

Study activity: main activity for the organization of teaching in a continuing formation program

Atividade de estudo: atividade principal para organização do ensino em um programa de formação continuada

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ABSTRACT

The present study carried out an investigation on the meaning of the study activity for the mathematics teacher when attending a continuing formation program. This research was carried out taking into consideration the continuing formation provided by the Educational Development Program – PDE, which aims at causing significant interaction between universities and public schools in the State of Paraná. Based on both theoretical assumptions of Leontiev's Activity Theory and Historical Cultural Theory, the research had as its subject of investigation a mathematics teacher who worked in Youth and Adult Education - EJA, participating in the referred program. The formation activity makes it possible that the understanding of the personal meaning attributed to the activity must match the social signification of such formation activity.

Keywords: Study Activity. Math Education. Teachers Continuing Formation. Historical Cultural Theory. Activity Theory.

RESUMO

O presente estudo buscou investigar o sentido da atividade de estudo, para uma professora de matemática, ao participar de um programa de formação continuada. A pesquisa foi realizada no contexto da formação continuada oferecida pelo Programa de Desenvolvimento Educacional – PDE, pela interação da universidade e escola pública do Estado do Paraná. Ancorada em pressupostos teóricos da Teoria da Atividade de Leontiev e da Teoria Histórico-Cultural, a pesquisa teve como sujeito da investigação uma professora de matemática que atuava na Educação de Jovens e Adultos – EJA, participante do referido programa. Nesse movimento de formação entende-se que o sentido pessoal atribuído a essa atividade deve estar em consonância com a significação social de tal atividade de formação.

Palavras-chave: Atividade de estudo. Educação Matemática. Formação continuada de professores. Teoria Histórico-Cultural. Teoria da Atividade.

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1 Introduction

The text is the result of a doctoral research that had as an investigative proposal to analyze the meaning of the study activity, for a mathematics teacher, when participating in a continuing education program. The research was carried out in the context of the continuing education offered by the Educational Development Program - PDE, through the interaction of the university and public school of the State of Paraná.

Fiorentini e Nacarato (2005) highlight the importance of partnerships between the school and the university in continuing education programs. According to these authors, most teachers are aware of their commitments in relation to their profession, so they try to update themselves, participating in congresses, seminars, workshops and lectures, in order to improve their practice. However, the result of this training depends on how he understands this process, that is, on the meaning attributed by the teacher to each program action that he believes is important to satisfy his needs.

According to Leontiev's Theory of Activity Theory (1978; 1983; 2012) and Historical-Cultural Theory, the teacher's work object is teaching. In this sense, in a training proposal, the activity of studying about the modes of teaching organization is fundamental.

The teaching activity developed by the teacher and the learning activity performed by the student constitute the core of the pedagogical activity. Through this relationship, it is possible to understand the teaching and learning process. And, in this process, when organizing teaching whose purpose contributes to the appropriation of knowledge by students, the teacher reflects and evaluates his knowledge.

2 Educational Development Program – PDE

The PDE program is part of the reformulation of public policies for education in the State of Paraná. In 2010, the program started to be regulated by Complementary Law nº 130, becoming a State policy for the continuous training

of teachers in the state public school system in Paraná. It counted on the articulation between basic education and higher education, with the proposal of improving the teachers of the state education network together with the teachers of the Public Institutions of Higher Education - IES.

The objective of the PDE program was to offer continuing education for teachers in the public school system in the State of Paraná, providing teachers with theoretical and methodological support for the development of systematic educational actions, which would result in the resizing of their practice (PARANÁ, 2009).

The program provided for the annual admission of teachers to participate in continuing education lasting two years, with the goal of improving the teaching and learning process in state public schools of basic education. The teacher who entered the PDE was removed 100% of his activities from the classroom in the first year and 25% in the second year. During the program, the participating teacher should carry out several studies according to his research object and elaborate a didactic pedagogical project with the primary purpose of overcoming the difficulties that he faced in basic education in Paraná public schools (PARANÁ, 2017).

The organizational structure of the PDE consisted of three axes of activities:

1. Theoretical-Practical Integration Activities;
2. Theoretical Deepening Activities;
3. Pedagogical Didactic Activities with Technological Support.

These activities are carried out throughout the program, consisting of four semiannual periods, spread over two years.

To meet the object of our investigation, the activities contained in Axis 1 were considered: Theoretical-Practical Integration Activities.

