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## Thesis summary

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CARCANHOLO, F. P. de S. *Creative learning by the subject: a study in light of Developmental Didactics and Subjectivity Theory*. 2020. 267 f. Thesis (PhD in Education) - Universidade Federal de Uberlândia, Uberlândia, 2020<sup>1</sup>.

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## Resumo

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CARCANHOLO, F. P. de S. *A aprendizagem criativa do sujeito: um estudo à luz da Didática Desenvolvimental e da Teoria da Subjetividade*. 2020. 267 f. Tese (Doutorado em Educação) - Universidade Federal de Uberlândia, Uberlândia, 2020<sup>1</sup>.

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This thesis summary addresses a discussion about learning as a creative process, based on the theoretical foundations of Developmental Didactics, studies derived from the Elkonin-Davidov-Repkin didactic system, and the Theory of Subjectivity, developed by F. González Rey. The fundamental premise of this approach is that the process of learning is contingent upon the consideration of the subject of this process, who is the protagonist in this action. It is also imperative to comprehend the historical, cultural, social, and subjective conditions that emerge from the learning process. In this sense, it is directed towards the hypothesis that every individual only learns when they emerge as a subject, this learning being the result of their creative activity, in symbolic-

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emotional unity. From this hypothesis arises the research question of whether human learning is always an act of creative production, whether the child is the subject of their learning, and whether only the subject learns. The overarching objective of the research endeavor was to examine the phenomenon of creative learning in Study Activity, a subject closely related to the domain of mathematics, employing a case study methodology with children in the initial year of elementary school, while taking into account the subjective aspects of learning. The principles of Constructive Interpretive Methodology were employed in the construction and interpretation of learning, in the elaboration and analysis of case study indicators, and in hypothetical constructions of the learning process from a didactic point of view.

### **Theoretical and methodological foundations: Developmental Didactics and Subjectivity Theory**

The decision to base the research theoretically and methodologically on Developmental Didactics and Subjectivity Theory is justified by the fact that each, in its own way, can contribute to theoretical advances in understanding the individual learner. Furthermore, both have conceptual assumptions in common, originating from the same theoretical matrix, the Historical-Cultural Approach. These theories support the concepts of learning, development, and creative acts of the individual. Conversely, there are notable conceptual discrepancies in their interpretation of the postulates espoused by the predominant figures within the aforementioned approach.

A study was conducted on the concepts of learning, development, and creativity discussed by Vygotsky, by the authors of the Elkonin-Davidov-Repkin System, and by González Rey. First, the relevance of Vygotsky's main thesis on the Zone of Proximal Development was identified, as well as the premise that it is good *Obutchénie*<sup>3</sup> that promotes development. In addition, among Vygotsky's significant

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<sup>3</sup> *Obutchénie* “is a special type of teaching activity that encompasses active, collaborative, intentional, communicative, motivated, and emotional work by both teachers and students, and therefore teaching and learning, with the purpose of fully developing the human qualities of the individuals involved. Thus, the objective of *obutchénie* is not limited to teaching or learning separately, nor to teaching-learning as a unit in itself; the objective lies at the end of the process, in the product that is born as a result of it, that which is evoked by it: development” (LONGAREZI; PUENTES, 2017, p. 12).

contributions to research, his assertion that all human activity results in creation and that this is a necessary condition for existence is particularly noteworthy (VIGOTSKY, 2009).

The theoretical assumptions that conceptualize learning in the Elkonin-Davidov-Repkin system substantiate the theoretical and practical precepts of the Study Activity developed in this didactic system. According to this system, learning is defined as the self-transformation of the student, who gradually becomes his or her own teacher. Learning is characterized by cognitive and assimilative processes, which facilitate internalization, thereby rendering the social experience individual and creative. This is achieved through the transformation of the student, who serves as the subject of the process, into a personality, a state in which the subject self-regulates the activity they perform.

It is imperative to comprehend that Study Activity does not constitute a didactic activity associated with the teacher; rather, it is a psychological mechanism that evolves in the subject between the ages of 6 and 11, with the collaboration of the teacher. The psychological state in question is constituted by the organization of problem situations in a didactic manner, which results in the genesis of concepts. Problem-solving occurs during the completion of study tasks, which are to be redefined and developed by the student, in collaboration with the teacher, in an approach that refers to the theoretical concepts involved. Puentes, Amorim, and Cardoso (2017, p. 275) state that "from the perspective of developmental teaching, any type of study activity is a process of task resolution that presents itself in the form of a learning problem capable of leading to the formation of theoretical thinking." The structure of the Study Activity underwent several modifications to ensure its completion, as the concept of learning, development, and creativity underwent a process of refinement. The structure of the aforementioned program was as follows: The sequence of tasks to be completed is as follows: first, the study task; second, the study actions; third, the control actions; and fourth, the evaluation actions. These components are dialectical in nature and intersect with one another.

