TRANSDISCIPLINARY PSYCHOPEDAGOGY: HIGHLIGHTING THE BENEFITS **BASED ON SYSTEMS THEORY**

PSICOPEDAGOGIA TRANSDISCIPLINAR: DESTAQUE PARA OS BENEFÍCIOS FUNDAMENTADOS NA TEORIA DOS SISTEMAS¹

PSICOPEDAGOGÍA TRANSDISCIPLINAR: DESTACAR LOS BENEFICIOS BASADOS EN LA TEORÍA DE SISTEMAS

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ABSTRACT: Transdisciplinary Psychopedagogy understands the individual as a whole, based on the systems theory. We must investigate how the organism, body, desire, and intelligence, which integrate the subject's life structure, are found, since they are parts of the individual and interfere in the learning process. In psychopedagogy, the diagnosis based on the transdisciplinary theory aims to guide psychopedagogues to have a different look during the evaluation of their patients. Thus, this experience report was based on a qualitative and descriptive bibliographic research to elucidate this diagnosis in the clinical context, with the purpose of guiding psychopedagogues to have a differentiated look. The results showed that when we understand this look as a whole, without leaving aside the parts that make up the system in which this individual is inserted, we can elucidate the entire process of diagnosis and psychopedagogical treatment for this subject. Thus, we carried out a work with support and, in a certain way, we understood the whole process in which this subject was constituted at school and outside of it, carrying out some sessions of individual interventions in order to present to this subject that he/she is capable of learning.

KEYWORDS: Transdisciplinary psychopedagogy. Systems theory. Psycho-pedagogical diagnosis.

RESUMO: A Psicopedagogia Transdisciplinar compreende o indivíduo como um todo, fundamentando-se na teoria dos sistemas. Devemos investigar como encontram-se o organismo, corpo, desejo e inteligência, que integram a estrutura de vida do sujeito, já que são partes do indivíduo e interferem no processo de aprendizagem. Na psicopedagogia, o

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¹ According to Bassedas *et al.* (1996) the system can be understood as a set of elements that reciprocally depend on each other (family) to form an organized whole. To this end, it is extremely important to analyze the system around its environment, verifying the relationship between the system itself and the environment in which it is

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diagnóstico realizado baseando-se na teoria transdisciplinar, tem o intuito de orientar psicopedagogos a ter um olhar diferenciado durante a avaliação de seus pacientes. Assim, este relato de experiência, partiu de uma pesquisa com abordagem qualitativa e descritiva bibliográfica para a elucidação deste diagnóstico no contexto clínico, com o objetivo de orientar profissionais psicopedagogos para um olhar diferenciado. Os resultados apontaram que, quando compreendemos esse olhar direcionado como um todo, sem deixar de lado as partes que compõe o sistema em que este individuo está inserido, elucidamos todo o processo de diagnóstico e de tratamento psicopedagógico para este sujeito. Sendo assim, efetuamos um trabalho com respaldos e, de certa forma, compreendemos todo o processo em que este sujeito se constituiu na escola e fora dela realizando algumas sessões de intervenções individuais a fim de apresentar para este sujeito que é capaz de aprender.

PALAVRAS-CHAVE: Psicopedagogia transdisciplinar. Teoria dos sistemas. Diagnóstico psicopedagógico.

RESUMEN: La Psicopedagogía Transdisciplinar entiende al individuo como un todo, basándose en la teoría de los sistemas. Debemos investigar cómo se encuentran el organismo, el cuerpo, el deseo y la inteligencia, que integran la estructura vital del sujeto, ya que son partes del individuo e interfieren en el proceso de aprendizaje. En psicopedagogóa, el diagnóstico basado en la teoría transdisciplinar pretende orientar a los psicopedagogos a tener una mirada diferente durante la evaluación de sus pacientes. Así, este informe de experiencia se basó en una investigación bibliográfica cualitativa y descriptiva para dilucidar este diagnóstico en el contexto clínico, con el propósito de orientar a los psicopedagogos para una mirada diferenciada. Los resultados señalaron que cuando entendemos esta mirada como un todo, sin dejar de lado las partes que conforman el sistema en el que se inserta este individuo, dilucidamos todo el proceso de diagnóstico y tratamiento psicopedagógico para este sujeto. Así, realizamos un trabajo con apoyos y, en cierto modo, comprendimos todo el proceso en el que se constituyó este sujeto en la escuela y fuera de ella, realizando algunas sesiones de intervenciones individuales para presentar a este sujeto que es capaz de aprender.