This axis prioritized activities aimed at theoretical-practical integration, as part of the PDE's continuing education proposal, including Intervention at School, Planning of the Pedagogical Intervention Project and Socialization of

Academic Studies, Pedagogical Intervention at School Project, process of Orientation in IES, Didactic-Pedagogical Production (this directed to the Implementation of the Project in School) and the Final Article, considered as work of completion of the training.

These activities were carried out under the guidance of the professors who guide the IES, by defining the line of study, according to their discipline for entering the program.

The guidelines occurred, in all periods of the program, at the headquarters of the IES to which the PDE professor was linked. In these moments, the routing of each of the activities / productions to be carried out by the PDE teacher within the program was discussed.

2.1 Research participant

The research participant refers to a teacher; whose codename was Sofia. She has a degree in Science, with specialization in Mathematics and Biology. She has taught the disciplines of Science, Mathematics and Biology and has experience with Elementary School, High School and Youth and Adult Education - EJA. At the time of the investigation, Sofia was teaching Mathematics to high school students at EJA. The teacher had 34 years of experience in education and, in 2004, assumed a standard of 20 hours / class in the subject of Mathematics, becoming part of the teaching staff of the State of Paraná. She also taught at the municipal school system, from the 1st to the 5th year, of Elementary School. In 2013, she retired from the municipal school system, remaining only in the state school system.

The researcher, acted as advisor in the PDE program and assumed the orientation of professor Sofia.

3 Elements of Activity Theory: guiding principles of continuing education

3.1 Need, motive, action and operation

The activity, according to Leontiev (1978), is related to the movement of the subject's psychic constitution with the world to which he belongs. According to this author, "the first condition of all activity is a necessity" (LEONTIEV, 1978, p. 107), which triggers a series of actions:

The man, over time in the process of appropriation and objectification, developed actions and produced instruments to satisfy his needs. At first, man sought to satisfy his organic needs, of a biological nature, such as sheltering, feeding, moving around, very close to the needs of animals. But over the course of history, these needs generated others, not immediately linked to physical conditions. These are properly human needs, including the need to appropriate the culture produced by the men themselves (MORAES, 2008, p. 87).

The necessity does not determine the concrete course of an activity. It is in the object of the activity that the need reaches its determination. Finding it, it aims, and the object becomes the motive for the activity, what stimulates it to act (LEONTIEV, 1978). Leontiev highlights some characteristics related to needs.

The first is that every need has an objective, an end. The second is that every need requires concrete content according to conditions and a satisfactory way. The third refers to your ability to repeat in different situations and at different times for individuals. A fourth resource is qualified for its development, that is, all the need to develop measures that expand the circle of objects and means to satisfy it (LEONTIEV, 1969 apud SERRÃO, 2006, p. 105).

In human activity, the production of objects is a means of satisfying their needs, "they must appear to the conscience as reasons" (LEONTIEV, 1978, p. 108). That is, it is the reasons that encourage the subject to act.

Leontiev's studies focused on the structure of the activity and its link with psychic processes. According to the author, it is in the process of transforming external activity into internal activity that human psychic functions originate.

This internalization occurs through the activity of the human being in his social relations and with nature.

Not the whole process is an activity. For Leontiev (2012), the activity is a process in which man's relations with the world satisfy a special need corresponding to him. "The necessity is the triggering factor of the activity; it motivates the subject to have goals and to take actions to supply it" (SFORNI, 2003, p. 84). For Leontiev (2012, p. 68), the activity concerns "processes psychologically characterized by what the process, as a whole, is directed at (its object), always coinciding with the objective that stimulates the subject to perform this activity, that is, the reason".

The reason is the articulating element between the need and the object, "it is what drives the activity, since objects and actions alone are not able to initiate it" (FRANCO; LONGAREZI, 2015, p 101). The reason is directly related to the satisfaction of one, or several needs. Without reasons and needs there is no activity. The activity assumes the satisfaction of the need.

The elements that make up the structure of the activity are: need, motive, action and operation. There is a distinction between action and activity. "Action is a process whose motive does not coincide with its objective (that is, with what it is aimed at), but resides in the activity of which it is a part" (LEONTIEV, 2012, p. 69). Thus, a subject is active when the purpose of his action coincides with the reason for his activity.

The activity is a set of actions articulated by a need.

