

THE HISTORICAL-CULTURAL THEORY AND THE EDUCATION OF PEOPLE  
WITH INTELLECTUAL DISABILITIES

*A TEORIA HISTÓRICO-CULTURAL E A EDUCAÇÃO DE PESSOAS COM  
DEFICIÊNCIA INTELECTUAL*

*LA TEORÍA HISTÓRICO-CULTURAL Y LA EDUCACIÓN DE LAS PERSONAS CON  
DISCAPACIDAD INTELECTUAL*



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**How to reference this paper:**

NORONHA, A. M.; SILVA; S. C. R.; SHIMAZAKI, E. M. The historical-cultural theory and the education of people with intellectual disabilities. **Revista Ibero-Americana de Estudos em Educação**, Araraquara, v. 18, n. 00, e023025, 2023. e-ISSN: 1982-5587. DOI: <https://doi.org/10.21723/riaee.v18i00.17611>



| Submitted: 05/01/2023  
| Revisions required: 23/01/2023  
| Approved: 02/02/2023  
| Published: 04/05/2023

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**Editor:** Prof. Dr. José Luís Bizelli  
**Deputy Executive Editor:** Prof. Dr. José Anderson Santos Cruz

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**ABSTRACT:** This theoretical discussion aims to present basic principles related to the bases of the defectology proposed by the Historical-Cultural theory. It is guided by the questioning: Which concepts discussed by the Historical-Cultural theory underpins the education of people with intellectual disabilities in the context of the inclusive school? The empirical data were produced from bibliographic research and using the application Voyant tools. The analysis of the basic concepts occurred through the content analysis (BARDIN, 2011). As results we discussed the main concepts, which currently are the base of inclusive education: learning and development of children with intellectual disabilities; social interaction; compensation; cultural development and mental processes, functions, and capabilities. We also indicate these concepts as resources to researches within inclusive education and the relevancy and the Historical-Cultural theory for the defense of non-segregation and isolation in educational and social contexts with people with disabilities.

**KEYWORDS:** Social compensation. Special education. Inclusive education.

**RESUMO:** *Esta discussão teórica objetiva apresentar conceitos basilares relacionados aos fundamentos da defectologia propostos pela teoria Histórico-Cultural. Está pautada no questionamento: Quais conceitos discutidos pela teoria Histórico-Cultural fundamentam a educação de pessoas com deficiência intelectual no contexto da escola inclusiva? Os dados empíricos foram produzidos a partir de pesquisa bibliográfica e o do uso da ferramenta Voyant tools. Os conceitos basilares foram analisados por meio da análise de conteúdo (BARDIN, 2011). Como resultados, discutimos os principais conceitos que fundamentam atualmente a educação inclusiva: aprendizagem e desenvolvimento de crianças com deficiência intelectual, interação social, compensação, desenvolvimento cultural, processos, funções e capacidades mentais. Indicamos ainda esses conceitos como aportes para pesquisas no âmbito da educação inclusiva e a relevância de recorrer a teoria Histórico-Cultural pela defesa da não segregação e isolamento educacional e social de pessoas com deficiência.*

**PALAVRAS-CHAVE:** *Compensação social. Educação especial. Educação inclusiva.*

**RESUMEN:** *Esta discusión teórica objetiva presentar conceptos basilares relacionados a los fundamentos de la defectología propuesta por la teoría Histórico-Cultural. Se basa en cuestionar: ¿Cuáles conceptos discutidos por la teoría Histórico-Cultural fundamentan la educación de personas con discapacidad intelectual en el contexto escolar inclusivo? Los datos empíricos fueron producidos a partir de la investigación bibliográfica y del uso de la herramienta Voyant tools. El análisis de los conceptos basilares ocurrió a través del análisis de contenido (BARDIN, 2011). Como resultados discutimos los principales conceptos, que fundamentan actualmente la educación inclusiva: aprendizaje y desarrollo de los niños con discapacidad intelectual; interacción social; compensación; desarrollo cultural, procesos, funciones y capacidades mentales. Indicamos, todavía, estos conceptos como contribuciones para investigaciones en el campo de la educación inclusiva y la relevancia de recurrir la teoría Histórico-Cultural por la defensa de la no segregación y aislamiento educacional y social de personas con discapacidad.*

