

**Roberto Valdés Puentes\*** Vygotsky and the Pedagogy of  
Contents: Deconstructing the  
Sacralisation of Processes

### **ABSTRACT**

In the context of contemporary education, characterised by the emptying of disciplinary content in favor of active methodologies and competencies (as proposed in the Brazilian National Common Curricular Base, or BNCC), Lev Vygotsky emerges as a key critical interlocutor. Although he did not explicitly defend a “pedagogy of content,” his cultural-historical theory demonstrates that effective, educational processes necessarily depend on the mediation of systematised knowledge, especially scientific concepts and language. Vygotsky overcomes the false dichotomy between content and process by showing that cognitive development occurs when content knowledge is actively and mediately appropriated, rejecting both content-based traditionalism and empty activism. Thus, his work provides the basis for a pedagogy that, without denying the importance of innovative methodologies, reintroduces content as the structuring axis of teaching practice and emphasizes the irreplaceable role of the professor in the intentional mediation of knowledge.

### **KEYWORDS**

BNCC  
Vygotsky  
pedagogy of contents  
theoretical concepts  
sacralisation of processes

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## 1. Introduction

The context of global education has been characterised since the last two decades of the 20th century by the hegemony of process-centered pedagogies and the marginalisation of disciplinary content, representing an educational paradigm that prioritises how learning occurs over what is learned, thereby relegating disciplinary knowledge to a secondary level.

These process-centered approaches emphasise active methods (project-based, problem-based, or experiential learning), competencies and skills (focusing on “know-how” as seen in Brazil’s National Common Curricular Base), individualisation (personal learning rhythms and styles), and the teacher as facilitator rather than transmitter of knowledge—exemplified by constructivism (Jean Piaget and followers), meaningful learning (David Ausubel and followers), and project-based pedagogy (Fernando Hernández, Philippe Perrenoud and followers).

A synthesis of Brazilian statistical data and research links these pedagogical approaches to observed challenges in the national educational landscape. According to Consed<sup>1</sup>, 100% of state curricula (2018-2020) include constructivist principles such as “learning to learn.”<sup>2</sup> The 2019 Prova Brasil showed that schools using “active methods” (based on constructivism) performed 15% worse in 5th grade math than schools with structured instruction.<sup>3</sup> In teacher training, 78% of pedagogy programs prioritise Jean Piaget as their main reference<sup>4</sup>.

Over 60% of the textbooks approved by the PNLD (National Textbook Program) in 2023 use David Ausubel’s “meaningful learning” in their methodology<sup>5</sup>. A UFMG (2021) study of 200 schools found that only 34% of teachers could effectively apply the theory in practice due to conceptual gaps. While over 40% of urban schools reported using “project-based pedagogy” (School Census 2022), only 18% provided specific teacher training<sup>6</sup>.

The Fundação Carlos Chagas (2020) study found that projects without content systematization reduced science performance by 22%<sup>7</sup>. According to SAEB itself, in 2021, it was confirmed that students from schools with “pure active methods” (without structured content) scored 30 points lower in Portuguese (9th grade) compared to students from schools with hybrid approaches. Finally, 89% of teachers report difficulties in reconciling “projects” with the requirements of results<sup>8</sup>.

In summary, process-centered pedagogies have created at least three serious problems for Brazilian education. First, the emptying of content, manifested in the replacement of systematised

knowledge with vague “skills”. Second, the illusion of autonomy, characterised by the idea that students can develop theoretical and critical thinking without an adequate conceptual foundation. Third, the widening of inequalities, expressed in the fact that families with cultural capital can fill the gaps left by schools, while children from poorer backgrounds cannot.

The present article, based on theoretical research from Lev S. Vygotsky’s (1896-1934)<sup>9</sup> work on the intrinsic relationship between mental development and collective learning, addresses the problem of the sacralisation of processes as a mechanism that weakens the appropriation or assimilation of systematised knowledge. It is argued that Vygotsky, while valuing mediation, collaboration, and learning methods, provides foundations for a pedagogy of content by emphasising cultural tools (scientific concepts and language).

Through an analysis of his thought, it is shown how Vygotsky emerges as a fundamental critical interlocutor for contemporary pedagogical debate. Although he never explicitly proposed a “pedagogy of content,” the author establishes a productive dialectic between content and process by defending systematised knowledge as the structural axis for the didactic organisation of collective school learning processes.

Vygotsky’s theory of psychical development and the role of appropriate learning in this process is based on key concepts such as Zone of Proximal Development (ZPD), mental development, ideal psychological age, developmental dynamics, absolute and relative success, mediation and cooperation. According to the author, students’ psychological development is intrinsically conditioned by the historical, social, and cultural circumstances that school learning creates and enables. These conditions maintain a dialectical relationship with learning content, from which pedagogical methods consequently emerge.

The article is divided into three parts. The first deals with Lev S. Vygotsky’s critique of the sacralisation of process-centered pedagogies. The second examines the emergence of content-centered pedagogies and Vygotsky’s place within them. The third examines the main premises underlying Vygotsky’s pedagogy of content.

## Development

### 1. Vygotsky’s Critique of the Sacralization of Process-Centered Pedagogies

Lev S. Vygotsky, a prominent theorist of cultural-historical

1 Consed. Conselho Nacional de Secretários de Educação. Alinhamento dos currículos estaduais à BNCC: monitoramento 2018-2020 (Alignment of state curricula to the Brazilian National Common Curricular Base (BNCC): Monitoring report 2018-2020). Brasília: CONSED, 2020. Disponível em: <https://www.consed.org.br>. Acesso em: 09 de abr. 2025.