PALABRAS CLAVE: Psicopedagogía transdisciplinar. Teoría de los sistemas. Diagnóstico psicopedagógico.

Introduction

Psychopedagogy in Brazil emerged in the 1970s and, for a long time, the problem of learning was explained as a product of organic factors, resulting in school failure. In the 1980s, new assumptions emerged, but this time socio-political, in which learning problems became "teaching problems." Since then, several scholars and theorists have been improving and rewriting different conceptions about learning problems such as Bossa (2002), Rubinstein (2014), Pain (1985), Fernandes (1991) among others.

Bossa (2019) when referring to psychopedagogy, recognizes it in its transdisciplinary perspective referring us to an understanding of the object of study: the subject.

Thought is one, we do not think intelligently on the one hand and then, as if turning the dial, we think symbolically. Thought is like a web in which intelligence would be the horizontal thread and desire vertical. At the same time, symbolic meaning and the capacity for logical organization take place (BOSSA, 2019 apud FERNANDEZ, 1990, p. 67) (Our translation).

From all these changes in the course of the profession and to redirect myself to what else we had at the moment regarding psychopedagogy, I went in search of the new, of what crossed the walls of psychopedagogical evaluation, with a different look, without blurring what more importantly, the subject.

Transdisciplinary Psychopedagogy was the way to achieve my goal. Returning to the University in 2017 as a re-entry in the specialization course in psychopedagogy and the possibility of feeling and experiencing in practice how important this redirection based on the fundamentals of systems theory was, made me record this whole process from the fabric of this report of experience.

The report that I present here intends to offer the reader proven subsidies about and with the practice of transdisciplinary, from the psychopedagogist's point of view for the subject as a whole within the system in which he is inserted, placing the subject as the main point, observing questions about your organism, body, desire and intelligence. Its relationship with the environment where it is inserted, that is, the system, was also observed, all together, in individual clinical sessions, resulting in an analysis, intervention and later discharge of the patient.

This survey, of an applied nature, has a qualitative approach of a bibliographic descriptive nature on a clinical care as an intern re-enters the psychopedagogy course, to present professionals in the area, within my reported experience, an approach that provides a differentiated look at the subject to be investigated. The subject, object of study, is a case of continuity in the field of psychopedagogy. Therefore, as it is an internship, all the documents necessary for the family's authorization for data collection and analysis were collected. His identity was maintained throughout the description, using the codename Lucas, age, school year. When contacting her medical record in the first half of 2018 and analyzing all the issues involved and described until that particular moment, I was evaluating, analyzing and thinking about transdisciplinarity, without taking my eyes off that learner who was under my care. The ability to listen and to have a differentiated look, based on transdisciplinary psychopedagogy

and supported by systems theory, made me understand that making a psychopedagogical assessment goes beyond theoretical issues. It is about overcoming the fragmentation of knowledge in isolated disciplines and finding the paths to a multidimensionality of what is real, acquiring specific knowledge from different theories, to focus transdisciplinary on the subject, our object of analysis.

Theoretical foundation

In order to share with you this moment I spent and to point out what were the evidences that brought quality to my professional career, we must initially remember that Psychopedagogy has already gone through three phases.

About this, Rubinstein (2000) states that it is possible to distinguish three different conceptions of this area of knowledge throughout history, naming them as: Reeducation, Dynamic Psychopedagogy and Transdisciplinary Psychopedagogy.