**PALABRAS CLAVE:** *Compensación social. Educación especial. Educación inclusiva.*

## **Introduction**

This paper includes discussions of concepts that we consider fundamental for inclusive pedagogical practices for students with intellectual disabilities. The justification that led to this study, within the scope of inclusive education, was the concern to broaden our understanding about the learning processes of students with intellectual disabilities, in order to contribute to the development and stimulation of higher mental processes of these individuals, supporting pedagogical actions in the assimilation of scientific concepts by these students, who, in many cases, have remained on the margins of the possibilities of formation of theoretical thought.

People with intellectual disabilities, historically, have been segregated from social interaction, including in school spaces. One of the reasons for this was the understanding that such individuals were capable of learning only basic and limited concepts. Thus, their educability was predominantly based on clinical categories, having the medical field as an influential factor in special education, to such an extent that a system of education was instituted parallel to and substitutable for the common education system.

Education for students with disabilities began to be rethought after three main documents, the World Declaration of Education for All (UNESCO, 1990), the Declaration of Salamanca (UNESCO, 1994), and the International Convention on the Rights of Persons with Disabilities (BRAZIL, 2007). These documents have indicated conceptual and historical changes in the field of education for people with disabilities. In the Brazilian context, in the face of the movement toward special education from the perspective of inclusive education, we have experienced the development of specific public policies. Among the main documents, besides those already mentioned, we highlight the National Policy for Special Education from the Perspective of Inclusive Education (BRAZIL, 2008) and the Statute of the Person with Disability (BRAZIL, 2015).

Given these public policies, there has been a re-signification of the concept of disability, historically based on the defective body, on physical and intellectual incompleteness, and on the clinical and medical view to a social model. Special education went from segregationist to inclusive, in order to contribute to the inclusion of children with disabilities in the common school. The principles that currently underpin inclusive education, i.e., access, permanence, learning in regular school, in addition to appropriate pedagogical practices to meet the needs also of students with disabilities, are found in studies related to the Historical-Cultural theory. Vygotski (2005) by postulating that all people learn and that knowledge is developed through interactions, possibly thought of an education equal for all, that is, an inclusive education. The

author advocated for the non-segregation of students with disabilities and argued that the special school was driven by charities, which would cause morbidity and not overcome disability.

Aiming to present basic concepts related to the defectology foundations proposed by the Historical-Cultural theory, we seek to answer the following question: Which concepts discussed by the Historical-Cultural theory are the basis for the education of people with intellectual disabilities in the context of inclusive school?

This study is, therefore, bibliographic research, supported by a theoretical corpus, composed of two texts by Vygotski (1997) initially published in Selected Works, Volume V, "Foundations of Defectology": "Defectology and the study of the development and education of the abnormal child" and "About the compensatory processes in the development of the mentally retarded child". Translated versions of these texts dating from 2011 and 2018, respectively, are used, due to the fact that they are in the public domain, to have Vygotski (2011, 2018) as reference. In addition to these two texts, we used the text "Learning and Intellectual Development at School Age" by Vygotski (2005) and the text "The Principles of Mental Development and the Problem of Mental Retardation" written by Leontiev (2005), both published in the work "Psychology and Pedagogy: Psychological Basis of Learning and Development".

The empirical data were produced from the works already mentioned, and the use of the Voyant tools tool, through which it was possible to identify the concepts most used by theorists in their texts, organize them in a word cloud (Figure 01) and analyze them by content analysis (BARDIN, 2011). Some concepts and defenses of Vygotsky and Leontiev, present in the corpus of analysis, which contribute and bring implications for school inclusion of people with intellectual disabilities, are put under debate. We highlight the main concepts discussed by the theorists: learning and development of children with intellectual disabilities; social interaction; compensation; cultural development; processes; mental functions and abilities. To have support in the dialectic thought, it would not be coherent to discuss the concepts in an isolated way and without articulation.