There is a particular relationship between activity and action. The reason for the activity, being replaced, can pass to the object (the target) of the action, with the result of an action transformed into an activity. [...] This process is precisely the concrete psychological basis on which changes in the main activity occur and, consequently, the transitions from one stage of development to another (LEONTIEV, 2012, p. 69).

For the author, it is the reasons that stimulate and guide the activity, thus classifying them into: only understandable reasons and really effective reasons.

Understandable reasons do not match the subject of the activity. However, it is understandable motives that become effective motives and, thus, new motives and, consequently, new types of activity arise. This transformation of motives occurs because there is a new objectification of their needs.

In the process of continuing education, it can be understood that a reason is only understandable when, to participating in a continuing education program, although the teacher understands that continuing education has the function of improving teaching activity, the reason that leads him to participating in it is only linked to the accumulation of points in your career to have a promotion and, with that, obtain a salary advance. However, during the course of the training, a new reason may arise that approaches the meaning of this activity, that is, to appropriate knowledge that can contribute to your pedagogical practice. If this happens, there are signs of changes in the reasons.

The activity comes from a need, which depends on the reasons, and consists of actions, which are subordinate to the objectives and driven by operations. "Operations are the means or procedures to carry out the action" (FRANCO; LONGAREZI, 2015, p. 104). Suppose a subject has to memorize a poem. The action will consist of memorization. But how can you do that? You can, for example, write it several times, record it and listen to it at different times, repeat it out loud. The action will be memorization, but the means of carrying it out, that is, the operations, will be different (LEONTIEV, 2012).

An action can become an operation, and these later become skills or habits, which are conscious operations.

For conscious operations to develop, it is typical [...] that they are formed primarily as actions, and cannot arise otherwise. Conscious operations are formed initially as a process directed towards the target, which only later takes on the form, in some cases, of automatic habit (LEONTIEV, 2012, p. 74-75).

The manifestation of conscious operations is only possible, because the operation appears initially as an action.

- a) For an action to have meaning for the subject, it is necessary that it be produced for a reason;
- b) For the actions to move to a lower place in the structure of the activity, becoming operations, it is necessary that new needs or reasons require more complex actions;
- c) So that, subjectively, the subject feels new needs or reasons that encourage him to act at a higher level, it is necessary that he be inserted in a context that produces, objectively, the need for new actions;
- d) For an operation to be consciously automated, it is necessary that it be structured initially in the action condition (SFORNI, 2003, p. 89-90).

In this movement, the activity is directed to satisfy a motive and an action or several actions will be directed to achieve one or several objectives. Actions can be performed repeatedly until the goal is achieved. This practice is transformed into operations, when the execution procedures are internalized by the individual.

3.2 Meaning and personal sense

The meaning and the personal sense are constitutive elements of the human conscience, therefore, the analysis of the conscience of the human being must start from the social and historical conditions of his way of life, of his existence. Therefore, "we must study how the structure of man's consciousness changes with the structure of his activity" (LEONTIEV, 1978, p. 92).

Leontiev (1978) presents the concept of signification and points out that signification is one of the most elaborated concepts in modern psychology.

The meaning is the generalization of reality that is crystallized and fixed in a sensitive vector, ordinarily the word or the phrase. It is the ideal, spiritual form of the crystallization of humanity's experience and social practices. Its sphere of representations of a society, its science, its language exists as systems of corresponding meanings. Signification therefore belongs, first of all, to the world of objectively historical phenomena (LEONTIEV, 1978, p.94).

The meanings are characterized by being the result of a social process, that mediates the reflection of the world by man to the extent that he is aware of it, that is, they establish man's relations with the world. For Asbahr, the meaning:

[...] it is a reflection of the reality historically elaborated by humanity in the form of concepts, knowledge, modes of action, regardless of the individual relationship that men establish with it. The system of meanings, although in eternal transformation, is "ready" when the individual is born, and it is up to him to appropriate it (ASBAHR, 2011, p. 88).

The meaning has an objective character, external to the subject. However, when analyzing the movement of the appropriation of meanings by the subject, one must consider the subjective dimension, the meanings that they have for the subject (SERRÃO, 2006). Leontiev (1978) highlights that the subject appropriates the social meanings expressed by language, giving it its own meaning, that is, a personal sense linked to their needs, motives and feelings.