The first conception, Reeducation, originated in the context of the time itself, was based on the organicist vision, that is, what mattered was only the organic dimension present in the learning process. "The biggest concern was with the techniques that would best contribute to promoting recovery. Difficulties were understood as disturbances, inability. [...] Educators sought explanations through neurology" (RUBINSTEIN, 2000, p. 418). Standardized tests and standardization were the most important aspects in the assessments. There were still no instruments specific to Psychopedagogy, and some tests were employed from other areas that today, in addition to not meeting the psychopedagogical demand, many of them are no longer allowed, their use outside the area that produced them, therefore, were vetoed to the psychopedagogue.

Bossa (2019) supports the idea or thought that the belief that learning problems were caused by organic factors lasted for many years and determined the treatment given to the issue of school failure until very recently. In Brazil, for many years, learning problems were explained as a product of organic factors presented by the subject himself. Psychopedagogues sought answers to learning difficulties in neurology. The main concern was centered on the techniques used for the patient's recovery. It was an organicist vision.

In Dynamic Psychopedagogy, the second approach in the historical order, the concern is focused on the subjectivity aspects of the subject's learning. Learning as a knowing subject, as a process, was the central theme in this approach, taking into account the subject of this learning as a starting point, and then understanding the issues related to knowledge and how

to deal with them, in addition to understand how the subject learns, how he thinks and what leads him to do so.

The advantage of this approach would be to help broaden the educator's view of children who do not learn or learn differently, in another style, and who knows, make them more productive and thus help to reduce the oppression of homogenized knowledge that afflicts those involved: parents, children, teachers and other specialists (RUBINSTEIN, 2014, p. 46) (Our translation).

It was then noticed that the dialogue between various areas of knowledge such as psychoanalysis, linguistics, etc. would be of fundamental importance for dynamic psychopedagogy.

Finally, the Transdisciplinary approach emerges. This conception is at the same time between the disciplines and beyond the disciplines. It emerges from the moment when professionals who worked in this area felt the need to build their own instruments for the investigation of learning subjects.

It came with maturity and was the result of accumulated experience. Within this conception, the aim was to evaluate the learning potential and the process itself. There is greater balance in understanding the aspects of objectivity and subjectivity. The professional's technique is valued, his own style of work and not the techniques themselves (RUBINSTEIN, 2000, p. 420) (Our translation).

Alvarenga *et al.* (2005), discusses the incorporation of interdisciplinary thinking as fundamental, pointing out new perspectives that find spaces from disciplines that contemplate the totality of an articulated knowledge. This transdisciplinary thinking ends up benefiting from the discussion of the interdisciplinarity that precedes it, in the different fields of knowledge, concerned with the fragmentation of this knowledge.

In this perspective, transdisciplinarity does not deny the disciplinary, since it starts from the disciplinary, but relativizes it, constituting itself in a knowledge that organizes different knowledge needs and proposes the meeting between the theoretical and the practical, between the philosopher and the scientific, presenting it if, thus, as a knowledge that is of the order of complex knowledge (ALVARENGA *et al.*, 2005 p. 16) (Our translation).

And it was in transdisciplinary psychopedagogy that I definitely found myself and obtained surprising results in my visits, not found before. When we analyze the learning subjects starting from a transdisciplinary conception, we see beyond them, or rather, we are able to analyze this subject within an open system (family) but inserted in an environment

(school) where all parties involved in the learning process of this individual become important for their development and possible causes of learning problems.