The Theory of Subjectivity, developed by González Rey, supports a conception of learning that is slightly different from that conceptualized by the Elkonin-Davidov-Repkin system. It can be considered that the core of the Theory of Subjectivity is the understanding of the way we subjectively produce in the world, and not the world experienced by people. It is the understanding of the peculiar way in which humans are constituted, with the psyche being conceptualized as its generative character, in the symbolic-emotional unity.

According to the Theory of Subjectivity, the very act of learning produces various subjective meanings that are constituents of the subjective configurations that participate in this process and that can generate new subjective meanings. In this action, not only the cognitive apparatus is necessary, but also “affections and social conditions, in particular, the quality of the relationship with the Other who will mediate this process” (MONTE; FORTES-LUSTOSA, 2012, p. 169). School learning should be viewed, in a non-deterministic way, as part of the student's social subjectivity. “To the extent that we can advance in understanding the complexity of learning, we will be in a better position to outline educational strategies that favor it” (MITJÁNS MARTINEZ; GONZÁLEZ REY, 2012, p. 79).

Thus, based on an understanding of how individuals learn, it is possible to devise better ways to contribute as an organizer and collaborator in this process and achieve higher levels of learning. According to González Rey (2014, p. 39), school teaching should be guided by conversation and dialogue that leads students to reflection and enables them to “take positions, a process that facilitates emotionality in the activity of learning.” In this learning process, which occurs uniquely but is constituted in individual and social subjectivity, Mitjás Martínez and González Rey (2012) clarify that the types of learning depend on the student's condition in terms of their subjective configurations of the action of learning as well as their involvement in this process.

## Study Activity in Field Research

The field research, grounded in Developmental Didactics, entailed the implementation of two study activities<sup>4</sup>. These activities were executed in accordance with the tenets of the Elkonin-Davidov-Repkin system, while concurrently acknowledging the subjective contributions of the participants. The research drew inspiration from the principles of Constructive Interpretative Methodology, recognizing the potential for understanding individual aspects within each social subject, despite the complexity of observing, interpreting, analyzing, constructing, and generating intelligibility of a total group of students, comprising various moments and situations from the children's school routine. This collective information, analysis, indicators, and hypotheses contributed to the interpretive construction of the learning process.

The postulates of the theories employed—namely, Developmental Didactics and the Theory of Subjectivity, with an emphasis on creative learning—were utilized to conceptualize **the subject as the individual who establishes a problem and a purpose, thereby producing in the symbolic-emotional unit**. The theoretical assumption that children are only subjects when they are active guided the analysis of the learning process, which was thus only possible based on activity and, in this case, the Study Activity.

After completing the two activities and collecting indicators built throughout the process, the analysis was prepared with the aim of approaching the thesis under discussion.

## Constructive interpretative process: analysis of case study indicators and hypothetical constructions

The analysis of the indicators was based on the premise of identifying the subject's learning as a creative act, within the symbolic-emotional unit, in Study Activity. Consequently, within an activity predicated on the precepts of the Elkonin-Davidov-Repkin System, designated as cognitivistic, wherein the

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<sup>4</sup> A complete description of the two Study Activities developed can be found in: Carcanholo, F. P. (2020).

subject is the sole agent of learning, it became imperative to ascertain, through the tenets of Constructive Interpretative Methodology, that students acquire knowledge in Study Activities, yet are influenced by the symbolic-emotional, configuring subjective and creative productions of the learning process. Consequently, it was evident that creativity in learning was limited to the individual engaged in active learning.

A synthesis of the constructed indicators yielded essential units of information, which were subsequently organized into three categories. These categories facilitated a more compelling elaboration of the hypotheses outlined. It is imperative to acknowledge that the categories were methodically arranged into discrete subjects, yet they are intricately intertwined within a complex network of relationships:

- **The relationship between intention and action in developing the purpose of the Study Activity.**

During the Study Activity, it became clear through the construction and interpretation of indicators that children produce actions to the extent that their intentions are motivated to do so. The intentional movement that a person needs to produce in the activity focuses on aspects that are subjective, imbued with feelings and emotions, which can be transformed into will or desire. Mitjás Martínez and Gonzalez Rey (2017) stated that intentional actions never have a single meaning or can be thought of as actions that produce direct results solely because of the intentionality that characterizes them; in other words, behind an intention there are subjective productions that drive these desires and attitudes. For there to be intention, there must also be implication, attitude, volition, and confidence, since intention is produced by the person, by the subject as the source, even if there are external motivating and instigating situations. “Intention is a complex act of conduct, indirect by its internal nature, which incites the individual to achieve an end devoid of its own stimulating force” (BOZHOVICH, 2020, p. 25).