## Methodological Considerations

To indicate the main contributions of the Historical-Cultural theory in the education of people with intellectual disabilities, we conducted a literature search in writings by Vygotski (2005, 2011, 2018) and Leontiev (2005) that deal with this disability. We used the content analysis method (BARDIN, 2011) because it can have its focus directed by the frequency of words in a given text (ALVES *et al.*, 2015). The content analysis was planned from three steps, which are explained below (ALVES *et al.*, 2015):

1) Pre-analysis: in this phase the texts were selected and the questions and objectives formulated.

2) Exploration of the materials: the texts were read in full so that we could identify the concepts discussed by the theorists. To help identify the concepts, the free online tool Voyant tools was used, from which it was possible to submit the pre-selected materials (VYGOTSKI, 2005; VYGOTSKI, 2011, 2018; LEONTIEV, 2005) and identify the frequency in which the concepts were indicated. From this movement a frequency table and word cloud (Figure 01) was created with the thirty most frequent concepts.

3) Data Treatment: In this phase the data were inferred and interpreted in light of the Historical-Cultural theory.

The implications of the theory in the schooling of people with intellectual disabilities are discussed below.

## Implications of Theory in the Schooling of People with Intellectual Disabilities

The implications and contributions of the Historical-Cultural theory, in the education of students with intellectual disabilities are the aspects discussed here. Vygotsky (1896-1934) and Leontiev (1903-1979) were two important theoreticians of the Historical-Cultural Psychology and sustained their work on dialectical thinking, considering the process and the movement of reality through its contradictions. Even though their assumptions about defectology were elaborated in the beginning of the 20th century, they are still current and move the contemporary inclusive thinking, in the 21st century. From the analysis of the works mentioned above, we present the basic concepts of the theory organized in a word cloud (Figure 1) that illustrates the most frequent concepts in the corpus of analysis.





but also those who have not yet overcome elementary difficulties, and, based on these evaluative conceptions, will not have the opportunity to overcome them (LEONTIEV, 2005).

The actual development level, when considered by teachers as static development that cannot be overcome, impoverishes and limits pedagogical activities aimed at students with intellectual disabilities. Thus, by providing only situations that students are capable of doing independently, they do not contribute to the development of mental processes nor to their potential abilities.

As a consequence of sustaining only the actual development, pedagogical practices are established on the idea that abstract thinking, in these students, is limited. Retaking the word cloud (Figure 01) it is necessary to indicate that the concept thought had frequency in the corpus of analysis 45 times. Vygotski (2018) indicates that, by adopting such a reductive idea, schools, by excluding everything about abstract thinking, betting the teaching only on visual and tactile means, in the training of elementary functions, do not help the child's development and consolidate, in turn, the view about the inability and intellectual deficit of their students with disabilities (VYGOTSKI, 2005).

If we base the pedagogical actions on the assumptions of the Historical-Cultural theory, special education would only be understood from the inclusive thought. In this aspect, the practices aimed at students with intellectual disabilities would consider the potential capacity of students, to offer mediations, actions, strategies, quality interactions that stimulate mental processes, conceptual formation and abstract thinking, with emphasis on the mental development of higher psychological functions and not only on the elementary ones.

In turn, Leontiev (2005) presents what he considers the principles of mental development and mental retardation. The mental development of the subject with intellectual disability is determined by internal, biological factors and by external, environmental and social factors (LEONTIEV, 2005). The author (2005) highlights three principles of development, which help teachers, who work with students with intellectual disabilities, to understand and act upon the learning needs presented by these students. The first principle is about the child's mental development as a process of appropriation of human experience (LEONTIEV, 2005). The second is about "The development of 'aptitudes' as a process of formation of functional brain systems" (LEONTIEV, 2005, p. 96, our translation) and the third principle is about "The mental development of the child as a process of formation of mental actions" (LEONTIEV, 2005, p. 101, our translation).