By way of experience

I completed my education in Psychopedagogy in 2012 at a university in the countryside of São Paulo state. Since then, I have worked in two sectors of psychopedagogy: as an institutional psychopedagogue in a school and as a clinical psychopedagogue in my own private practice. However, some concerns accompanied me on this journey. I then decided to re-enter in 2017 a specialization course in psychopedagogy. Although I already had the title of specialist in psychopedagogue, I chose this path as a way to update myself. So, now as an intern, I was able to experience something that, in my opinion, was really significant, learning Transdisciplinary Psychopedagogy in practice, which did not happen in the previous course. Psychopedagogy that perceives the whole, as it is, without leaving aside the parts, in other words, the subject is not isolated from the world in which he lives, he has a structure, a family and is inserted in an environment that we must consider as a set of factors for learning. In a transdisciplinary perspective, it is one that understands the patient within a system that works in its entirety, without isolating its members. One that emphasizes the concept of the individual seen as a whole. A whole that takes into account the organism, the body, the desire, the intelligence and the context in which it is inserted.

The case that I will present refers to an 11-year-old boy, attending the sixth year of elementary school, at a State Public School Unit in São Paulo state countryside. This teenager had already been treated at the University clinic by two supervised interns: one from the area of psychology, in 2015 to 2016, and the other, from the psychopedagogy itself in 2017, the latter of which recommended the continuation of a psychopedagogical work for the next year. I imputed the case following the University's own guidelines.

The process of Cycle I: The beginning of the evaluation

I started a first consultation with the parents and then a study of the adolescent's medical records, a procedure foreseen because it is a clinic within a university. Important data were collected about its development, as well as its evolution, which will be presented in this report.

This teenager, called by the fictitious name of Lucas, is the son of divorced parents, has two sisters and they all live with his mother. Lucas has a heart anomaly called Ebstein Anomaly, which according to our literature:

> Ebstein's Anomaly is a congenital heart disease in which the patient is born with the tricuspid valve of the heart (which separates the atrium from the right ventricle) located further into the ventricle (a different location than usual). In most cases, surgical correction is necessary (SOUZA, [202-?] [Web], emphasis added) (Our translation).

When it causes problems in the individual's daily life, he needs surgery, which so far is not the case for this individual, according to his cardiologist. A very important fact that appeared was a report that the younger sister suffered sexual harassment from her mother's ex-partner (a relationship they had after the end of the relationship with the children's father and before the current partner) and that the boy had witnessed the whole process of the tutelary council, and also of the police in her house, which in a way, according to her mother, interfered with her emotional behavior.

Her first referral to the clinic, in 2015, was made by an institution where he had taken Occupational Therapy due to an unspecified psychomotor problem. The speech-language pathology report brings the diagnosis of F80. 9 - Non-specific disorder of speech or language development. After undergoing psychological screening, he was referred for evaluation and treatment in psychopedagogy, where he remained for a year with little improvement and was continued for 2019.

After analysis and observation, it was noticed that there were some gaps in this chart. Thus, I experienced the need to redo some assessments and to think about which path I would follow to assist this patient. I redid the Vital History to understand a little more the context in which he was inserted.

From the family point of view, the mother always says that Lucas has difficulties and does not learn, and considers him lazy. He talks in front of his son about his difficulties, he always defends himself saying that he is getting better. She thinks Lucas' resistant behavior is

due to her difficulty in educating him. When he does not respect her, she uses physical punishment, but he cannot establish dialogue and rules with his son.

According to data collected by the first intern, Lucas had difficulties in showing his knowledges. Did he present hypoassimilation and hyperaccommodation, always showing insecurity in carrying out the activities, hoping that there was a correct way to be done and, what is, his view, different from what he knew how to perform in the learning processes?

According to Pain (1985), the dimensions of the learning process involve four factors, constituting an effect, which in this sense, is a place of articulation of schemas. In this place of the learning process, a historical moment of the individual coincides: the biological, social and cognitive dimension of learning, and a learning process as a function of the self.

Cognitive function needed to be investigated again, as the analyzed data raised doubts about their school learning. In principle, the teenager showed delay in school contents due to his behavior and how the relationship with learning took place so far present in his chart, however, apparently, he did not present any disorder in the development of speech and language. The results collected were also not complete and some specific assessments were lacking to be applied.