The meanings are phenomena of social consciousness and when they are appropriated by the subjects they become part of the individual conscience, because they acquire a personal sense. They express the historical syntheses of cultural products (words, objects, concepts), therefore, they undergo changes in the course of human history and its vital activities, as well as the meanings attributed to these activities over time.

According to Leontiev (1978), the meaning is created by the objective relationship between that which stimulates action in the individual and that towards which his action is oriented as an immediate result. The personal sense reflects the relationship between the reason (reason for the activity) and its end (end of the action). In order to find the personal meaning, it is necessary to discover its corresponding reason. The author also points out that every sense is meaning of anything and there are no "pure" meanings, it is in the activity that the subject attributes personal meaning to social meanings.

[...] the meaning is in some way an integral part of the content of consciousness and seems to enter into its objective meaning. [...] In fact, although the sense (personal sense) and the meaning seem, in introspection, fused in the conscience, we must distinguish these two concepts. They are intrinsically linked to each other, [...] however, it is the meaning that is expressed in the meanings (as the reason in the ends) and not the meaning in the sense (LEONTIEV, 1978, p. 98).

The personal sense portrays the individual's relationship with objective phenomena, that is, it is always linked to the motive that stimulates the individual to act. The man appropriates the social meanings existing in the social conscience and gives them their own senses, which are linked to their own life, their motives, their needs and feelings, thus becoming part of their individual conscience. Therefore, when analyzing the subject's activity, it is necessary to find out what is the reason for generating personal sense.

To clarify the separation between sense and significance at the level of consciousness, Leontiev (1978) presents an example to elucidate this situation. One can be aware of a historical event, understand the meaning of a date; however, the date in question may have several meanings for the subject. One for the young man of school age and another for the young man who was assigned to fight for his country and give his own life for it.

The knowledge about the event, the historical date, it does not change or increase and, certain elements, can even be forgotten. However, for some reason, this event suddenly appears in the spirit, that is, it appears in his consciousness in another way, totally new, “[...] not as a signification and under the aspect of his knowledge of it, but under the aspect of the meaning it has for him; took on a new, deeper meaning for him” (LEONTIEV, 1978, p. 98).

The personal sense is formed in the course of the subject's activity, that is, a way in which he is appropriate, or not, according to the requirements that depend on the relationship of interest of these subjects with such meanings, that is, it depends on the meaning of the subject staff that they are executed (PIOTTO, ASBAHR, FURLANETO, 2017). Therefore, the meaning cannot be

taught, but it is possible to be educated and its unity with social significance is possible in the unity between education and teaching (LEONTIEV, 1983).

The personal sense translates the relationship of the motive to the end and to find it is necessary its corresponding motive. For the present study, it was necessary to investigate Sofia's initial motive in order to understand whether these coincided with the objective of the training activity. Leontiev (1978) also points out, that the subject will be in activity when the motive and objective of the activity coincide. In this way, the researcher considered the possibility of intervening in order to raise the need for new reasons in Sofia, that would allow this coincidence. When carrying out this movement, Sofia could consciously appropriate the knowledge promoted by this training action.

The reasons, the personal sense and the meaning deserve to be highlighted for the understanding of the object of study of this research, which is related to the continuing education of teachers. Such elements are anchored in the concept of activity, that provides for the humanization of the subjects involved in the training process. Thus, through planned actions, the aim was to collaborate with Sofia's training process, aiming at a non-alienated training whose study during her participation in the program was linked to the need to improve her teaching actions.

3.3 Study Activity: essential activity for the organization of teaching

The learning activity is related to the acquisition, through different processes, of experiences that lead to qualitative and quantitative changes in a person's psychological and physical structures and characteristics. The study activity has a peculiar structure:

The study is considered a particular aspect of "human activity" because, as in "human activity" in general, the person who carries it out is transformed at the same time as the material and symbolic objects with which he interacts. Through "study activity", attitudes and research skills are developed in students, making them capable of appropriating knowledge in a way similar to what has historically occurred. Therefore, it is not something that can

be done alone, it is a joint, social activity, it necessarily presupposes communication and the relationship with the “other”, both for the cultural production materialized in some material or symbolic object, as well as for the physical presence of that “other” (SERRÃO, 2006, p. 119).

For the study activity to be conscious, Sofia needs to know why she needs to study. What guarantees her awareness is the meaning that the study actions have for her. And for the action to make sense, its end must meet the reason for the activity, that is, the actions of the study activity, carried out by the teacher, as planning and teaching organization are aimed at promoting the students' learning activity.