In this way, the study activity is always established by the subjects themselves, and the teacher collaborates in various ways: through didactic organization, thought-provoking questions, a challenging situation established based on the Zone of Proximal Development, observing and interpreting the subjective productions of that student, and considering them as the subject of their learning in the activity produced in *Obutchénie*.

- **The symbolic and emotional unit indicator in the Study Activity.**

The establishment of a purpose is characterized by the primary function of the person's condition as the subject of the activity. Concurrently, the subject's subjective productions, encompassing affectivity, emotion, cognitive processes, and memory, serve as the foundation for the integration of the symbolic-emotional elements. These elements, in turn, influence the elaboration of the purpose. In this regard, it is imperative to acknowledge the significance of the elaboration of purpose as a foundational element of the individual's journey within the Study Activity. The formulation of a task is predicated on the premise that personal meaning conditions the acceptance of the challenging circumstances, the elaboration of the problem situation, and the study situation, thereby enabling the subject to establish the study task. Asbahr (2019, p. 202) cautioned that "when the study activity lacks a tangible connection to the subject's intrinsic motivations, it tends to take on a formal, merely reproductive nature." Furthermore, it requires the assumption that these productions occur if there are motivations, intentions, implications, desires, and thoughts in unity, so that, when faced with a new difficult situation, the necessary modes of action are produced by the subject. That is to say, "it depends on the motives that stimulate the student to learn and give personal meaning to what they do." Consequently, these motives are integral components of the study activity, as well as its content and structure" (REPKIN; REPKINA, 2019, p. 58). This personal meaning underscores the necessity of considering the subject's emotions and individuality.

- **Mutual existence: subject and activity.**

The manner in which the concept of mutual existence between the subject and the activity is theorized is instrumental in substantiating the indicator that only those who emerge as subjects in the activity learn. The existence of the subject and activity is established through the development of this relationship, characterized by reciprocal and mutual interactions, thereby constituting the subject and activity. As stated by Chaves (2019, p. 230), "The subject, being the one who produces subjective meanings, does so because they live this dialectical and complex process of experience that they carry out in the relationships they establish with others, with nature, and with themselves." The subject exists in this dialectical and complex condition in this process.

Consequently, the two study activities conducted during the field research revealed the condition and reciprocal existence of the subject and activity, which became fundamental for the development of creative learning. Therefore, the child must be included as a subject in the activity. This condition was highlighted by Repkin and Repkina (2019) with the aim of considering the importance of the subject beyond the development of actions and operations, as it is the condition for the existence of activity and learning. The authors elucidate that the primary objective of the system is to facilitate "the development of students as subjects of developmental learning, who need to think in order to solve their problems" (REPKIN; REPKINA, 2019, p. 35).

As a result of constructive and interpretative analysis, it is understood that learning consists of subjective and creative production in a person's performance as a subject from the moment the purpose of the activity is established.

Bringing together two theories, Developmental Didactics and Subjectivity Theory, presented this research with a great challenge, but at the same time, a perspective for understanding the subject's learning with the aim of advancing theoretically and contributing to future didactic proposals and interpretation of the productive process of learning.

However, when looking at Study Activity as a process of cognitive internalization, one encounters the subject's production, in the condition of

symbolic-emotional unity. This statement is supported by the theoretical precepts studied on human learning requiring an intrinsic relationship and coexistence between activity and subject. Only the subject learns. Furthermore, it is evident that creative learning only happens when this subject elaborates the purpose of the Study Activity, subverting the conditions that the challenging situation offers, identifying existing contradictions, producing a problem situation, and new modes of action that lead to its resolution.

This study also provides notes on the definitions of subject, learning, development, and creative process. However, it recursively leads to attributing new perspectives to these concepts: the subject as the source, producer of their creative learning, in a subjectively produced activity, from a perspective of self-transformation and self-development. Thus, pointing out the criticisms, recognitions, and congruencies of the works of Developmental Didactics and the Theory of Subjectivity reveals an opening for new perspectives, dialogues, and reflections in the expectation of theoretical and practical advances.

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