Investigating Lucas' cognitive process through specific assessments of school skills and Piaget's operative tests, the results presented in both were consistent with the child's grade/age.

As for the linguistic part, when writing a free text production, there were some spelling errors, and the non-usability of technical standards for writing such as: punctuation, paragraph, capital letter, etc. This caused a textual disorganization, which resulted in the impossibility of understanding his writing. It became necessary to rewrite its text, using punctuation, and all the systematic norm of the Portuguese language. It was noticed that after this reorganization, his ideas presented coherence and temporal structure (from start to finish). Thus, there was a question of the correct use of grammatical markers.

Effectively, there was a self-organization of the gaze, emerging new properties. So, what was the role of the symptom in this system?

I could see that if I were just looking at the textual production, disregarding its content, I would not realize that Lucas presents a healthy learning modality, where his assimilation and accommodation are activated. In this way, to say that the hypothesis that the teenager could have some problem in the concept of the Portuguese language was wrong, because we proved that his linguistic thinking has coherence, has meaning and that, in principle, the transdisciplinarity that transposes the idea of discipline, of parts, which goes

beyond itself, has brought us human knowledge, surpassing fragmentation. Griz (2006, p. 77), analyzes the path to transdisciplinarity as a process by which the "[...] subject is analyzed as a global being, transversalized, in its singularity, by a plurality, as a subject inserted in a culture". Thus, the recurring mistakes that he had been committing in writing would not be directed to the psychopedagogical intervention, but to a pedagogue, a private class or a school reinforcement.

It was now necessary to investigate the desire, that is, his 'self'. I was constantly wondering how to proceed with the investigation. He needed to find out how much the emotional would be interfering with his learning, but, for that, he should review his vital history again, directing his look and listening to the family. This, understood as an open system, could be healthy or in crisis and, a priori, would be the next analysis to be made.

Basseda and Cols (1996) when talking about open systems within systems theory, discuss the properties of these systems. Among them, we find circular causality, totality, equifinality and self-regulation.

Circular causality is configured as a circular reality, that is, it understands the family as a system that is in continuous interaction, with each other, and that the behaviors of some influence us and others and vice versa. In totality, the changes that occur in some part of the system lead to the change of the system as a whole. Equifinality brings the idea that the same cause can generate different results and that an outcome can have different causes. In selfregulation, like systems, they suffer interference from the outside and the inside. The system tries to regulate itself, maintaining homeostasis, or to stimulate and accentuate the transformations, bringing about the changes.

And it was precisely with this circularity in mind that I replicated the vital story – of Lucas. In it, I got several indications of the parental relationship that exists in the house where Lucas lives. His relationship with his mother seemed a little distant to me, and Lucas' "self" was constantly asking for help in this relationship.

In Transdisciplinary Psychopedagogy it is impossible to deal with any subject without looking at the whole. Every symptom is a communication between the subject and the system in which it is inserted. The symptom finds its meaning within the system and not only in the subject himself. Banyai's book (1995) can be deduced as a metaphor for these ideas understanding the whole. This is because, images are presented that resize one within the other when turning pages, where we can read it from front to back and back to front. And it was exactly when I started to look at the whole constitution of the subject Lucas, that this case brought meaning.

There were incomplete data, results that were not amenable to analysis to reach a conclusion. We had data regarding the organism: Ebstein syndrome, a speech-language pathologist opinion framed in F80.9 - Non-specific speech or language development disorder as well as a delay in its psychomotor development in 2013, diagnosed and treated by a therapist occupational health, which after six months, he was discharged. All these data, still existing or not, excluded any possibility of interference in Lucas' learning.

Fernandez (1991) states that we must position the learner in a circular scene, which contains four structures: organism, body, desire and intelligence. These are rooted in the family and culture in which we live and which,

[...] in turn, they are built or installed through a constant and permanent interrelation with the family and social environment. Learning is, then, one of the functions for which these levels can interrelate with the outside and, in turn, conform to themselves in a dialectical process (FERNANDEZ, 1991, p. 52) (Our translation).

