

The importance of activity theory in the university educational context

(esp) La importancia de la Teoría de la actividad en el contexto educativo universitario

(port) A importância da teoria da atividade no contexto educacional universitário

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Abstract

The objective of this essay was to analyze Activity Theory in the context of university education, where this theory was proposed based on the principles of cultural-historical psychology. The methodology was to analyze this theory in connection with university educational practices, considering the sociocultural theory of students and the university community. Some findings indicate that the evolution of Activity Theory throughout its different generations has a direct impact on education, allowing students to improve their learning both in the classroom and through professional development. Its contribution to educational research is that it allows for a comprehensive link between psychology, education, and society, which has direct application in the university context. Among the conclusions, it is highlighted that Activity Theory is one of the important pillars of the university context, where the teacher-student relationship is essential for enhancing university practices and its impact on training professionals in the field of education at different levels, as well as providing tools for their professional work.

Keywords: Activity; education; university; theory; Vygotsky.

Resumen

Objetivo de este ensayo fue analizar la Teoría de la Actividad en el contexto educativo universitario, donde esta teoría fue una propuesta originada en los principios de la psicología cultural-histórica. Metodología fue analizar esta teoría vinculando con las prácticas educativas de la universidad, considerando la teoría sociocultural de los estudiantes y la comunidad universitaria. Algunos hallazgos, la evolución de la teoría de la actividad a lo largo de sus diferentes generaciones tiene un impacto directo en el ámbito educativo, Permitiendo a los estudiantes mejorar su aprendizaje tanto en las aulas como a través del desarrollo profesional. Su aporte a la investigación educativa es que permite vincular la psicología, la educación y la sociedad de manera integral, lo cual tiene una aplicación directa en el contexto universitario. Entre las conclusiones resalta en que la teoría de la actividad uno de sus pilares importantes del contexto universitario donde la relación docente alumno es primordial para potencializar las prácticas en la universidad y su impacto al formar profesionales en el ámbito educativo en diferentes niveles, así como dar herramientas para su quehacer profesional.

Palabras clave: Actividad; educación; universidad; teoría; Vygotsky



Resumo:

O objetivo deste ensaio foi analisar a Teoria da Atividade no contexto educacional universitário, sendo esta uma proposta originada nos princípios da psicologia histórico-cultural. A metodologia foi analisar essa teoria em conexão com as práticas educacionais da universidade, considerando a teoria sociocultural dos estudantes e da comunidade universitária. Algumas descobertas, incluindo a evolução da teoria da atividade ao longo de suas várias gerações, têm um impacto direto na educação, permitindo que os alunos melhorem seu aprendizado tanto em sala de aula quanto por meio do desenvolvimento profissional. Sua contribuição para a pesquisa educacional é que permite uma conexão abrangente entre psicologia, educação e sociedade, o que tem aplicação direta no contexto universitário. Dentre as conclusões, destaca-se que a teoria da atividade é um dos pilares importantes do contexto universitário, onde a relação professor-aluno é essencial para potencializar as práticas universitárias e seu impacto na formação de profissionais da área educacional em diferentes níveis, além de instrumentalizar sua atuação profissional.

Palavras-chave: Atividade; educação; universidade; teoria; Vigotski



Introduction

Teacher training for basic education faces the challenge of developing critical and reflective thinking skills in future teachers that enable them to analyse and improve their pedagogical practice. In this context, the use of literary narratives - understood as stories, histories and narrated experiences - has gained relevance as a pedagogical approach in teacher training. Many educational theorists argue that narrative is a privileged way of constructing meaningful knowledge in education. Indeed, narrative discourse is considered essential in our attempts to understand teaching and learning processes. Through stories and narratives, trainee teachers can connect theory with experience, make sense of complex classroom situations and develop a deeper understanding of their role.

This essay aims to analyze Activity Theory in the context of university education, where this theory was a proposal originating from the principles of Lev Vygotsky's cultural-historical psychology (Manoharan & Subramania, 2024). In its original context, Vygotsky sought to explain human activity as a phenomenon mediated by tools, signs, social interaction, and culture (Vygotsky & Cole, 1978). These elements influence learning, work, and social development.