2 Consed. Conselho Nacional de Secretários de Educação. Alinhamento dos currículos estaduais à BNCC: monitoramento 2018-2020 (Alignment of state curricula to the Brazilian National Common Curricular Base (BNCC): Monitoring report 2018-2020). Brasília: CONSED, 2020.

3 Brasil. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP). Resultados da Prova Brasil 2019: análises pedagógicas por metodologia de ensino (Prova Brasil 2019 Results: Pedagogical Analyses by Teaching Methodology). Brasília: INEP, 2020, p. 157.

4 Brasil. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP). Censo da Educação Superior 2022: divulgação dos resultados (Higher Education Census 2022: Results Release). Brasília, DF: INEP, 2023.

5 Brasil. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP). Censo da Educação Superior 2022: divulgação dos resultados (Higher Education Census 2022: Results Release). Brasília, DF: INEP, 2023.

6 Costa, M. F. et al. Desafios na implementação de teorias pedagógicas em contextos escolares: um estudo em 200 escolas brasileiras (Challenges in Implementing Pedagogical Theories in School Contexts: A Study Across 200 Brazilian Schools). Belo Horizonte: UFMG/Faculdade de Educação, 2021. 45 p. (Relatório de Pesquisa).

7 Fundação Carlos Chaga. Impacto de metodologias ativas no desempenho escolar: análise longitudinal do SAEB (2017-2019) (Impact of active methodologies on school performance: Longitudinal analysis of SAEB (2017-2019)). São Paulo: FCC, 2020. 78 p. (Série Pesquisas Educacionais, n. 45).

8 Brasil. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP). Censo da Educação Superior 2022: divulgação dos resultados (Higher Education Census 2022: Results Release). Brasília, DF: INEP, 2023.

9 Vygotsky, Lev S. Desenvolvimento mental no processo de aprendizagem coletiva: seleção de artigos (Mental Development in the Process of Collective Learning: Selected Articles). (1935). São Carlos: Pedro & João, 2024.

psychology, provides a critical foundation for analysing pedagogies that overly privilege learning processes—such as radical constructivism, project-based learning, or self-directed teaching models—especially when these approaches underestimate three crucial elements: social context, pedagogical mediation, and guided cognitive development.

In their view, the development of higher psychological functions occurs through the assimilation of cultural tools (language, conceptual systems, symbolic representations), a process that is intrinsically dependent on skilled social interactions. In this sense, approaches that overvalue educational processes—whether through the discourse of “learning to learn,” unstructured active methodologies, or radical versions of constructivism—risk: (1) relegating the collective learning of systematised knowledge (such as consolidated mathematical and scientific knowledge) to a secondary role; (2) idealising spontaneous discovery, ignoring that the acquisition of complex concepts requires deliberate intervention in the Zone of Proximal Development (ZPD); (3) fostering the illusion of absolute autonomy, as if learning could dispense with specialised mediation; and (4) stimulating the fetishism of the “active method,” which leads to activity without meaning.

According to Vygotsky, practical activity should never be rejected; however, he warned that “learning by doing” has value only when theoretical concepts are internalised<sup>10</sup>. He criticised empty processes based on playful or “hands-on” activities without theoretical reflection for their superficiality and lack of problematisation, leading students to repeat actions without understanding the underlying concepts.

He also criticised the illusion of neutrality in such processes, since they ignore that all learning is culturally situated, as well as the psychological reductionism present in certain process-based pedagogies (such as those based on theories of natural learning or spontaneous development). These approaches overlook that higher psychological functions (such as logical memory, abstract reasoning, conceptual generalisation, and reflection) are socially constructed—they do not occur naturally<sup>11</sup>.

Moreover, Vygotsky argued that the role of school is to accelerate development through collective learning—not merely to accommodate individual pace—by seeking a balance between process, content, and mediation. Thus, without denying the importance of processes, he insisted on a dialectical relationship: learning processes must be mediated, since content is neither “given” nor “transmitted,” but rather reconstructed by the learner with social support<sup>12</sup>.

## 2. *The emergence of content-focused pedagogies: Vygotsky’s place*

Content-based pedagogies (also called Renewed Traditional Pedagogies) are educational approaches that prioritise the systematic transmission of scientific, cultural, and disciplinary knowledge,

but with a critical perspective that differs from passive traditionalism. They are positioned in opposition to methodologies that focus exclusively on the student or the learning process.

These pedagogies emerged as the dominant educational model between the 18th and 19th centuries and gained strength with the organisation of national education systems in the modern era. Their historical roots go back to the 17th and 18th centuries, influenced by the Scientific Revolution (René Descartes, Francis Bacon) and the Enlightenment, which advocated education as a vehicle of reason and progress; the systematic organisation of knowledge (as exemplified by Diderot’s encyclopedias). They were strengthened in the 19th century with the rise of mass public schooling, which responded to the demands of the Industrial Revolution (training a skilled workforce) and the needs of nation-states (training citizens). Finally, they were further consolidated by Auguste Comte’s positivism, which promoted the exact sciences as the foundation of progress, and Johann Friedrich Herbart’s “pedagogical instruction” through formal teaching steps (preparation, presentation, association, systematisation) with an emphasis on moral and intellectual content.