When I reported to the body, I noticed that Lucas had a block movement when walking, with residue on the right side, visible on the upper part of the body. Probably, arising from the delay in psychomotor development evaluated in 2013. For a more detailed verification of this item, an investigation with a psychomotricity test will certainly be necessary.

As for the desire, although it was previously reported about the need to return to Lucas's vital history during the sessions, it was possible to observe that, at the same time that he had pleasure in carrying out the activities that are proposed to him, expressing the desire to know, presented body movements in the face of challenges that lead us to the meaning of despair.

His intelligence, within a cognitive structure, left us with no doubts as to his ability: in the operative diagnostic tests, he was within the expected for his age, classified within the operational thinking stage as concrete, according to the table presented by MacDonell (2004). As for the learning poles, assimilation and accommodation were activated alternating between them. This means, according to Fernandez (2001, p. 88) that:

The learning modality will mark a particular way of relating, seeking and building knowledge, a positioning of the subject in front of himself as the author of his thought, a way of discovering-building the new and a way of doing that is proper to others (Our translation).

Regarding academic performance, what was collected until the end of 2017 put us in doubt. Psychopedagogical assessments of school competences were applied regarding the

grade/year Lucas was in. The results were apparently not satisfactory both in Portuguese and in Mathematics. Lucas presented a phonological reading, that is, it lacks accuracy, speed and especially prosody. In Mathematics, the questions presented as problem situations could not be solved, probably because of reading.

Through these reflections, in the supervision, we decided to redo Lucas' diagnostic synthesis.

The cycle II process: The decision to rediagnose

Considering the properties that are found within the systemic relationships and that, within an open system, there is no isolated thought, everything is somehow interconnected, we decided to verify, initially, if the subject had an established link about learning, or rather, how the learning process was internalized by him and how he perceived the one who teaches and the one who learns. In this way, it was decided to reapply the test of the educational pair since Lucas had been presenting many difficulties in the academic subjects, which had been causing over the years a departure from these bonds.

Visca (2018) approaches the learning process as the production and stabilization of behaviors, in fact becoming learnings that are produced both in the school context and those that are manifested in the social and family environment. In this sense, it is extremely important to know the bond that the subject establishes with the teacher, as well as which adult the learner looks up to serve as a model for learning.

These different links constitute, on the one hand, a network of universal relationships insofar as every subject is immersed in it, and on the other hand, particular relationships, as each subject structures each link and the total plot in a unique way (VISCA, 2018, p. 16) (Our translation).

Afterwards, the game time was used as a projective technique. Pain (1985) presents this technique as a playful activity, represented by a box with various school, stationery and recycled materials, where the child can create whatever they want, "bringing information about the schemes that organize and integrate knowledge at a higher level". representative" (PAIN, 1985. p. 51). It is possible, through this technique, to verify the child's interrelation with the unknown and the type of obstacle that emerges from this relationship, as well as to enable a reading of the aspects related to the child's semiotic function, through symbols, verifying the level of accommodative and assimilative processes.

It was observed, during the sessions held until June 2019, that Lucas has a block movement when walking and presents residue on the upper right side. In his medical record, it

is stated that in 2013 a problem was identified in his psychomotor development and treated for six months by an occupational therapist, and then he was discharged. Given this observation and this document, we decided to apply psychomotricity tests for a more adequate verification.

Oliveira (2014) clarifies that the child uses the body as a point of reference to interact and get to know the world around him. An unorganized body, which does not obey, is harming its intellectual, social and affective-emotional development, since it does not have confidence in its potential. It harms school development, as some psychomotor skills are necessary for learning and development.

Behaviors such as: balance coordination, body scheme, laterality, spatial orientation and body orientation were investigated. All had an unsatisfactory performance, that is, below expectations for their age, which may, in a way, be influencing their learning.