During its formation (of the study activity) we have to reveal and create the conditions so that the activity acquires a personal meaning, becomes the source of the individual's self-development, of the multilateral development of his personality, on the condition of his inclusion in social practice. . (DAVIDOV; MARKOVA 1987, p. 320 apud PIOTTO; ASBAHR; FURLANETTO, 2017, p. 121).

In this sense, for the study activity to be, in fact, Sofia's main activity, during continuing education it should occupy a structural place in her life, the personal meaning she attributes to this activity is an essential element for her education.

The teacher's learning activity when it occurs through the study activity aims at the learning of his students. The tasks, operations and actions of studies should lead to the appropriation of theoretical knowledge, that collaborates with the need to teach.

The pedagogical activity is expressed through the work of the teacher. It can be a collective activity that promotes the transformation of subjects, arising from social relations, originating from educational relations generated in the school space.

Considering that the pedagogical activity is that which takes place in the school space, we can understand the school as a social institution whose specificity is the transmission of historically accumulated knowledge in a systematic and organized way, therefore, the teacher is the conducting agent of

the pedagogical activity, being responsible for that transmission (ASBAHR, 2005). Still, according to the author, the social significance of the pedagogical activity carried out by the teacher is to provide an opportunity for teaching that enables students to engage in learning activities, ensuring them the appropriation of non-everyday knowledge.

4. Research stages

Throughout the continuing formation, there were moments of guidance between Sofia and the researcher for planning the actions to be carried out under the program. For orientation meetings, each semester, a workload of 32 hours was allocated, 24 hours in person and 8 hours at a distance.

The table below shows the moments of the constitution of the research data, as well as that of the training process. The analysis of these moments focused on Sofia's movement during its realization.

Table 1 - Actions mobilized by the researcher in the stages of the program PDE

Period	Stages	Objectives of the PDE program	Researcher's actions
1st semester 2016	Pedagogical Intervention Project at school - (PIPE)	Define the object of study and the theoretical framework	Sensitize Sofia to her theoretical framework
2nd semester 2016	Didactic-Pedagogical Production - (PDP)	Produce pedagogical material related to your object of study	Guide Sofia in relation to the organization of the mathematical object percentage
1st semester 2017	Implementation of the Pedagogical Intervention Project at School - (IPIPE)	Implement teaching material at school	Assist Sofia during implementation and guide her in the analysis according to the framework adopted in her work
2nd semester 2017	Article	Disseminate and socialize the work done in the program	Analyze Sofia's impressions of her work in the classroom

Leading Sofia to Activity

Examining the results

Source: the authors

These actions, mobilized by the researcher, had the purpose of analyzing Sofia's movement regarding the meaning of the study activity, in the course of continuing education.

1st Stage: 1st semester of 2016

According to table 1, during the first semester of 2016, the Pedagogical Intervention in School Project was elaborated. This stage was aimed at sensitizing Sofia as to the importance of the study activity for the elaboration of her research work. For this, the reading of texts referring to its theoretical framework began. In the first moment, Sofia performed a previous individual reading of the texts. This made it possible that, in the moments of orientation, possible doubts that emerged were discussed and resolved. To conduct this stage, it was proposed to read articles, dissertations and theses.

2nd Stage: 2nd semester of 2016

In the second half of 2016, the Didactic-Pedagogical Production was prepared. At this stage, Sofia continued with the readings about her theoretical framework, and the researcher focused her guidance in the sense of subsidizing her, at this time of training, for the organization of teaching aimed at EJA students.

3rd stage: 1st semester of 2017

During the previous stages, Sofia was 100% removed from her classroom activities. The Implementation of the School's Pedagogical Intervention Project - happened in the first semester of 2017, when Sofia returned to the school with a 75% workload for its implementation. Also, getting 25% leave to dedicate to the program.

4th Stage: 2nd semester of 2017

In the second half of 2017, the last moment of the PDE program was carried out, which was the preparation of the Article, whose proposal was to analyze the actions that were developed during the implementation.

In this stage, Sofia's movement was analyzed, in relation to the results obtained, through the actions developed in the classroom. For this, Sofia's oral and written narratives, as well as those of her students, were used to support the analysis of the investigation.