Returning to Figure 01 we have the concepts mental and mentally, which appeared 76 and 89 times respectively in the corpus of analysis. For Leontiev (2005) and Vygotski (2011, 2018), the mental development of the child is attributed to the appropriation of the experience accumulated in the course of social history, of the achievements of past generations, to differ, qualitatively, from the development of animals. For both researchers, the experience of appropriating the knowledge accumulated in the course of social history, the objects and phenomena created from language and social interaction, allow man to develop higher mental functions. An example of this is language, since the child, in the course of its development, appropriates this objective product in social interaction. Speech and the understanding of words are not innate, they are functions that emerge, since language is present in the child's everyday life. However, in order to hear and speak, biological characteristics (LEONTIEV, 2005) that are specific to human beings are necessary. In this sense, Leontiev (2005, p. 93, our translation) teaches that "[...] for the development of hearing and speech in the child, it is necessary to have the organs of hearing [...]. But only the objective existence of the sounds of language in the child's environment can explain why the auditory function develops".

If the appropriation of concepts and knowledge passed on from generation to generation is not made possible for children with intellectual disabilities, they also do not have the opportunity to interact with different individuals due to the misconception that the deficit defines who they are, including the place they occupy in society.

The second principle about mental development, discussed by Leontiev (2005, p. 96, our translation) deals with "The development of "skills" as a process of formation of functional brain systems". The theorist notes that mental capacities formed throughout the individual's life are not biological inheritances, they are developed in the historical and cultural process. Although mental functions and capacities require specific innate organs, functions acquired in historical and social development do not have direct dependence on heredity.

When we continue the analysis of the word cloud (Figure 01) we have the concept functions as frequent 104 times in the analyzed texts. Leontiev (2005) discusses the formation of higher psychological functions and brain functions, from a relationship, by indicating that "[...] simultaneously with the formation of higher mental processes, specifically human, the brain organs essential for their functioning are also formed in the child [...]" (LEONTIEV, 2005, p. 97, our translation). Therefore, the author argues that children's organs are not prepared already during their birth to fulfill certain functions. They and the brain functional systems develop from the appropriation of human historical experience and throughout life.



The third principle of human development pointed out by Leontiev (2005) addresses "The mental development of the child as a process of formation of mental actions" (LEONTIEV, 2005, p. 101, our translation). The author argues that language is essential for the mental development of the child, since it represents the generalization of the historical knowledge of man, because from language the child appropriates the concepts and knowledge accumulated by humanity. Leontiev (2005) indicates that the pedagogical action would begin with actions with objects, manipulative materials, and visual resources so that, afterwards, the student transforms the external actions into language, and later into internal actions. The mental actions, therefore, first appear in the form of external actions, actions directed to objects, then they are related to language, and then become internal actions (LEONTIEV, 2005).

For the teaching of students with intellectual disabilities, the aspects related to the appropriation and formation of appropriate mental actions have relevant implications, since it is essential for the teacher to understand the way the child proceeds, how he/she acts towards the concepts being worked on. This conduct allows the teacher to interfere in the formation process of mental operations in a satisfactory way, at the appropriate moment.

Another concept that stands out in the word cloud (Figure 01) is compensation (58 times). Vygotski (2011) discusses forms of compensation for intellectual disability, indicating that indirect paths of development are made possible when direct paths are impeded. This compensation by indirect pathways occurs primarily through the cultural sphere.

Vygotski (2011) teaches that when children count on their fingers to be able to answer an addition operation, they are using indirect pathways, because their hands become instruments, since the direct pathway to answer the question is impeded, yet. The structure of the indirect path arises by having an obstacle to the direct path. Therefore, only through necessity does the development of the higher functions take place. Thus, if there is no need to think, reflect, conjecture, the child does not carry out such processes (VYGOTSKI, 2011).

Based on these considerations, the school, when faced with students with intellectual disabilities in the organization of situations that make the child think, solve problems, abstract and generalize, would promote the development of indirect ways to compensate for the intellectual deficit.

Linked to the concept of compensation are the cultural (40 times) and social (39 times) concepts. Culture, in this perspective, reconstructs the development that was natural in the child. The development plans, the natural and the cultural, need to be starting points for a pedagogical practice that aims at the development of students with intellectual disability. Being inserted in

a historical, social and cultural context, the child's development goes from natural to cultural, however, left to himself, such development would be incomplete (VYGOTSKI, 2011).