At that moment, reorganizing this entire investigation process, I referred to desire. About desire and intelligence in learning, we can take a look from what Fernandes (1991, p. 67) discusses that: "[...] the thought is just one, it is like a plot in which intelligence would be the horizontal thread and desire the vertical thread. At the same time, symbolic meaning and the capacity for logical organization take place".

Analyzing the desire that this child showed to learn together with the result obtained in the evaluations carried out on the cognitive process, perhaps the problem was in the parental relationships. I couldn't look at the parts if we had a whole. A whole involved with the parts.

I requested the mother's presence to investigate how was the child's relationship with her siblings and herself. After this conversation, I discovered that the mother believed that her son was lazy, fighting and forcing him to solve school activities alone, not having any patience with him. The mother forced the older sister to help him. He thought that his son had cognitive problems and, therefore, was not doing well with his academic grades. In addition, the mother worked a lot and the time she had was to organize her house. On weekends, Lucas would go to a friend's house and only return on Monday.

Fernandes (2001) talks about learning modalities and teaching modalities. The learning modality supposes a relational mold that each subject uses to learn. The teaching modality refers to a way of showing what you know and a way of considering the other as a learner. From the learning modality, in each individual, a teaching modality is built.

In the projective test applied at the beginning of the reassessment in Lucas, his learning modality was healthy, where his assimilation and accommodation poles were activated. The modality of parental education was also healthy, as one builds the other, forming a whole.

It was observed that after all this process of reassessment and analysis of all aspects that involved this system (family), the child was part of a system in crisis, where the symptom was itself immersed in its not learning.

The cycle III process: The new results of the new diagnosis

In view of all this data collection and thinking about transdisciplinary psychopedagogy, the diagnostic hypothesis of this child resulted in learning difficulties. It was observed throughout the period in which the assessments were applied that, using the Zone of Proximal Development (ZPD), proposed by Vygotsky (2001), the child can understand the proposal presented and perform the activity in a pleasant and assertive way. What Lucas needed was to be encouraged to believe in himself. See, now you bring up another psychologist a little different from Piaget's perspective without having announced it to the reader beforehand. In other words, we used Piaget for this reason... we used Vygotsky at another time for another analysis of the subject or the subject's learning processes.

When carrying out the feedback with the mother, I highlighted the negative points of the child, affirming at all times that the positive points outweigh the negatives. I oriented her to try to help him, supporting him to research, without fights and offenses, as this type of behavior on her part further harmed the feeling of fear and insecurity that he presented in the learning processes. The mother was very sensitive to her son's difficulties, but I reassured her that there was no need to be worried, as the son only had a learning disability and that, with the intervention sessions, we would try to help him with some of these problems.

In the psychopedagogical interventions, activities were introduced to be worked on related to motor coordination, laterality and temporal and spatial orientation. Activities that led him to a better cognitive resourcefulness in academic structures, using the ZPD and instruments that made him think differently in school activities, proposing challenges in order to encourage him to have a healthy competition.

Lucas evolved throughout this therapy, showing advances in terms of reducing the insecurity he had, creating confidence in himself, interest in learning and progression in his academic grades, as well as congratulations from the teachers and his family on his achievements. The need now was for a referral to a psychologist and a follow-up of a school reinforcement.

After all aspects worked out with this patient, we opted for discharge and a referral to psychological therapy to solve the emotional problems caused by various family events, some described in this experience report.

Final considerations

From this report, we found that there was a construction of knowledge with transdisciplinary psychopedagogy supported by the benefits based on systems theory. Approaching the obstacles presented by the subject, seeking subsidies in the construction of knowledge and of educational practice with the interrelationship in subjective, cultural, social and family particularities are part of the existing relations between thought and subjectivity. This differentiated look at the individual's learning and the teaching process takes place through the analysis of cognitive and symbolic behaviors, observed and analyzed in the light of transdisciplinarity.

