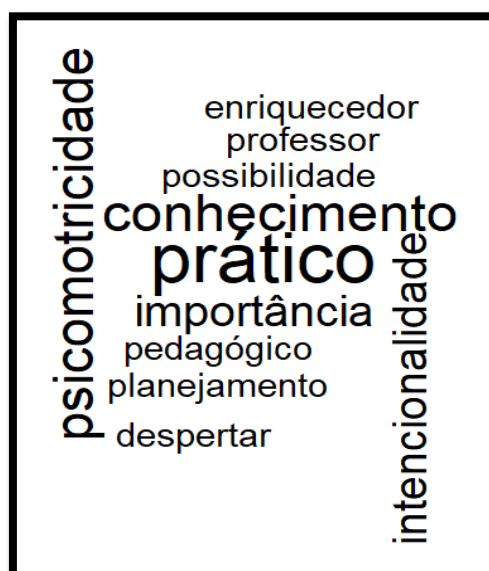
Source: own work



In Figure 3, referring to question 14 of the questionnaire, “In one or two words, what did this book add or represent for you in your teaching practice?”, analyzed in the form of a word cloud, the term “practical” stands out, surrounded by four other words— —that are directly linked: “knowledge, importance, psychomotor skills, and intentionality.”

The responses revealed that, from the perspective of the evaluating teachers, the book was perceived as a resource applicable to everyday practice, one that directly addresses the realities of the classroom, which reinforces that the book’s guidelines lead to a new perspective on psychomotor skills, as addressed in question 8, where 80.4% of participants stated that the book’s content broadens understanding and shifts perspectives, and reinforced in question 11, where (88.2%) considered that the activities resonate with the reality experienced by teachers, highlighting a close connection to the school context and that the book’s purpose as a guiding resource capable of enriching teachers’ knowledge, as presented in question 12, when (80.4%) of the evaluating teachers indicated that they felt capable of creating their own activities based on the guidelines presented, which demonstrates a strengthening of teacher autonomy.

Figure 3 - Word Cloud



Source: Author’s own

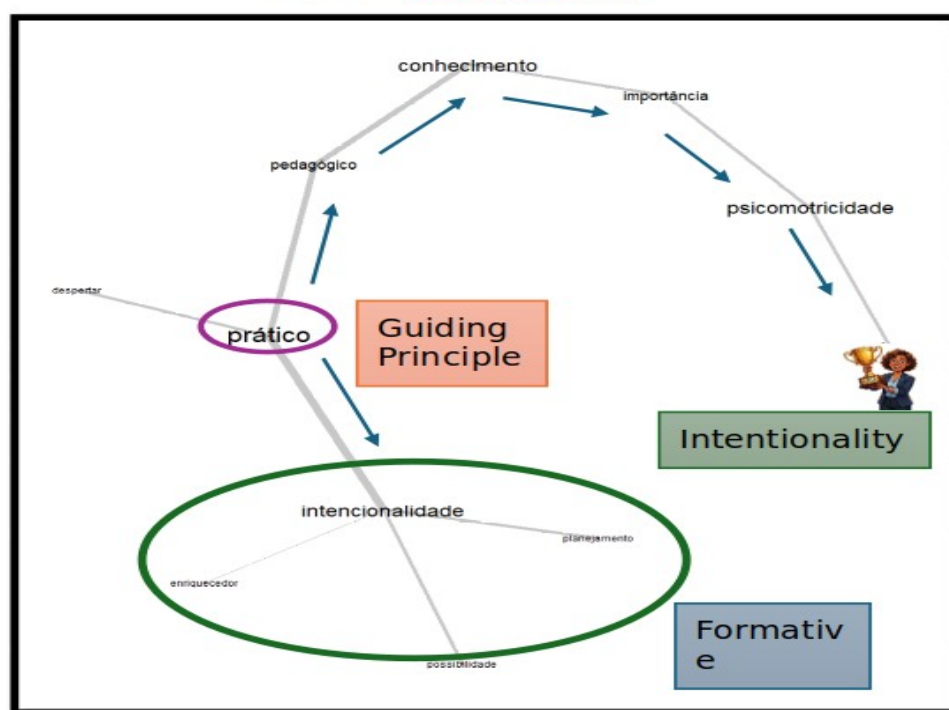


In Figure 4, the similarity analysis regarding question 14 allowed us to visualize how the words mentioned by the teachers connect and form a path that leads back to the teacher. At the center of the image is the word “practical,” which organizes the entire structure; this positioning indicates that the main perception of the book is related to its applicability in pedagogical practice.

From “practical,” a path can be observed that connects to “pedagogical” and “knowledge,” reaching “importance” and “psychomotor skills,” until it approaches “teacher.” The path reveals that the practice highlighted by the participants is supported by a theoretical foundation and an understanding of the role of psychomotor skills in teaching work.

Another pathway extends from “practical” toward “intentionality,” which relates to “planning,” “possibility,” and “enriching.” This structure demonstrates that the book was understood as a resource for purposeful planning and for expanding the possibilities of pedagogical practice in the classroom.