Vygotski (2011) directs that the human cultural apparatus is adapted to people without disabilities. For him, "All our culture is calculated for the person endowed with certain organs [...] All our instruments, all technique, all signs and symbols are calculated for a normal type of person" (VYGOTSKI, 2011, p. 867, our translation). The natural and cultural lines, in the case of the child with intellectual disability, are in disparity, so the child needs techniques, methods, forms, approaches, special strategies of adapted cultural instruments and signs, they are alternative paths for the appropriation of historical and cultural knowledge. One point is salient: the child cannot be left to its own natural development, for then it would not develop its intellectual capacities. About this, Vygotski (2011, p. 868, our translation) states that "[...] cultural forms of behavior are the only way to educate the abnormal child. They consist in the creation of indirect paths of development where it results impossible by direct paths." From this perspective, intellectual disability exerts two influences on the child's development, the first as an obstacle, difficulty, lack; the second, as a stimulus for alternative paths to be developed.

For Vygotsky (2011), the child with intellectual disability generally presents delays in the development of higher psychological functions, both in relation to external means, such as speech, and in relation to internal means, such as abstract thought, memory and voluntary attention, and conceptual appropriation. However, the theorist indicates that higher psychic development is only possible through cultural means. These arguments lead to the elaboration of the thesis that "[...] cultural development is the main sphere in which it is possible to compensate for deficiency. Where organic development cannot advance, a limitless path opens up for cultural development" (VYGOTSKI, 2011, p. 869, our translation).

For the child with intellectual disability, specifically, an indirect path must be created for the higher functions to be developed. In this case, the author indicates that something that presents an indirect path for cultural appropriation and development, something like Braille, a language used by blind people. In the case of intellectual disability something that contributes to the development of mental functions and abilities (VYGOTSKI, 2011).

The social conditions of the child with intellectual disability interfere in their development, since the indirect ways are related to the environment, the culture and pedagogical action promoted. For Vygotski (2018), the educational goals set for students with disabilities would be the same as those proposed for students without disabilities. The author is emphatic

in stating that the pedagogical practice would not be based on the students' difficulties, on what they lack.

In clinical and pedagogical history aimed at students with intellectual disabilities, "The difficulty in understanding the development of the delayed child arises because the delay has been taken as a thing rather than a process" (VYGOTSKI, 2018, p. 4, our translation). Based on dialectical thinking, it is not possible to establish the development of children with intellectual disabilities as static. For Vygotski (2018, p. 5, our translation), primary impairment, "that which arises in the initial stage of development, is repeatedly removed by the new qualitative formations that arise." In turn, the concept of removal is understood by Vygotski as overcoming, it does not mean, however, that the organic has simply ceased to exist, "[...] but rather that somewhere it is preserved, it lies in the background [...]" (VYGOTSKI, 2018, p. 5, our translation), the biological has not been destroyed, it has been removed from the developmental process (VYGOTSKI, 2018).

Another term that appears in the word cloud (Figure 01) is the concept of processes (223 times). About the processes in the development of the child with intellectual disability, favorable to pedagogical work, Vygotski (2018) highlights some, such as the understanding of the child's developmental forms, compensatory developmental processes, and social interaction. The first process is related to understanding the forms of learning and development of the child with intellectual disability, not so much in relation to the type and level of disability, but in relation to how he responds to situations of difficulty that stem from the disability he has. The important thing is to know the child who has a disability and not just what the child lacks, the type of disability.

Compensatory processes are also understood to be favorable to the development of the child with intellectual disabilities. These processes arise when the child encounters difficulties in the development process. Faced with this fact, the child "[...] is forced to travel an indirect path to overcome them" (VYGOTSKI, 2018, p. 7, our translation). These indirect paths need to be the core of the pedagogical activity aimed at students with intellectual disabilities, because, with support in the potential learning capacity, the teacher would propose situations that challenge the student to potentiate these paths.