The "listening" and the differentiated psychopedagogical "look" are necessary for an assertive diagnosis. I think that if I had stopped at the end of my initial education and had not returned as I re-entered the psychopedagogy course to update myself, I would not have had the possibility of having known transdisciplinary psychopedagogy, which taught me to transpose the idea of discipline, of parts, to go beyond, learning that talking about human knowledge goes beyond fragmentation. Today, I realize that before I could not reorganize my look, my therapy was based on dynamic psychopedagogy, where I evaluated the individual with a view of family, society, school, etc. It widened my gaze, but I couldn't look at all sides at the same time, it was linear. At this very moment I realize that transdisciplinarity has helped me to look at what is happening, at the same time, across disciplines, across disciplines, and beyond all disciplines. The objective of this report is to place the reader on the understanding of the present world, but one of the imperatives for this is the unity of knowledge and the understanding of the processes of constitution of the subject as singular in the learning processes, at school and in other social spheres of human activity in to direct it to a differentiated look at our learner.

REFERENCES

ALVARENGA, A. T.; SOMMERMAN, A.; ALVAREZ, A. M. S. Congressos internacionais sobre transdisciplinaridade: reflexões sobre emergências e convergências de idéias e ideais na direção de uma nova ciência moderna . **Saude soc.**, São Paulo, v. 14, n. 3, p. 9-29, 2005. ISSN 1984-0470. DOI:

10.1590/S0104-12902005000300003. Available:

https://www.scielo.br/j/sausoc/a/5w3pJVjCS5tvTVHVJ65vWnF/?lang=pt. Access: 02 aug. 2021.

BANYAI, I. **ZOOM.** Rio de Janeiro: Brinque Book, 1995.

BASSEDAS, E. *et al.* **Intervenção educativa e diagnóstico psicopedagógico**. 3. ed. Porto Alegre: Artes Médicas, 1996.

BOSSA, N. A. **A psicopedagogia no Brasil**: contribuições a partir da prática. 5. ed. Rio de Janeiro: Walk Editora, 2019.

FERNÁNDEZ, A. A Inteligência aprisionada: abordagem psicopedagógica clínica da criança e sua família. Porto Alegre: Artes Médicas, 1991.

FERNÁNDEZ, A. **Os idiomas do aprendente**: análise das modalidades ensinantes com famílias, escolas e meios de comunicação. Porto Alegre: Artes Médicas, 2001.

GRIZ, M. G. S. O caminho para a Transdisciplinaridade. **Psicopedagogia: Revista da associação Brasileira de Psicopedagogia**, São Paulo, v. 23, n 70, p. 77-80, jan./abr. 2006. Available: http://www.revistapsicopedagogia.com.br/detalhes/412/o-caminho-para-a-transdisciplinaridade. Access: 30 nov. 2021.

MAC DONELL, J. J. C. **Manual Provas do Diagnóstico Operatório**. Translation: Carlber, Simone. Buenos Aires, Argentina: Centro de Informática Psicopedagógica SRL – CIP, 1994/2004.

RUBINSTEIN, E. A psicopedagogia no Brasil. *In*: CONGRESSO BRASILEIRO DE PSICOPEDAGOGIA, 5., 2000, São Paulo. **Anais** [...]. São Paulo: Vetor, 2000. p. 418-422.

RUBINSTEIN, E. R. **O estilo de aprendizagem e a queixa escolar**: entre o saber e o conhecer. 2.ed. São Paulo: Casa do Psicólogo, 2014.

VYGOTSKY, L. S. **Psicologia Pedagógica**. Translate by Paulo Bezerra. São Paulo: Martins Fontes, 2001.

VISCA, J. **Técnicas projetivas psicopedagógicas e pautas gráficas para sua interpretação**. 6. ed. rev. Ciudade Autónoma de Buenos Aires: Visca & Visca Editores, 2018.

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