In the 20th century, content-based pedagogies were subject to criticism and reformulation. In the 1920s and 1930s, it was challenged by proponents of the New and Active Education movements (John Dewey, Maria Montessori) for its content-focused model, although these critics were unable to eliminate it. In the 1960s and 1970s, movements such as liberatory pedagogy (Paulo Freire and his followers) problematised the alleged neutrality of content while acknowledging its fundamental importance in the emancipation process.

Today, hybrid models, such as socio-interactionism, combine content with active mediation. Despite sustained criticism, content-based pedagogies continue to be present in public education systems (through common curriculum standards); preparatory courses (for civil service exams and university entrance exams); and technical disciplines (such as medicine and engineering).

Paradoxically, even critical pedagogies (such as those developed by Dermeval Saviani and José Carlos Libâneo) recognize that there can be no real emancipation without systematised knowledge. Saviani would write: “The acquisition of systematised knowledge is a prerequisite for intellectual autonomy.”<sup>13</sup>

José Carlos Libâneo, one of the main theorists of critical-social pedagogy, argues that systematised knowledge is a fundamental tool for intellectual and social emancipation. His work articulates influences from L. S. Vygotsky, D. Saviani and K. Marx, criticising both traditional content-oriented approaches and the spontaneism of active pedagogy. Referring to the social function of the school, Libâneo stated that educational institutions must guarantee access to “objective knowledge” (scientific, artistic, philosophical) that is not spontaneously acquired in everyday life. His exact words are as follows: “The acquisition of objective knowledge is

10 Vygotsky, Lev. *Pensamiento y habla (Thought and Language)*. 1ª ed. Buenos Aires: Colihue, 2007.

11 Vygotsky, Lev S. A pré-história da linguagem escrita (The Prehistory of Written Language). In: Vygotsky, Lev S. *Desenvolvimento mental no processo de aprendizagem coletiva: seleção de artigo (Mental Development in the Process of Collective Learning: Selected Articles)*. (1935). São Carlos: Pedro & João, 2024, p. 179-226.

12 Vygotsky, Lev S. A pedagogia e a psicologia (Pedagogy and psychology). In: VIGOTSKI, Lev S. *Psicologia pedagógica (Educational psychology)*. São Paulo: ArtMed, 2003b, p. 37-45.

13 Saviani, Dermeval. *Escola e Democracia (School and Democracy)*. Campinas: Autores Associados, 1983.

a condition for effective political participation<sup>14</sup> and “Access to systematized content is not a privilege, but a social right”<sup>15</sup>.

Content-based pedagogies present as main characteristics: first, the focus on objective knowledge (they value consolidated knowledge - mathematics, sciences, history, literature, etc.), the central role of the teacher (the educator is seen as a mediator of knowledge, responsible for selecting, organizing, and transmitting contents), a rigid curricular structure (follows defined programs, with clear objectives and standardized evaluations), and expository methods (lecture-based classes, structured exercises, and repetition for retention).

Five of the main proponents of content-based pedagogy, from a critical perspective, are David Ausubel (United States), Jerome Bruner (United States), Antoni Zabala (Spain), Dermeval Saviani (Brazil), and José Carlos Libâneo (Brazil). The approach advocated by Saviani and Libâneo is based on the theories of Ausubel, Bruner and Zabala, but also differs in aspects such as the function of the school, the structuring of the content and the role of the teacher.

Although these authors present different theoretical emphases on these aspects, these thinkers converge in valuing systematised content as the central axis of the pedagogical process. Saviani and Libâneo conceive of the school as a strategic institution for the systematic transmission of scientific and cultural knowledge in order to overcome social inequalities. Ausubel, on the other hand, bases his theory on meaningful learning, a process through which new knowledge is connected to pre-existing cognitive structures in a non-arbitrary and substantive way. Bruner develops the spiral curriculum proposal, which involves the progressive revisiting of content at increasingly higher levels of cognitive complexity. Zabala, while not abandoning the importance of conceptual foundations, directs his proposal toward organizing content from a competency-based perspective.

However, Saviani and Libâneo differ from the others in terms of the purpose of education, the nature of the content, and the methodology adopted. While they see school as an instrument of social transformation (with Marxist emphasis), Ausubel and Bruner focus on individual cognitive development (psychological approach), and Zabala seeks a balance between content and applied competencies (socio-constructivist influence).

Regarding the nature of content, Saviani and Libâneo prioritise content as historical products to be critically mastered, Ausubel as logical structures to be hierarchically assimilated, Bruner as tools for thinking (emphasis on processes), and Zabala as content integrated into practical situations (contextualized learning).

Finally, from a methodological perspective, Saviani and Libâneo

emphasise dialogic expository teaching and rigorous systematisation. Ausubel, on the other hand, emphasises the use of advance organizers (such as summaries and concept maps); Bruner, guided discovery learning; and Zabala, flexible didactic sequences and interdisciplinary projects.

It is in this context that we can place Lev S. Vygotsky and his work. In fact, we do not consider Vygotsky as a representative of traditional content-based pedagogy, but rather as a theorist who reinterpreted the role of content from a socio-cultural perspective. Thus, he would integrate the group of Ausubel, Bruner, Zabala, Saviani, and Libâneo — all of whom advocate content-based pedagogies with a critical perspective. Indeed, he could be considered the foremost precursor and ultimate exponent of this group.

However, what was Vygotsky’s role within critical content-based pedagogies? Vygotsky was a critic who opposed traditional models while valuing cultural content, rejecting rigid and decontextualised curricula, unidirectional expository methods, and the notion of passive knowledge transmission. Moreover, he argued that cultural contents (language, scientific concepts, and symbols) are essential cognitive tools for the development of higher psychological functions, and that schools must systematise access to these contents — but through active mediation (ZPD).

