THE SELF-REGULATION OF THE LEARNING OF STATE TRAINERS IN RONDÔNIA IN THE PANDEMIC CONTEXT

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ABSTRACT

This study investigates the learning self-regulation strategies adopted by state trainers in Rondônia during the context of the COVID-19 pandemic, between March and December 2020. The pandemic has imposed significant challenges for teaching, forcing a rapid adaptation to remote teaching. Using Bandura's social-cognitive theory and Zimmerman and Pintrich's models, the research seeks to understand how educators managed their learning processes and adaptation to the new scenario. The methodology adopted was qualitative, with semi-structured interviews and documentary analysis of the pedagogical materials used by the trainers. The results indicate that, to face the difficulties imposed by the pandemic, the trainers adopted cognitive, metacognitive, and emotional strategies, such as the use of digital platforms, rigorous planning of activities, and self-reflection on their practices. The survey also reveals the importance of self-regulation not only for the success of remote learning but also for educators' resilience in the face of a global crisis. This study contributes to the understanding of how self-regulation can be applied in adverse contexts, promoting more effective and adaptable continuous training.

Keywords: Self-regulation of learning. Training of trainers. COVID-19 pandemic. Remote teaching. Cognitive strategies. Continuing education.

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INTRODUCTION

Education is a dynamic field, constantly marked by transformations that require professionals in the area not only to adapt to new methodologies, but also the ability to critically reflect on their practices. In crisis contexts, such as the one caused by the COVID-19 pandemic, this adaptation becomes even more urgent. Educational theory, when detached from practice, runs the risk of becoming obsolete and decontextualized. However, replacing it with practice devoid of a consistent theoretical foundation would result in an educational process empty of principles and critical reflections, compromising the quality of teaching.

In the State of Rondônia, the continuing education of teachers in the state network, coordinated by the Pedagogical Training Management (GFORM) of the Rondônia State Department of Education (Seduc/RO), is essential for the improvement of teaching. Before the pandemic, this training was carried out in person, with activities distributed by the 18 Regional Education Coordinators (CREs), covering the 52 municipalities of the state. However, with the arrival of the new coronavirus (SARS-CoV-2) and the declaration of a pandemic by the World Health Organization (WHO) in March 2020, the educational scenario was drastically changed.

Remote teaching, until then a distant reality, has become the only alternative to continue the training of educators. In this context, significant challenges arose, both pedagogically and emotionally, which required teacher educators to make an effort to adapt and self-regulate. The self-regulation of learning, a central concept in the social cognitive theory of Bandura (1991) and the models of Zimmerman (2000) and Pintrich (2004), emerges as a key factor for the resilience of educators in the face of crisis. This process involves the ability to monitor, control, and adjust one's behaviors, thoughts, and feelings to achieve specific goals.

Given this scenario, the present research proposes to investigate the learning self-regulation strategies adopted by state educators in Rondônia during the pandemic period of 2020. From the analysis of these strategies, it seeks to understand how the educators managed to maintain the quality of continuing education of teachers, despite the difficulties imposed by the new educational context. The central hypothesis is that educators who mastered technological tools better and had greater self-regulation capacity were more effective in adapting to the new demands of remote teaching.

The relevance of this study lies in the contribution it can offer to the formulation of more effective public policies for the continuous training of educators, in addition to providing subsidies for the development of training programs that strengthen the autonomy and resilience of education professionals, especially in times of crisis. This research is part of the line of investigation on self-regulation of learning, focusing on the context of teacher educators, a topic little explored in previous research, especially during periods of crisis such as the COVID-19 pandemic.

METHODOLOGY

This study adopts a qualitative approach, to explore the self-regulation strategies of learning adopted by state trainers in Rondônia during the context of the COVID-19 pandemic. The research is characterized as descriptive, as it aims to describe the practices adopted by educators in the pandemic period, in particular how they managed continuing education in a remote teaching scenario. The combination of qualitative methods allows for an in-depth analysis of participants' perceptions and experiences, without the need for quantification. The literature review was the first stage of data collection, seeking the main theoretical contributions on self-regulation of learning, based on the works of Bandura (1978), Zimmerman (2000) and Pintrich (2004). The research was carried out on the Scielo, Google Scholar, GEPES/UNIVALI and BDTD platforms, to theoretically substantiate the study.