Figure 4 – Similarity Analysis



Source: own work



4. DISCUSSION

The evaluation of educational products is an essential step in ensuring the quality and practicality of teaching materials developed in an academic context, particularly in professional graduate programs. Santos et al. (2025) emphasize that the validation and relevance of the product to the educational reality are determined through teachers' direct experience. The results of this study corroborate this hypothesis, demonstrating strong acceptance of the material "Psychomotor Activities in School" by the target audience, which consists mainly of public school teachers (98%) with extensive teaching experience (90.2%) (49% with more than 21 years of experience).

Quantitative analysis revealed total agreement rates exceeding 80.4% across all evaluated categories, with peaks of 94.1% in the area of clear understanding and added value of teachers' knowledge, and 96% in the area of relevance of information regarding necessary precautions during the activity. The data suggest that the product was able to transcend the limits of academic theory, translating complex concepts of psychophysiology into accessible and applicable language. Psychomotor skills, as a mechanism for holistic development in early childhood education, require materials that directly address the teacher's needs (Melo et al., 2025). The material fulfills its role as a contextualized teaching resource when 88.2% of evaluators state that the distribution of activities corresponds to lived reality, thus distancing itself from idealized and unattainable proposals in the daily life of public schools.

However, the discussion should not be limited to high approval rates. The presence of 19.6% partial agreement and issues related to a shift in perspective on psychomotor skills and the ability to develop new activities based on the book's recommendations deserve attention. This implies that, despite the exceptional value of the material as a practical guide, the continuous development of teachers' full autonomy in formulating new psychomotor strategies may require, in addition to the written material, physical training sessions or opportunities for the exchange of experiences. The development of professional autonomy is





closely linked to the pedagogical planning process (Morais, 2019), and teaching materials serve as catalysts for this process rather than as isolated and definitive solutions.

The qualitative analysis, processed by the IRAMUTEQ software, provided the necessary depth to understand the product's effects on pedagogical practice. In the first subjective question (), the term “activity” was highlighted as the central element in the Word Cloud (Figure 1) and in the Similarity Analysis (Figure 2), which translates to “child,” “development,” and “psychomotor.” This figure demonstrates that the teachers grasped the essence of the proposal: the centrality of the child in the learning process through movement. Current literature reinforces the notion that child development is directly linked to the acquisition of psychomotor skills through physical activities, which serve as the foundation for more complex cognitive and motor achievements (Lima, Silva, Carvalho Silva, 2023). The fact that the material was perceived as a “guiding” and “formative” tool demonstrates that it was not viewed merely as a manual, but as a theoretical-practical resource.

Moving forward in the analysis, the responses to the question about what the book represented for pedagogical practice (Figures 3 and 4) introduced the term “practical” as a structural element, strongly connecting it to “knowledge,” “importance,” “psychomotor skills,” and, in a very significant way, “intentionality.” The significant shift in the teacher's stance is revealed by the prominent presence of the concept of intentionality. When a teacher explains that the material helped them, they are affirming that the proposed activities moved from mere passivity or a pastime (“intuition”) to pedagogically grounded actions (Carvalho, 2024).

The semantic trajectory revealed by the similarity analysis (Figure 4) demonstrates that a path has been established toward “planning” and “possibility” starting from the “practical” element. This suggests that the educational product has achieved its most important objective: empowering the teacher. Teachers who understand the fundamentals of their practice and planning, with a clear intention, possess greater autonomy (Nunes, Nobile, 2025). The transcendence of empirical reasoning through reflective practice is what distinguishes true psychomotor education from the mere application of tasks.





In summary, the integration of quantitative and qualitative data demonstrates that the validation of the educational product was successful not only in terms of its format but also in terms of the impact it had on teachers' perceptions. The material was recognized as an effective bridge between theoretical knowledge of psychomotor skills and the practical demands of the classroom, promoting a more conscious, intentional, and child-centered pedagogical approach.

5. CONCLUSION

The validation of the educational product "Psychomotor Activities at School" demonstrated that the convergence between academic research and teaching practice is not only feasible but also contributes to the improvement of teaching quality in elementary education. The results showed that the material was widely accepted by the evaluators, who recognized it as clear, relevant, and, above all, applicable to the daily reality of schools.

The study concluded that the provision of well-structured teaching materials directly contributes to increasing teacher autonomy. By offering a theoretical foundation combined with practical proposals, the educational product went beyond the function of a basic activity manual, assuming a formative role. The qualitative analysis of teachers' perceptions revealed a paradigm shift: the transition from an intuitive pedagogical approach to an intention-based practice. Participants reported that the most significant gain was the realization that each psychomotor activity must be planned with a clear purpose for child development.

Despite the highly favorable results, the study highlights the ongoing need to invest in training that enhances the use of written materials, ensuring that all teachers feel fully capable of creating their own interventions based on the provided fundamentals. Finally, the research reinforces the importance of professional graduate programs for the development of educational products that address classroom needs. The validated material is a valuable tool for pedagogical planning, effectively contributing to the intentional, linear, and structured development of children.





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