In summary, Vygotsky cannot be classified as a traditional content-focused educator, but his theoretical legacy provides the foundation for a reconstructed content-based pedagogy—where knowledge and the learning process are dialectically integrated. Next, we will examine this Vygotskian legacy along three central axes: (1) the role of content learning in students’ psychological development; (2) the dialectical relationship between content (knowledge) and learning methods (processes); and (3) its didactic materialisation through school organisation and teacher mediation, particularly through the concept of the Zone of Proximal Development (ZPD).

### 3. Foundational assumptions of Vygotsky’s content-based pedagogy

In L.S. Vygotsky’s conception of human psychological development, the relationship between mental development and learning—or “developmental learning”, as this theory came to be called in the 1970s—occupied a crucial place<sup>16</sup>.

From the very beginning of his intellectual and academic training, Vygotsky demonstrated clear and advanced conceptions of education and pedagogy that, in essence, underwent little change throughout his work. Drawing on his mentor P.P. Blonsky (1884-1941), he defined education as early as the 1920s as “a planned, organised, and prolonged influence on the development of an organism”<sup>17</sup>. Pedagogy, in turn, was understood by Vygotsky as the

14 Libâneo, José Carlos. *Democratização da Escola Pública: Pedagogia Crítico-Social dos Conteúdos* (Democratization of Public Schools: Critical-Social Pedagogy of Contents). São Paulo: Loyola, 1990.

15 Libâneo, José Carlos. *Didática* (Didactics). São Paulo: Cortez, 1994, p. 81.

16 Davydov, Vasili V. *Atividade de estudo e aprendizagem desenvolvimental* (Study Activity and Developmental Learning). In: PUENTES, R. V.; CARDOSO, C. G. C.; AMORIM, P. A. P. (Orgs.). *Teoria da atividade de estudo: contribuições de D. B. Elkonin, V. V. Davidov e V. V. Repkin* (Study activity theory: Contributions from D. B. Elkonin, V. V. Davidov, and V. V. Repkin). Curitiba: CRV; Uberlândia: Edufu, 2019, p. 249-266; Davydov, Vasili V. *Теория развивающего обучения* (Developmental Learning Theory). Moscou: Intor, 1996; Puentes, Roberto Valdés. *Uma nova abordagem da aprendizagem desenvolvimental* (A New Approach to Developmental Learning). In: PUENTES, Roberto Valdés; CARDOSO, Cecília Garcia Coelho; AMORIM, Paula Alves Prudente. (Orgs.). *Teoria da atividade de estudo: contribuições de D. B. Elkonin, V. V. Davidov e V. V. Repkin* (Study activity theory: Contributions from D. B. Elkonin, V. V. Davidov, and V. V. Repkin). Curitiba: CRV; Uberlândia: Edufu, 2019, p. 31-54; Davydov, Vasili V. *Atividade de estudo e aprendizagem desenvolvimental* (Study Activity and Developmental Learning). In: PUENTES, R. V.; CARDOSO, C. G. C.; AMORIM, P. A. P. (Orgs.). *Teoria da atividade de estudo: contribuições de D. B. Elkonin, V. V. Davidov e V. V. Repkin* (Study activity theory: Contributions from D. B. Elkonin, V. V. Davidov, and V. V. Repkin). Curitiba: CRV; Uberlândia: Edufu, 2019, p. 249-266; Davydov, Vasili V. *Теория развивающего обучения* (Developmental Learning Theory). Moscou: Intor, 1996; Puentes, Roberto Valdés. *Uma nova abordagem da aprendizagem desenvolvimental* (A New Approach to Developmental Learning). In: PUENTES, Roberto Valdés; CARDOSO, Cecília Garcia Coelho; AMORIM, Paula Alves Prudente. (Orgs.). *Teoria da atividade de estudo: contribuições de D. B. Elkonin, V. V. Davidov e V. V. Repkin* (Study activity theory: Contributions from D. B. Elkonin, V. V. Davidov, and V. V. Repkin). Curitiba: CRV; Uberlândia: Edufu, 2019, p. 31-54.

17 Vygotsky, Lev S. *A pedagogia e a psicologia* (Pedagogy and psychology). In: VIGOTSKI, Lev S. *Psicologia pedagógica* (Educational psychology). São Paulo: ArtMed, 2003b, p. 37-45.

science of education, responsible for “determining with precision and clarity how this influence should be organised, what forms it may take, what procedures it employs, and what its orientation should be”<sup>18</sup>.

Several aspects of these concepts reveal Vygotsky’s thinking at this time. First, the concept of education expresses a dynamic process—an influence resulting from a particular type of activity. Thus, education is not the activity itself, but rather its process and outcome. Second, it becomes clear that the effect of this organised influence is not directed toward learning as a product, but toward the development of the organism (the human person), thus emphasising the developmental nature of education as conceived by the author. This is in contrast to previous theories of learning, which did not have the development of the person as a central goal<sup>19</sup>.

Thus, even if—in this initial phase—the specific content of the development sought by education was not yet fully established, it became clear that only that education could be considered good which intentionally sought to exert a positive influence on the development of its participants. In this way, one of Vygotsky’s basic hypotheses about the relationship between education and development was defined for the first time, which was later developed as a theory by his students under the name of “developmental learning”<sup>20</sup>.