The second stage consisted of the analysis of documents, with the request for authorization from Seduc/RO to access materials related to continuing education during the pandemic period, such as activity schedules, training guidelines and ordinances that regulated remote teaching actions. The last step involved the application of an online questionnaire developed in Google Forms. The questionnaire, composed of semi-structured questions, was sent to the trainers of the Pedagogical Training Management of Seduc/RO. The questionnaire aimed to obtain information on the self-regulation of the learning of trainers and the strategies used in teacher training during the pandemic period. All participants signed the Informed Consent Form (ICF) before answering the questionnaire.

The research population was composed of 10 trainers from Seduc/RO, who worked during the period from March to December 2020. The inclusion criteria were the trainers directly involved in the online training activities during the pandemic. Those who did not

participate in the online training actions were excluded from the research. Data collection involved three stages: bibliographic research, document analysis and application of the online questionnaire. The first stage, the bibliographic research, aimed to identify the main theoretical models on self-regulation of learning, being carried out through consultation with scientific research platforms. The second stage, the documentary analysis, aimed to identify the institutional documents and regulations that guided teacher training during the pandemic period. The third stage, the application of the questionnaire, sought to understand the strategies adopted by the trainers for the self-regulation of their learning in the context of remote teaching.

The analysis of the collected data was carried out using the Content Analysis technique, according to Bardin (1977), and consisted of three stages: pre-analysis, exploration of the material and treatment of the results. In the first stage, the data were organized in a table in Excel, separating them into two main categories: self-regulation of learning and online training methodologies. Then, in the material exploration phase, the data were analyzed in detail and classified, through coding, to identify patterns and recurring themes in the participants' answers. In the last phase, the treatment of the results, the interpretation and analysis of the categorized answers were made, focusing on the self-regulation strategies and training methodologies adopted by the trainers.

The research also included an analysis of thematic constructs related to self-regulation, such as planning, activation, monitoring, control/regulation, and evaluation. These constructs guided the analysis of the participants' responses and allowed us to understand the processes of self-regulation during the online training. The research sample was composed of trainers from the Pedagogical Training Management of Seduc/RO, who participated in the research in its entirety, except technicians who did not work directly in online training during the pandemic.

The research flowchart illustrates the stages of the study, which began with the literature review and the definition of the participants, followed by data collection, data analysis and writing of the results. The research schedule established that the data collection and analysis stages would take place between June and September 2024, with the final wording of the results scheduled for January 2025.

RESULTS OF THE ADAPTATION TO REMOTE TEACHING BY THE TRAINERS OF RONDÔNIA

ANALYSIS AND PRESENTATION OF THE RESULTS OF THE BIBLIOGRAPHIC AND DOCUMENTARY RESEARCH

The results of the analysis of the theoretical and methodological contribution sought to investigate the phenomenon of self-regulation of the learning of the trainers of the Training Management, highlighting how they self-regulated to offer continuing education. The documentary research revealed that, during the pandemic period, 4,195 teachers from the 6th to the 9th grade received continuing education. Of these, 774 were teachers of Portuguese Language, 329 of Spanish, 193 of Physical Education, 454 of Art, 359 of Mathematics, 771 of History, 623 of Geography and 432 of Natural Sciences, all belonging to the 18 Coordinators distributed in the state of Rondônia.

ANALYSIS AND PRESENTATION OF THE RESULTS OF THE FIELD RESEARCH

The Planning of the Participants in the Perspective of Self-Regulation of Learning

Planning was one of the points most highlighted by the trainers in their answers. In the literature on self-regulation of learning, planning is seen as the first phase of the cyclical process that involves the definition of goals and the choice of appropriate strategies to achieve them (Zimmerman, 2000). This was evident in the answers of the trainers, who mentioned the organization of schedules, participation in courses and the search for new knowledge as an essential part of their planning.