The registration of the empirical data of the investigation was carried out through informal interviews, questionnaires and documents, whose purpose was to obtain information for the analysis about the problem investigated in the research.

5 Some considerations about Sofia's movement during continuing education

It was necessary to understand Sofia's reasons for analyzing the attribution of personal meaning given to the study activity during the continuing education program, and what were the actions that corresponded to this activity. At the first meeting, the researcher asked Sofia about the reasons that led her to join the PDE program, as shown in the dialogue transcribed below:

Researcher: What led you to enroll in the PDE program?

Sofia: We think ahead, level up, have a better retirement.

According to Sofia, what motivated her to participate in the PDE program was career advancement and salary increase.

Researcher: So, is doing the PDE related to salary?

Sofia: Yes, this is what moves; I had to do another post because if not, I couldn't get in, because I didn't have a score. I had already enrolled in other years, but I couldn't get in.

Researcher: How many times have you signed up for the PDE program?

Sofia: Three times, the third time I entered. My colleagues said "you have to do the PDE because it will take time to retire, you have to do the PDE".

Researcher: Have your colleagues done the PDE?

Sofia: No, my colleagues haven't done it yet because they only have 20 hours so they can't take extra classes. In the beginning it was different, you took all classes, plus extras and left, not now, you leave "smooth". Sofia meant that in previous years, those who participated in the PDE program could take standard classes plus extra classes, without any loss of salary.

Researcher: Did you have extra classes?

Sofia: There was only one group, so I lost, but I was already aware that I was going to lose, but then I was going to win. There was a time that I didn't even sign up because of that. I needed to take some extra classes because I was paying for my daughter's college and my son was also going to get married and I had to help, so I didn't enroll. Then, he started with titles and more titles, requiring at least two powders, he had to have two powders to count points.

According to the PDE program, one of its objectives was to create a permanent dynamic of reflection, discussion and construction of knowledge about school reality. In this process, the teacher is seen as a subject who learns and teaches in relation to the world and in relation to other men. Thus, it was expected that this training would have an effect on educational practices (PARANÁ, 2009).

It can be seen from Sofia's report, that the purpose of participating in the PDE continuing education program was related to the change of level for career promotion and the consequent improvement in salary.

Franco and Longarezi (2011) highlight that the continuing education of the teacher, although it has the social meaning of growth, knowledge and self-realization, is often not related to the personal sense of those who decide to just participate in such a program to simply receive something in return, such as salary increases or career advancement. In this sense, there is a divergence between personal sense and social meaning of continuing education.

The continuing education becomes an alienated process when the personal meaning does not correspond to the social meaning. The social meaning of this formative process should be to promote their participation in the production of objectivations, from the perspective of genericity, the incessant search for cultural improvement for themselves and for students. However, continuing education has often been understood by teachers as

only a means of improving wages, guaranteeing employment, survival and meeting market pressures. (FRANCO; LONGAREZI, 2011, p. 572-573).

The initial reason demonstrated by Sofia for participating in the program did not coincide with the objectives of the continuing education program, directly related to the development and improvement of the pedagogical and disciplinary foundations of a theoretical and practical character, to be built in the relationship between her studies and the school reality of the teaching and learning process.

The appropriation of knowledge, through the study activity offered by the program, may have existed in Sofia's consciousness. However, according to her speech, this reason was only understandable, but it did not determine her decision to participate in the program. According to Leontiev (1978; 2012), understandable reasons do not coincide with the objective of the activity.

What motivated Sofia to participate in the program was the possibility of advancing the State's career and raising wages. However, during the process of continuing education, it is possible that the reason that was only understandable could be modified and become an effective reason. This transformation happens when the appropriation of knowledge becomes more significant for the subject than the initial reason that triggered the activity (LEONTIEV, 2012).

In a continuing education program, the teacher must be understood as the subject of the training activity. So, for this teacher's teaching actions to transform, “[...] it is necessary that he actively participate throughout the process as the subject of his relationship with knowledge and with the process of appropriating that knowledge” (GLADCHEFF, 2015, p. 68).

The organization of teaching is seen as an important element of the learning activity, as it allows the apprehension of knowledge for both the teacher and the student. In addition, the development of appropriate tasks and materials are essential factors for the organization of the learning activity, since school tasks, organized by the teacher, can trigger the learning activity (LOPES, 2009).