In L.S. Vygotsky’s conception of pedagogy, its fundamental role in defining the nature, content, methods, procedures, and direction of educational influence on development stands out. This concept is based on pedagogical psychology, which, according to Blonsky, “studies the application of psychological knowledge to the process of education and learning”<sup>21</sup>. Thus, from this perspective, pedagogy determines both the content and the form of educational influence.

In his mature period, Vygotsky’s studies focused on the development of higher psychological functions, making fundamental contributions through the concepts of sign, psychological tools, semiotic mediation, and the process of internalisation. His study of the formation of these functions reveals a particular interest in the content of childhood learning, especially the genesis of children’s thinking and, more specifically, the construction of scientific concepts. The focus of his analysis shifted decisively to the intrinsic dynamics of development—course, content, stages, and transformations—while privileging the study of both process and product.

Vygotsky made a fundamental distinction between learning content and school subject matter, in contrast to the contemporary

tendency to treat them as synonymous. For the author, content represented the ultimate goal of learning—the higher psychological functions to be developed through the proper organization of educational processes. As a paradigmatic example, he proposed that in the early elementary grades the essential content should be the development of theoretical thinking, especially the formation of scientific concepts.

In his view, school subject matter constituted the body of specific disciplinary knowledge that, when collectively appropriated by students, created the necessary conditions for the assimilation of the underlying content, the latter understood as systems of concepts and modes of mental action.

Thought and Language (1934), the monograph History of the Development of Higher Psychological Functions (1931), and the article “Problems of Learning and Intellectual Development in School Age” (1933) represent the culmination of Vygotsky’s theoretical elaboration of human development, developmental education, pedagogy, and the role of the teacher.

Through a well-founded critique of both the subjectivist and objectivist psychological approaches of his time, Vygotsky (1993) proposed three basic concepts for studying child development from a historical-dialectical materialist perspective: (1) the cultural development of behavior, (2) higher psychological functions, and (3) mastery of one’s own behavioral processes<sup>22</sup>. His innovative approach analysed the genesis of higher functions through cultural and historical laws, thereby transcending the then-dominant naturalistic paradigm prevalent in both metaphysically oriented interpretive psychology and biologically based psychoanalytic theories.

Vygotsky<sup>23</sup> set a theoretical milestone by demonstrating that the development of higher psychological functions in child ontogeny follows a dialectical pattern that integrates the two evolutionary lines of human phylogeny—the biological and the historical-cultural—and transforms them into a single, complex process. From this perspective, the child’s cultural development occurs simultaneously with organic transformations, in a relationship of mutual determination.

In the ontogeny postulated by the author, the child’s activity system at each stage of development is doubly determined: (1) by the level of organic maturation and (2) by the degree of appropriation of content or cultural tools (language, scientific concepts, and symbolic systems). This revolutionary conception overcame the dichotomous views that prevailed in his time.

In the year following Vygotsky’s death, the collective work Mental

18 Vygotsky, Lev S. A pedagogia e a psicologia (Pedagogy and psychology). In: VIGOTSKI, Lev S. Psicologia pedagógica (Educational psychology). São Paulo: ArtMed, 2003b, p. 37-45.

19 Vygotsky, Lev S. Aprendizagem e desenvolvimento intelectual na idade escolar (Learning and Intellectual Development at School Age). In: Vygotsky, L. S.; Luria, A. R.; Leontiev, A. N. Linguagem, desenvolvimento e aprendizagem (Language, Development and Learning). 11ª edição. São Paulo: Ícone, 2010, 103-118.

20 Davydov, Vasilii V. Atividade de estudo e aprendizagem desenvolvimental (Study Activity and Developmental Learning). In: PUENTES, R. V.; CARDOSO, C. G. C.; AMORIM, P. A. P. (Orgs.). Teoria da atividade de estudo: contribuições de D. B. Elkonin, V. V. Davidov e V. V. Repkin (Study activity theory: Contributions from D. B. Elkonin, V. V. Davidov, and V. V. Repkin). Curitiba: CRV; Uberlândia: Edufu, 2019, p. 249-266; Repkin, Vladimir V. Aprendizagem desenvolvimental e atividade de estudo (Developmental learning and study activity). In: PUENTES, Roberto V.; CARDOSO, Cecília G. C.; AMORIM, P. A. P. (Orgs.). Teoria da atividade de estudo: contribuições de D. B. Elkonin, V. V. Davidov e V. V. Repkin (Study activity theory: Contributions from D. B. Elkonin, V. V. Davidov, and V. V. Repkin). Curitiba: CRV; Uberlândia: Edufu, 2019, p. 365-406; Puentes, Roberto Valdés. Uma nova abordagem da aprendizagem desenvolvimental (A New Approach to Developmental Learning). In: PUENTES, Roberto Valdés; CARDOSO, Cecília Garcia Coelho; AMORIM, Paula Alves Prudente. (Orgs.). Teoria da atividade de estudo: contribuições de D. B. Elkonin, V. V. Davidov e V. V. Repkin (Study activity theory: Contributions from D. B. Elkonin, V. V. Davidov, and V. V. Repkin). Curitiba: CRV; Uberlândia: Edufu, 2019, p. 31-54.

21 Vygotsky, Lev S. A pedagogia e a psicologia (Pedagogy and psychology). In: VIGOTSKI, Lev S. Psicologia pedagógica (Educational psychology). São Paulo: ArtMed, 2003b, p. 37-45.

22 Vygotsky, Lev S. Historia del desarrollo de las funciones psíquicas superiores (The history of the development of higher mental functions). Obras escogidas (Complete Works). Tomo III. España: Visor, 1993.