For example, the Anthurium flower reported that it organized its time, including rest periods, which refers to the importance of time management in the process of self-regulation, as pointed out by Schunk (2005). The Chrysanthemum flower, in turn, highlighted the importance of reinventing oneself as a trainer, which is also related to the concept of self-regulation as a continuous process of adaptation and adjustment of learning strategies (Zimmerman, 2013). These findings are consistent with Zimmerman's theoretical models, which emphasize the role of metacognition, where planning and self-reflection are crucial tools for academic success.

Participants' Control/Regulation Strategies from the Perspective of Learning Self-Regulation

The trainers' responses indicated that the strategies for controlling and regulating learning ranged from the replacement of non-productive activities, such as the excessive use of social networks, to the use of new educational platforms and technologies. The Anturium flower, for example, reported the replacement of time on social networks with studies and the adoption of a routine with breaks for physical activities. This approach aligns with the recommendations of Pintrich (2004), who argues that self-regulation is not limited to cognitive control, but also involves emotional and behavioral control.

The Chrysanthemum flower, by seeking new forms of formation, including the use of platforms such as AVAMEC and IFRO, also reflected the search for forms of external regulation that complement self-regulation. This is consistent with Bandura's (1991) theory, which highlights the importance of self-efficacy beliefs and the interaction between the individual and the environment in regulating learning.

Activation of Prior Knowledge from the Perspective of Learning Self-Regulation

The activation of prior knowledge was an important strategy, as highlighted by the Anthurium flowers, which used time management and heuristics, and Chrysanthemum, which dedicated itself to active listening and commitment. Other flowers, such as Hortência and Margarida, activated their knowledge related to the mastery of technologies and pedagogical tools.

Monitoring and Evaluation from the Perspective of Learning Self-Regulation

Monitoring and evaluation of the learning process was central to the trainers, with most using platforms such as Google Classroom and Moodle to track the progress of their trainings. The Chrysanthemum flower indicated that the evaluation was based on the fulfillment of deadlines and observations of the students' activities, which is in line with the concept of formative evaluation defended by Black and Wiliam (1998), who argue that continuous evaluation and feedback are essential for self-regulated learning.

The responses indicated that the trainers were aware of the importance of continuously adjusting their approaches, which is also a reflection of Zimmerman's (2000) cyclical model of self-regulation, which highlights the importance of reflection and adjustment of strategies based on the feedback received.

DISCUSSION: REFLECTIONS ON SELF-REGULATION STRATEGIES IN REMOTE TEACHING

PLANNING AND SELF-REGULATION: THEORETICAL FOUNDATIONS AND TEACHING PRACTICES

Planning emerged as one of the strategies most frequently mentioned by trainers, reflecting the importance of establishing a framework for learning. This finding is fully in line with the cyclical model of self-regulation proposed by Zimmerman (2000, 2013), in which the planning phase constitutes the starting point for effective learning, being the moment when the learner defines goals and selects the strategies he considers most appropriate to achieve them. Planning, in this sense, is not just an initial action, but an indicator of the subject's intentionality and autonomy in his or her formative process.

In the context of remote teaching, the emphasis on planning acquires an even more significant dimension. As Anderson and Dron (2011) point out, the planned use of educational technologies is essential for the success of the teaching-learning process mediated by digital platforms. The report of the trainers on the use of agendas, personal schedules and organization of time evidences a metacognitive self-regulatory practice, which corroborates the understanding of Tardif (2014), for whom continuous planning is a fundamental competence of teaching, especially in contexts of continuing education. The articulation between professional autonomy and self-regulation, in this case, reveals the importance of developing, throughout the teaching career, strategies that support the confrontation of pedagogical demands adaptively and reflectively.