Vygotsky's perspective was later enriched by the contributions of Leontiev and Luria, who expanded and deepened its applications and scope. Activity Theory is based on key principles that allow us to understand human dynamics around goal achievement. Among these principles, the following stand out: a) Goal-orientation: All human activity is directed by a specific purpose that gives meaning and direction to actions, b) Mediation by tools and signs: Tools (physical or symbolic) are essential to transform the environment and facilitate interaction with it, c) Social and cultural interaction. Activity does not occur in isolation, but within a sociocultural framework that shapes the ways of acting, thinking and learning (Luria, Leontiev, Vygotsky & outros, 1991).

By applying these principles, researchers have extended Activity Theory beyond a psychological perspective to diverse fields such as education, organizational psychology, and management. For example, in education, it allows for the design of more comprehensive learning environments by considering the cultural and social elements that influence students. In organizations, it offers tools to understand and improve the dynamics of work systems. Activity Theory has evolved since its initial conception. Leontiev delved into the analysis of the structure of human activity, differentiating between activity, action, and operations (Leontiev, 2009). Luria, on the other hand, contributed to the study of the neuropsychological bases of activity (Cordeiro, Souza, Caixeta, Caixeta, & Aversi, 2021).

At the contemporary level, Engeström expanded the theory by introducing the concept of expansive activity systems, highlighting the interaction between multiple systems and collective learning (Engeström, 2005). Finally, Fariñas's contributions enrich the theoretical and methodological understanding for addressing complex problems in current social and educational contexts (Fariñas, 2007). The progression of these ideas has allowed Activity Theory to consolidate itself as an essential framework for analyzing and understanding complex human systems, contributing significantly to research and practice in multiple disciplines. This essay will detail this theoretical evolution, its fundamental principles, and its impact on various social and educational



contexts. The essay is divided into an introduction, development, and conclusion. The development section addresses the evolution of the generations of activity theory from different perspectives and its application in the university context.

Development

Activity Theory adopts a holistic and cultural approach to understanding how people learn and develop skills within a social and historical environment. This perspective builds on the ideas of Lev Vygotsky (Vygotsky & Cole, 1978). Vygotsky postulated that cultural tools mediate cognitive development, with language being one of the most significant tools because it acts as a bridge between the individual and their sociocultural environment.

On the other hand, Alexander Luria, Vygotsky's collaborator and disciple, complemented this theory from a neuropsychological perspective. Luria explored how cultural tools and social environments directly affect brain function. He demonstrated that biological factors do not solely influence higher cognitive processes; instead, cultural contexts also play a crucial role in shaping them. This connection among culture, tools, and human activity has helped researchers understand how social dynamics shape learning and the structure of human thought. Vygotsky and Luria laid the foundation for studying human activity as a dynamic interaction between the individual and their environment. They emphasized how cultural tools shape both cognitive and neuropsychological development. Over several generations, scholars have developed activity theory further; the following sections present some of these contributions (Maia, Silva, Correia, & Perea, 2006).

First Generation

Lev Vygotsky laid the foundations of this theory with his concept of mediation, introducing the idea that cultural tools and artifacts mediate human interactions. Scholars articulate this perspective through the subject-object-mediating artifact triad, which connects individuals to their cultural environments and emphasizes that individuals, through their actions and use of tools, shape society. It's important to recognize that individuals consistently engage with the cultural context by using tools (Manoharan & Subramania, 2024; Vygotsky & Cole, 1978). This generation mainly contributed the concept of cultural mediation, transforming human activity into a dynamic and bidirectional process. This model shifted the paradigm in psychology by highlighting that social interaction and symbolic tool use fundamentally shape human development (Solovieva, 2020).

Researchers developed this concept of mediation and the triad to offer a new perspective on human learning and development. This perspective originates in Marx and Engels' dialectical materialism. Individuals do not act directly; instead, they engage in human activity through cultural tools and signs, such as language. In this way, Vygotsky's triad illustrates how individuals interact with objects by employing the tools discussed earlier (Vygotsky & Cole, 1978).

Sahagún (2022) proposes a multiple-case study using activity theory in his doctoral thesis. Activity theory, initially proposed by Vygotsky and developed by Leontiev, establishes that human activities are the core of learning and development, as they integrate cognitive, social, and cultural elements in an interrelated dynamic.