Moura (1996), starting from the assumptions of Activity Theory and having the organization of teaching as an essential factor for the appropriation of

knowledge, proposes the Teaching Guiding Activity (AOE), as the unity between teaching activity and study activity in context of pedagogical activity.

[...] one that is structured in a way that allows subjects to interact, mediated by content negotiating meanings, with the aim of collectively solving a problem situation. It is a guiding activity because it defines the essential elements of educational action and respects the dynamics of interactions that do not always reach the results expected by the teacher (MOURA, 2002, p. 155).

For this author, the organization of teaching in this perspective encompasses two dimensions: the teaching activity developed by the teacher and the learning activity performed by the student. The structure of the teaching guiding activity follows the assumptions of the Activity theory advocated by Leontiev.

The teaching guiding activity has a need: to teach; it has actions: it defines the way or procedures of how to put knowledge into play in the educational space; and elects auxiliary teaching instruments: the methodological resources appropriate to each objective and action (book, chalk, computer, abacus, etc.). And, finally, the processes of analysis and synthesis, throughout the activity, are the moments of permanent evaluation for those who teach and learn (MOURA, 2002, p.155).

Lopes (2009) point up that the teaching guiding activity is a way of organizing teaching, with theoretical knowledge as its main content, and its object is the transformation of the subject in the movement of appropriation of this knowledge. It becomes a learning activity for the teacher when he assumes himself as the subject of the activity, that is, as one who also learns. “The teacher, when organizing the teaching process, also qualifies his knowledge, therefore, the AOE constitutes a teacher and student training unit” (MORAES, 2008, p. 98). This proposal conceives, teacher and student as:

[...] active subjects and, as subjects, they are individuals with knowledge, values and affection, who will be present in the way they will carry out actions that aim at new quality knowledge. (MOURA *et al.*, 2016, p.97).

In the pedagogical activity, the teaching activity is carried out by the teacher, to develop it needs to be in study activity. The actions that are developed during the training correspond to the need for teaching organization, whose proposal is to provide learning conditions for students. During the development of the Program, the objective was to identify evidence provided by the study activity in Sofia's training movement. For this, it was observed how she mobilized and acted when organizing teaching, guided by the actions proposed by the training program of which she was a part.

From this, the actions planned by the advisor (researcher) were thought to sensitize Sofia in relation to the reason, initially understandable, in effective reasons to perform actions related to the study activities that contributed to the intervention with the students of EJA.

In the orientation meetings, there were moments of analysis and reflection of what was being planned and developed for the organization of teaching for students. During the training, Sofia presented evidence about the importance of theoretical studies for her training, as well as possible contribution to her pedagogical practice. Questioned in relation to theoretical studies as a condition for better planning of classes, that is, in the organization of teaching, Sofia reports:

It contributed a lot, because through theoretical study, new knowledge is acquired, and this knowledge is necessary for teaching practice. So I was able to reflect and question the information acquired and thus plan and improve my teaching practice. [...] in addition to acquiring the habit of reading, in the classroom I try to observe and value the unique way of learning of each student.

Moretti (2007) highlights that the new actions resulting from the involvement of the teacher in training, produces a more significant result than the reason that prompted him to act, “thus allowing him to reflect on the organization of teaching and how much this influences students' work” (MORETTI, 2007, p.117). This allows the teacher to reevaluate the reason for his actions in view of the result achieved through them.

According to Leontiev (2012), the transformation of the reason happens when the result of the action is for the individual “more significant [...] than the reason that really induced it” (LEONTIEV, 2012, p.70). This means that during the training, through the study activity, it was possible for Sofia to assign new meanings to her needs and, thus, establish a new understanding about them. This was evidenced by admitting that the theoretical study was fundamental for her pedagogical activity, as it contributed to the planning of actions related to the teaching situations that he proposed to his students.

Emphasizing that the first condition of all activity is a necessity, the teacher, when deciding to participate in a process of continuing education, it does so because of the need to give objective answers to problems that afflict him in the relationships that he establishes between himself and the surrounding environment (MOURA, 2004). This need seems to have been felt by Sofia only after joining the program:

I was motivated to join the Educational Development Program (PDE), due to the advantages it offered, such as salary improvement and career advancement. But in the course of the studies, it was possible to verify that the objective of the Program goes beyond that, since the teacher leaves the classroom to talk with his peers and the academy about his pedagogical practice. This period of distance from the classroom makes the teacher reflect on his pedagogical practice (SOFIA).