CONTROL AND REGULATION STRATEGIES IN REMOTE TEACHING

The control and regulation strategies observed in the trainers' responses show the complexity of the self-regulation process in the context of remote teaching. The use of technological platforms, combined with time management and the ability to adapt one's behaviors to the demands of online training, is in line with the self-regulation model described by Bandura (1991), particularly in the sub-processes of self-observation, judgment and self-reaction. By monitoring their actions and adjusting their engagement according to the results obtained, the trainers mobilized cognitive and motivational processes directly related to self-efficacy, a central concept in social cognitive theory.

In addition, peer-to-peer exchange of experiences — mentioned as a frequent and valued practice — reinforces the social dimension of self-regulated learning. According to

Bandura (1991), learning also occurs through observation and modeling, and the training colleagues function, in this sense, as behavioral models that contribute to the development of new skills. The observation of successful practices, associated with the possibility of imitating and adapting these practices, constitutes a powerful mechanism for learning in collective contexts. As pointed out by Imbernón (2010), collaboration between teachers promotes an environment favorable to shared reflection, essential for the reconfiguration of practices in times of uncertainty.

MONITORING AND EVALUATION: REFLECTIONS ON PRACTICE

Monitoring and evaluation, as described by the trainers, were key aspects for adapting to remote teaching. The use of digital tools such as Google Meet and Moodle has become not only a technical necessity, but a pedagogical strategy aimed at the self-regulation of teaching itself. In this context, evaluation is no longer an isolated moment and has become part of the continuous cycle of self-regulated learning, as suggested by Black and Wiliam (1998), for whom constant feedback and formative evaluation are essential to the adjustment of teaching and learning strategies.

This practice is also aligned with the reflection phase proposed in Zimmerman's (2000) model, in which the subject evaluates his performance and adjusts his approaches to future learning situations. The experience reported by one of the trainers, when making the evaluation criteria more flexible during the pandemic, demonstrates the understanding that self-regulation requires sensitivity to the context and the ability to adapt. It is a pedagogical posture in which the control of learning is not exercised through normative rigidity, but through active listening and continuous adjustment, in line with the logic of continuing education described by Tardif (2014) and Imbernón (2010).

Evaluation, in this context, is no longer just a measure of performance and becomes a tool for self-reflection, both for trainers and trainees. The possibility of rethinking one's pedagogical practice in the light of the data collected and the interactions mediated by technology reinforces the metacognitive dimension of remote teaching, integrating planning, execution, and reflection in a cycle of constant improvement — exactly as described in the contemporary models of self-regulation analyzed by Boruchovitch (2014).

CONCLUSION

The analysis of the survey results revealed that the trainers adopted a variety of strategies to enhance their knowledge and adapt to the educational context imposed by the COVID-19 pandemic. The integration of educational technologies, coupled with the effort to balance studies and well-being, was an aspect often mentioned, providing significant insight into the different individual approaches taken by participants to cope with the demands of the moment.

However, it is important to highlight some limitations found throughout the research. First, it was observed that some trainers did not participate in filling out the questionnaire, which may have influenced the representativeness of the sample. In addition, when conducting the literature search, it was found that there was a scarcity of studies that specifically addressed the self-regulation of learning in the context of educators, which reveals a relevant gap in the field of research on the pedagogical practice of teacher educators.

Another point to be considered is that, during the pandemic period, the Rondônia State Department of Education (Seduc) implemented palliative measures to mitigate the impact of emotional and psychological exhaustion on trainers, seeking to reduce the effects of work overload. However, even with the flexibility of working conditions, it was possible to perceive, in the participants' answers, the presence of feelings of tiredness and fatigue, evidencing the difficulties faced by the trainers in the challenging context of the pandemic.

These findings suggest that, despite the efforts to adapt and the strategies adopted to ensure the continuity of training, the pandemic experience exposed weaknesses in both teacher training and the ability to manage remote educational work. The research underlines, therefore, the importance of continuous support policies for educators, aiming to promote their resilience and ensure the effectiveness of pedagogical practices in crises.

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