This approach is evident in the document, which analyzes the teaching-learning process within a flexible environment, using the fundamental principles of this theory as a conceptual framework.

The text emphasizes that activity constitutes the central unit of analysis for understanding learning. This perspective posits that educational processes cannot be understood in isolation or reduced to simple tasks, but must be approached as comprehensive activities, where subjects constantly interact with tools, objectives, and social contexts. In this sense, the document highlights that student activity takes on a complex dimension in a flexible learning environment, as it integrates elements such as autonomy, motivation, and collaborative interaction (Sahagún, 2022).

A key aspect of activity theory is mediation, understood as the role of tools, whether physical, such as technology, or symbolic, such as language, in the development of human activities. It emphasizes that in flexible environments, tools play an essential mediating role in the teaching-learning process. Digital technologies, teaching resources, and pedagogical strategies become bridges that connect the subject with the learning object. However, these tools are not neutral, as their effectiveness depends on the context and the pedagogical design that integrates them. In the university context, this theory becomes an essential framework for analyzing and improving educational practices, considering the sociocultural specificities of students and the community.

Vygotsky emphasized that cultural tools and symbols—such as language and technology—actively mediate human interactions. Scholars express this idea through the subject-object-tool triad, which links individuals to their sociocultural environments. In the university setting, where social and cultural dynamics intertwine with local identity, this concept becomes particularly relevant. Students engage not only with technological tools and academic materials but also with community practices and values that shape their learning. Cultural mediation, therefore, emerges as a concrete experience that enriches university teaching, rather than remaining an abstract concept.

One of the theory's most significant contributions is its definition of activity as a holistic unit of analysis, where subjects, tools, and objectives interact as inseparable elements. In flexible educational environments like those found in universities, this approach helps educators understand how students structure their learning. Within this framework, concepts such as autonomy and motivation gain new meaning: students not only aim to meet academic goals but also incorporate personal interests and community contexts into their learning activities, which enhances both the relevance and purpose of their education.

This approach to activity theory also identifies internal contradictions within educational systems and treats them as catalysts for change and development. In universities, these tensions often appear in challenges like unequal access to technology or the need to adapt traditional teaching methods to more flexible strategies. Rather than viewing these contradictions as barriers, educators and institutions can treat them as opportunities to innovate and reshape educational practices, creating systems that better respond to students' needs and promote greater inclusivity.

Furthermore, the social dimension of activity is a key pillar reflected in the teaching-learning dynamic. In the university, where collaborative work and the co-construction of knowledge are pedagogical pillars,



students and teachers engage in interactive processes that foster critical and creative skills. The role of the teacher transforms into that of a facilitator who guides activities, organizes interaction with cultural tools, and promotes meaningful learning. The evolution of Vygotsky's activity theory is still under development.

Second Generation

Leontiev expanded this theoretical idea by structuring activity into three levels: a) activities, b) actions, and c) operations. He explained that needs or purposes motivate activities, individuals perform actions to achieve specific goals, and operations are the automatic processes that support those actions (Manoharan & Subramania, 2024). This generation made one of its most important advances by identifying internal contradictions as a driving force for change. These contradictions, arising from structural tensions within activity systems, generate conflicts that fuel system development and transformation rather than hinder it. This approach enabled scholars to analyze how social and cultural systems evolve and adapt through negotiation and conflict resolution.

Alexei Leontiev, who led the second generation of activity theory, built on Vygotsky's foundations by shifting the analytical focus from individual cognition to collective, socially mediated activity. He argued that human activity does not exist in isolation but emerges within specific social and cultural contexts. Leontiev introduced a conceptual framework that incorporates cultural mediation and a hierarchical structure of activity, with the object (or purpose) guiding all human actions. He organized activity into three interconnected levels—activities, actions, and operations—each linked to motives, goals, and conditions, respectively (Vygotsky & Cole, 1978). This framework offers deeper insight into the dynamics of university education by integrating intrinsic motivation with the cultural and social processes that mediate learning.