Considering that the activity is driven by the motive, the movement for change, and the constitution of new motives, succeeded each other as the planned

actions, together, brought to Sofia more significant answers to her need to organize teaching. By relating the reasons, that led her to participate in continuing education and the concrete objectives of such training, new meanings were attributed to this training. Sofia's testimony shows that the new meaning attributed is not far from the social meaning of the training program. Especially when referring to her pedagogical practice and the reflection of her pedagogical practice, making it possible to re-do, that is, re-elaborate, redesign, re-evaluate what she did. Actions that made her value theoretical studies:

During these two years of studies that the Program offered was very rewarding for our professional and personal growth, as during one year the time was dedicated exclusively to theoretical and technological studies. These studies, which in the classroom would not be possible (SOFIA).

Leontiev (1978) points out that verbalized actions help to modify and transform internal thought processes.

Gladcheff (2015) considers that when reporting on the teaching activity carried out with his students, the teacher reflects on his teaching work. Through the actions that took place at the school, he made another elaboration regarding the way he acted and this contributes to his learning. This reflection can be seen in Sofia's account:

[...] the teacher needs permanent updating of knowledge and bibliographic research, because to acquire new knowledge, research is necessary for theoretical argumentation on the subject, thus aiming to overcome difficulties and improve pedagogical actions.

The actions planned and carried out by the researcher during the course of continuing education, aimed at Sofia, the attribution of new motives and with that new meanings to the study activity. According to the evidence identified through the analysis, the process of signifying the study activity occurred in a movement structured as an activity that materialized in the organization of

teaching. Through the social relationship established, in the moments of orientation for the organization of teaching, Sofia can manifest the intentionality of her actions, which, articulated among themselves, constituted her activity.

6 Finals Considerations

Based on the theoretical frameworks of the Historical-Cultural Theory, the research was based on the theoretical assumptions of Leontiev's Activity Theory that has human development as a principle, to support a proposal for continuing education committed to the training of the subjects involved in this process.

The empirical investigation of the research took place by accompanying a basic education teacher during her participation in a continuing education program offered by SEED³ of the State of Paraná. To accompany the movement of formation of this teacher, we started from three elements that constitute the theoretical framework adopted for the investigation: the reasons, the sense and the meaning. These elements served as the basis for the data analysis.

The meaning of the teacher's activity is in the action of teaching. Thus, it manifests itself in the relationships established between the subjective and objective work conditions. In this sense, we sought to develop actions that would contribute to the training process, supported by the theoretical contributions that supported the investigation, aiming at understanding the meaning of such activity.

During the training process, there was a concern to sensitize Sofia about the need to reorganize her actions and this happened in the moments of orientation in a collective work. Thus, when reorganizing their actions, they assumed the status of significant actions for the objectification of the reason, that stimulated them in the organization of teaching.

By assigning new meanings to the organization of teaching, through study activity, Sofia also gave new meanings to the choice of mediating instruments. To

³ Paraná State Department of Education

achieve the objective of her work, she chose instruments that contributed to the objective conditions for its realization.

The implementation of the project with the students allowed Sofia to reflect and evaluate her own actions in the course of her work. This enabled their autonomy in the organization and reorganization of some actions. The analysis of the data provided evidence to consider, that this autonomy was due to the articulation of the moments of theoretical activity and moments of practical activity provided by the training, aiming at the students' learning.

Another factor highlighted was the importance of study activity in continuing education programs, studies that involve specific knowledge of the concept to be taught, of learning perspectives, of the students' social context, among others.

We infer that Sofia, when relating teaching to students' learning, showed signs of having appropriated the social meaning of the continuing education program, enabling the attribution of new qualities to her educational practices. In addition, the need for the proper working conditions that an education professional needs was also expressed. Basso (1998), emphasizes the importance of considering the subjective and objective conditions for educational work. The subjective condition is related to teacher training and the objective condition to working conditions (teacher remuneration, class preparation, among others). Therefore, the continuing education offered by the PDE program is related to both the subjective conditions and the objective conditions of educational work.

In view of what was analyzed, in relation to the PDE program, the time available to teachers for study activities is essential. In this context, we can conclude that the proposal for continuing education presented in this study, through the interactions that followed, has the potential to provide quality changes in the pedagogical activity of teachers.

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