Related to the compensatory processes, we have the direct action of the interaction with the environment, with the social environment. It is from these interactions that it is possible for the child to advance through the compensatory process. Depending on the situation created, the quality of the proposed social interactions, and the difficulties imposed by the environment,

compensation occurs in different directions. The social or collective is understood by Vygotski (2018) as indispensable in the development of higher psychological functions also of the child with intellectual disability. Thus, "[...] the source, the medium that nourishes the development of the higher psychological functions, is the child collective, composed of children with a certain difference in optimal intellectual level" (VYGOTSKI, 2018, p. 11, our translation). What is essential in the collective is understood by the theorist as the diversity, the heterogeneity of the individuals that compose it, because "[...] The homogeneous composition of a collective only by mentally backward children with highly similar level of development [...] is a false pedagogical ideal. It contradicts the fundamental law of development" (VYGOTSKI, 2018, p. 12, our translation). From these statements, it is possible to understand the advocacy of the Historical-Cultural theory for the attendance of children with disabilities in ordinary school, a place where they will interact socially with diversity and create ways to compensate for intellectual disability.

Another important point highlighted by Vygotski (2018) to converge the Historical-Cultural theory with the current inclusive school perspective, is in the fact that the functions of the intellect of the child with intellectual disability are not equally affected, because one function would compensate for the other once, that the compensatory development of the child with intellectual disability is characterized by function substitutions. Memory would be an example of such substitutions. In the case of a blind student, let's think about the way he reads, because at the base of this process, there is the substitution principle, which allows reading to be done from Braille, by means of touch. The habitual way of reading is not the only way, so when this way is absent, the child replaces it by another, from cultural artifacts (VYGOTSKI, 2018).

Despite listing many positive aspects settled in our actions to contribute to the intellectual development of the student with disabilities, Vygotski (2018) still argues that there are also others that are part of the development of this child. The first is in relation to the social environment in which he or she is inserted, an environment without stimuli, with weak interactions between other individuals contributes to the accentuation of the primary disability. The unsatisfactory development of higher functions is related to the incompleteness of cultural development, the segregation of the social, the lack of interactions and stimuli, the influence of the environment that the child with disability "[...] has not experienced at the appropriate time [...] as a result of this, his delay accumulates, negative properties and additional complications in the form of an incomplete social development, of neglect" (VYGOTSKI, 2018, p. 15, our

translation). As we have discussed throughout this text, secondary order issues (social and cultural) bring about intense damage to the education of these students, in particular. The influence of the environment on the development of the child with intellectual disability needs to be part of the focus of education, in order to be able to recognize what is primary disability and what in the development of the child with intellectual disability has been interfered with by secondary, compensable situations.

### Final remarks

The Historical-Cultural theory presents contributions that are current for the development of inclusive schools and, in particular, for the education of people with intellectual disabilities. We briefly mention some basic concepts discussed by the theorists to think about the schooling of these students: learning and development of children with intellectual disabilities; social interaction; compensation; processes; cultural development and mental functions and abilities.

The discussions about the concepts proposed by Vygotski (2005, 2011, 2018) and Leontiev (2005) are not exhausted in the ones discussed here, nor in the explanations offered. The theory is complex and needs to be constantly studied and reviewed for a better and greater understanding of its assumptions. The studies of these theorists are invaluable sources of knowledge that contribute with many implications for the pedagogical practice also aimed at students with intellectual disabilities.

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### ***CRedit Author Statement***

- Acknowledgements:** Not applicable.
- Funding:** Not applicable.
- Conflicts of interest:** Not applicable.
- Ethical approval:** Not applicable.
- Data and material availability:** adriela.noronha@ifc.edu.br
- Authors' contributions:** Adriela Maria Noronha: Reading the base texts, creating the word



cloud, collecting data, analyzing and interpreting the data; Sani de Carvalho Rutz da Silva: Orientation, data interpretation and corrections related to the Portuguese language rules; Elsa Midori Shimazaki: Orientation, data interpretation and corrections related to Portuguese language rules.

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**Processing and editing: Editora Ibero-Americana de Educação.**  
Proofreading, formatting, normalization and translation.