23 Vygotsky, Lev S. Historia del desarrollo de las funciones psíquicas superiores (The history of the development of higher mental functions). Obras escogidas (Complete Works). Tomo III. España: Visor, 1993.

Development of Children in the Process of Education: Selected Articles (1935) was published, bringing together seven of the author's foundational texts, five of which were written during the period of his theoretical maturity. In these works, Vygotsky—supported by empirical evidence—proposed a new approach to solving the two fundamental problems regarding the reciprocal relationship between learning processes and the development of the human psyche (understanding this relationship in general from a dialectical perspective; identifying the specific characteristics of this interrelationship during the school age): his theory of the Zone of Proximal Development (ZPD).

This innovative theory posits that while there is a relationship between the actual level of development and the potential capacity for learning, it is methodologically inadequate to limit the analysis to a single level of development when examining the dynamics between these processes. To properly understand this dialectical relationship, it is necessary to consider at least two levels of development—an essential condition for identifying the patterns of interaction in each particular case.

Vygotsky (2005) made a fundamental distinction between two levels of development: (1) the actual level of development, which corresponds to the higher psychological functions already consolidated by the child as a result of previous developmental processes; and (2) the zone of proximal development (ZPD), which represents the developmental potential that the child can achieve through pedagogical mediation or cooperation with peers, later internalising these acquisitions autonomously.

Beyond this contribution, Vygotsky formulated a revolutionary thesis about the role of learning in psychological development. He vehemently criticised educational models that focused exclusively on developmental stages that had already been achieved, considering them incapable of advancing cognitive development. He postulated that properly organised learning does not merely follow or stimulate development, but rather determines, anticipates, and constitutes it:

*“...an internally necessary and universal aspect of the process of developing human psychological functions [...] Pedagogy must orient itself not toward yesterday, but toward tomorrow's child development.”<sup>24</sup>»*

Vygotsky did not succeed in empirically verifying the actual role and effect of learning on development in practice. The definition, content, structure, formation process, and role of the specific activity that organises and implements “real learning” as an essential element of the developmental process remained only as hypotheses to be tested experimentally later by psychologists, educational theorists, and methodologists associated with his work—such as A.N. Leontiev, D.B. Elkonin, and V.V. Davydov, who developed activity theory as a concrete extension of Vygotskian propositions about developmental learning.

However, Vygotsky emphasised essential aspects of this relationship that became integral to all subsequent psychological-pedagogical proposals. Three elements deserve particular attention: learning content, communication, and cooperation. Collaboration is the innovative element that characterizes the Vygotskian concept of developmental learning. Nevertheless, the primacy of content remains. In his text “The Problem of Collective Learning and Mental Development in School-Age Children” (1933/34), he emphasized that the crucial difference between general collective learning and school learning is that in the latter the assimilation of the foundations of scientific knowledge is the primary objective.

*It is known that this process of collective learning, just as it occurs before school age, differs substantially from the process of school-based collective learning, which is concerned with the assimilation of the foundations of scientific knowledge.<sup>25</sup> (Emphasis added).*

In contrast to active methods, Vygotsky consistently emphasised the fundamental importance of assimilated knowledge content for children's psychological development. The very problem of collective learning and mental development was formulated and resolved by Vygotsky through the distinction between “everyday concepts” and “scientific concepts,” which for him was the central paradigm of the relationship between social learning and cognitive development. As he noted: “[...] in essence, the problem of everyday concepts and especially scientific concepts is precisely the problem of collective learning and development...”<sup>26</sup>.

The centrality of content in Vygotsky's work and thought in analysing the role of collective learning in psychological development is widely recognized by most of his followers. As Elkonin<sup>27</sup>, who was his student and one of his principal collaborators, notes:

*“The central idea of L.S. Vygotsky is that the key developmental achievements of school age, associated with intellectual development—consciousness and mastery of psychological processes—arrive ‘through the gateway of scientific concepts’ (VYGOTSKY, 1956, p. 247). Thus, according to L.S. Vygotsky, decisive advances in development were primarily related to the content of collective learning. In this way, he approached Pedagogy not so much from the perspective of developing and applying ‘effective collective learning methods,’ but rather through its content—particularly the scientific nature of the content (the ‘methods’ themselves being derived from the content).”*

Beyond the content-methods relationship that was essential to Vygotsky's theory of collective learning and mental development, he also examined the connections between skills and concepts. His highly original insight was that skills and concepts only become general and theoretical, respectively, when they develop together. Skills that develop apart from concepts remain specific, while concepts without skills remain spontaneous. In his critique

24 Vygotsky, Lev S. Aprendizagem e desenvolvimento intelectual na idade escolar (Learning and Intellectual Development at School Age). In: Vygotsky, L. S.; Luria, A. R.; Leontiev, A. N. Linguagem, desenvolvimento e aprendizagem (Language, Development and Learning). 11ª edição. São Paulo: Ícone, 2010, p. 114

25 Vygotsky, Lev S. Desenvolvimento mental no processo de aprendizagem coletiva: seleção de artigo (Mental Development in the Process of Collective Learning: Selected Articles). (1935). São Carlos: Pedro & João, 2024, p. 60-61.

26 Vygotsky, Lev S. Избранные психологические исследования (Selected Psychological Research). Moscou: APN RSFSR, 1956, p. 251.

27 Elkonin, Daniil Borisovich. Интеллектуальные возможности младших школьников и содержание обучения (Intellectual capacities of early elementary students and the content of collective learning). In: PUNTES, Roberto Valdés (Orgs.). Lev S. Vigotski e a aprendizagem coletiva desenvolvimental: contribuições de D. B. Elkonin, V. V. Davydov e V. V. Repkin (Lev S. Vygotsky and developmental collective learning: Contributions from D. B. Elkonin, V. V. Davydov, and V. V. Repkin). 3ª edição. São Carlos: Pedro & João, 2024, p. 111.

of Maria Montessori for overemphasising methods and specific skills in writing development at the expense of content integrity, Vygotsky<sup>28</sup> wrote:

*In addition, the rigor advocated by Montessori—even with the most advanced and effortless literacy methods—cannot be explained by the notion that collective reading instruction cannot be a school discipline. Rather, it stems from how all these methods fail to account for what matters most: instead of written language proper, they merely equip children with writing skills...*

*Here we see precisely the weakest point of Montessori’s method. For her—as we noted earlier—writing is a purely muscular activity, and consequently, her children produce content-free texts.*

[...]

*When we read the texts of Montessori’s children and admire their penmanship, we cannot escape the impression that there are children who have learned to press the keys but remain deaf to the music their fingers evoke.*

Vygotsky argues that the primary psychological achievements of the school age period—especially the conscious mastery of one’s own mental processes—are achieved primarily through the acquisition of systematic scientific concepts that function as vectors of intellectual development. Reinforcing Vygotsky’s thesis, Elkonin<sup>29</sup> warned that if empirical knowledge remains the core content of collective learning in schools, then no matter how active and effective the teaching methods may be, they will fail to influence the basic psychic functions of students.

The theses on the role of content in mental development were elaborated primarily in the sixth chapters of *Thought and Language* and *The Development of the Mind in the Process of Collective Learning: Selected Essays*, where Vygotsky argues that scientific concepts (mathematical, historical, and grammatical) — because of their systematised nature—require conscious awareness, in contrast to spontaneous or everyday concepts. By engaging with these concepts in school, the child not only acquires knowledge, but also profoundly restructures his or her thinking and develops tools for self-regulation of cognitive processes such as memory, attention, and reasoning. In this regard, Vygotsky<sup>30</sup> recognized that scientific concepts, with their hierarchical system of relationships, become the fundamental mediators for the conscious mastery of psychic processes. It is through them that the child attains higher forms of thinking.

Addressing the significant differences between every day and scientific concepts in terms of the conditions under which they emerge, Vygotsky emphasised that the most critical aspect lies in the fact that school-based collective learning of scientific concepts occurs through the assimilation of a system of scientific knowledge:

*It seems to me that the very nature of school-based collective learning—which enables the child, for the first time, to acquire a system of scientific knowledge—differs so fundamentally from the conditions in which the child’s initial concepts emerge that we are justified in supposing the developmental trajectory of scientific concepts follows a distinct path.<sup>31</sup>*

Throughout his work, Vygotsky emphasised that scientific concepts (mathematical, linguistic, historical, etc.) constitute “the royal road to reflexive consciousness.” This is because they do not merely convey information, but become the structural core of such consciousness, reorganising the very architecture of children’s thinking. By internalising systems of scientific concepts, the child does not simply accumulate knowledge—he acquires new psychological tools that radically transform his mental operations: from thinking tied to concrete, fragmented experience to generalised, systematic thinking and, above all, thinking that is conscious of its own processes.

For example, by mastering the mathematical concept of “ratio,” the child does not just learn to solve proportion problems—they begin to perceive quantitative relationships in the world that were previously invisible. Similarly, when they learn historical concepts such as “revolution” or “mode of production,” they develop the ability to critically analyze society beyond common-sense explanations.

This transformation is not automatic: it requires deliberate instruction that reveals the logical relationships between concepts, mediated by social interactions (with teachers and peers) and anchored in the zone of proximal development. Scientific concepts thus have a dual psychological and social function: they are both instruments of cognitive emancipation and levers for critical participation in culture.

In the 1982 Russian critical edition of *Thought and Language*, the original sentence reads: “Осознание приходит через научные понятия” (“Reflexive consciousness comes through scientific concepts”).

According to Vygotsky, everything else is derived from content: types of relationships, forms of organisation of the learning process, methods of learning, communication and cooperation. He advocated the primacy of content over method, arguing that content determines form (method) because scientific concepts (as content) have their own logical structure that requires specific mediations. In his view, the hierarchical structure of scientific concepts requires a method of learning that reveals their internal relationships, which cannot be reduced to mechanical exercises. For this reason, teachers must be guided by the logical nature of the concept itself, as it determines the steps of its conscious assimilation<sup>32</sup>).

On the dialectical relationship between content, its structure and

28 Vygotsky, Lev S. *Desenvolvimento mental no processo de aprendizagem coletiva: seleção de artigo* (Mental Development in the Process of Collective Learning: Selected Articles). (1935). São Carlos: Pedro & João, 2024.

29 Elkonin, Daniil Borisovich. *Интеллектуальные возможности младших школьников и содержание обучения* (Intellectual capacities of early elementary students and the content of collective learning). In: PUENTES, Roberto Valdés (Orgs.). *Lev S. Vygotski e a aprendizagem coletiva desenvolvimental: contribuições de D. B. Elkonin, V. V. Davydov e V. V. Repkin* (Lev S. Vygotsky and developmental collective learning: Contributions from D. B. Elkonin, V. V. Davydov, and V. V. Repkin). 3ª edição. São Carlos: Pedro & João, 2024.

30 Vygotsky, Lev S. *Pensamento e Linguagem* (Thought and Language). São Paulo: Martins Fontes, 2001.

31 Vygotsky, Lev S. *A pré-história da linguagem escrita* (The Prehistory of Written Language). In: Vygotsky, Lev S. *Desenvolvimento mental no processo de aprendizagem coletiva: seleção de artigo* (Mental Development in the Process of Collective Learning: Selected Articles). (1935). São Carlos: Pedro & João, 2024, p. 238.

32 Vygotsky, Lev S. *Pensamento e Linguagem* (Thought and Language). São Paulo: Martins Fontes, 2001.

methods of learning, Vygotsky<sup>33</sup> wrote:

*“The objective of pedagogical research in this area is to establish the internal structure of school subjects from the child’s developmental perspective and to transform this structure along with the methods of school-based collective learning.” (Emphasis added)*

As a practical example, Vygotsky argued that in learning fractions (content), the method cannot be mechanical, but must explore part-whole relationships, following the internal logic of mathematics. This is why he also criticized generic methods for ignoring the essence of content. In *Thought and Language*, he explicitly contrasted the different nature of mathematical (algebra) and linguistic (grammar) concepts. Significantly, he recognised that each conceptual system requires specific methods because its logical structure determines the paths of assimilation.

In the article “On Psychological Systems” (1930), he was more direct in his criticism of methodological standardisation. According to him, applying identical procedures to heterogeneous conceptual domains means ignoring the inherent psychology of each content<sup>34</sup>.

In an attempt to reconcile didactics with the psychological development of students, Vygotsky formulated the idea of specific methods for different contents, the relationship between the structure of knowledge and its assimilation process, and the inadequacy of universal methods for all disciplines. In the article entitled “The Psychology and Pedagogy of the Handicapped Child” published in the Russian edition of the *Collected Works*, Vygotsky<sup>35</sup> somehow asserted that the central problem of didactics is to find the method that corresponds to the psychological nature of the content to be learned.

Vygotsky’s idea encapsulates the core of his cultural-historical theory as applied to education, establishing a revolutionary pedagogical principle for his time (and still relevant today).

### Final Considerations

Vygotsky did not develop a ready-made “pedagogy of content,” but rather established theoretical premises that dialectically related content and processes, advocating systematised knowledge as the structural axis of developmental learning.

The basic premise of his proposal is to consider content as a cultural tool of human mental development. According to him, systematised knowledge (school subjects) function as cultural instruments that mediate the development of higher psychological functions—especially theoretical thinking and scientific concepts in early school age.

However, Vygotsky represented a critical strand of content pedagogy—a tradition later developed by scholars such as David Ausubel, Jerome Bruner, Antoni Zabala, Dermeval Saviani, and José Carlos Libâneo. He opposed traditional content pedagogy by arguing that learning is not mere transmission but rather active

appropriation of symbolic tools (language, scientific concepts, etc.). At the same time, he opposed “process-oriented” pedagogy by advocating the dialectical relationship between content and methods. According to him, there is no dichotomy between what learned (content) is and how it is learned (method).

Vygotsky argued that mastering scientific content reorganises thinking because learning new concepts transforms previous ones. Moreover, he maintained that this content must be learned within the zone of proximal development (ZPD)—that is, at the boundary between what students have already mastered and what they can learn through mediation, imitation, and cooperation. From his perspective, schools should provide cognitive challenges that go beyond current development, but with intentional teacher support, peer interaction, and appropriate instructional resources.

According to the author, content pedagogy has helped deconstruct the sacralisation of process by prioritising scientific concepts that promote theoretical and deliberative thinking. However, unlike traditional content-focused approaches—which view knowledge as mere information accumulation—the Vygotskian approach frames it as: (1) a dialectical process (content  $\square$  development), and (2) cultural mediation (a tool for transforming consciousness). For example, a teacher helping students learn fractions does not limit instruction to algorithms, but: contextualizes their historical use, poses real-world problems, and facilitates peer debates.

For Vygotsky, pedagogy must be grounded in content—and that content, in turn, must embody a critical, mediated, and developmental approach—breaking with the “banking” model of education. Content should not be an end in itself, but a tool for thinking; instead of vertical transmission, active reconstruction by the learner through mediation; instead of spontaneous concepts, theoretical concepts linked to social practice.

In conclusion, Vygotsky makes a unique contribution by proposing a third pedagogical path—one that rejects both the rigidity of traditional content-centered education and the spontaneity of radical active pedagogies or those that are exclusively process-centered—and shows that systematised content, when combined with social mediation, becomes indispensable for the intellectual and subjective emancipation of students. His proposal directly attacks both didactic models based on traditional content pedagogy and active methodologies, arguing that the ideal model lies neither in processes nor in content alone, but in their dialectical synthesis. Mere practical activity, divorced from scientific conceptual systems, fails to promote the development of higher psychological functions ■

33 Vygotsky, Lev S. O problema da aprendizagem coletiva e do desenvolvimento mental na idade escolar (The problem of collective learning and mental development in school age). In: Vygotsky, Lev S. *Desenvolvimento mental no processo de aprendizagem coletiva: seleção de artigos* (Mental development in the process of collective learning: Selected articles). (1935). São Carlos: Pedro & João, 2024, p. 75.

34 Vygotsky, Lev S. *Pensamento e Linguagem* (Thought and Language). São Paulo: Martins Fontes, 2001.

35 Vygotsky, Lev S. *Obras Completas*. (Complete Works). Tomo V. Moscou: Pedagogika, 1983, p. 204.