Leontiev advanced the theory by framing internal contradictions as central to system transformation. These tensions arise within activity systems when elements such as subjects, tools, goals, and social roles interact in conflicting ways. In universities, students often encounter such contradictions while trying to solve problems, for example, when adapting to innovative teaching methods or incorporating technology into their learning. Rather than acting as obstacles, these tensions become drivers of development and learning, facilitating the ongoing transformation of educational systems (Engeström, 2005).

Redirected attention to the collective dimension of human activity. He emphasized that individuals engage in socially mediated practices, such as teaching and learning, within broader cultural, professional, and institutional contexts. In the university setting, students participate in collective activities where their actions revolve around shared objectives or purposes. These interactions, structured by cultural tools and mediated by social relationships, guide students toward achieving common educational goals. Through this perspective, knowledge emerges individually and through interactions within the educational community (Leontiev, 2009).

Defined collective activity as the foundation of educational practice. He described the object of activity as the unifying element that aligns individual efforts with social outcomes. In universities, the division of labor—reflected in assigned roles among students, instructors, and administrators—creates opportunities for both collaboration and conflict. These dynamics are essential for driving educational innovation. Learning, therefore,



takes place in authentic contexts where students, especially future educators, adopt various roles that help them acquire academic knowledge alongside social and professional competencies.

Finally, Leontiev emphasized the cultural and social mediation of activity through the tools involved in the process. In the university context, these tools range from textbooks and academic discourse to digital platforms and specialized languages. These instruments structure interaction and guide both teaching and learning activities. At the same time, they can generate contradictions, for instance, through unequal access to technology or gaps in digital literacy. Educators and institutions can address these tensions by improving teacher training and adopting innovative pedagogical strategies, ultimately enhancing the educational experience for all participants. Leontiev's ideas, particularly the notion of internal contradictions in activity systems and collective activity, offer a robust theoretical framework for understanding the development of educational processes in the university. This theoretical perspective not only facilitates the identification of challenges present in the classroom but also proposes strategies for addressing the tensions that emerge in the educational process, thus promoting continuous transformation and expansive learning at both the individual and collective levels (Leontiev, 2009).

Third Generation

Engeström (2005) developed the third generation of the theory, focusing on collective activity systems and their interaction in networks. Activity theory, in its evolution over three generations, has provided valuable contributions to understanding human activities, particularly in complex social contexts such as education. A fundamental contribution of this theory is the "activity system," which is an integral unit of analysis for studying how human actions are structured within collective systems. In the university context, this perspective allows us to understand how the actions of students, teachers, and administrative staff are intertwined in a social system mediated by artifacts and tools, such as curricula, digital platforms (Classroom and Moodle), and pedagogical methods, directed toward a common objective: the academic training and professional development of future teachers.

Engeström (2005) presents his model as an interconnected network of elements that combines subjects, such as students, teachers, and administrators, with tools like teaching materials and educational technologies. This model incorporates institutional and academic rules, the university community, its local context, the division of labor, and the roles each actor plays in the educational process. All these components work together to pursue a common educational objective.

The activity theory approach emphasizes the presence of multiple voices within activity systems, showcasing the diversity and heterogeneity that define dynamic communities. In the university setting, this becomes evident in the ongoing interactions among various educational actors—teachers, students, administrators, and educational materials—each contributing their unique perspectives, interests, and cultural backgrounds. This melting pot of voices generates collaboration and tensions, making teaching and learning practices inherently a dialectical process. Recognizing these dialectical dynamics allows us to understand better the importance of dialogue and negotiation in the classroom, between teachers and students, and in institutional



decision-making, where the perspectives of different actors can influence the pedagogical methodologies and strategies implemented at the university.

This concept is particularly pertinent in the university context when faculty, students, and administrators reflect on pedagogical practices and their effectiveness, proposing changes and adjusting methods to improve educational quality. This innovation cycle is essential in a constantly evolving educational context, where societal demands, technological advancement, and new pedagogical perspectives require continuous adaptation.

In short, activity theory, focusing on social and cultural mediation, internal contradictions, and historicity, offers a robust theoretical framework for analyzing and transforming educational systems such as universities. This approach facilitates a deep understanding of current educational practices and provides tools for improvement and evolution in response to emerging challenges in the academic and social environment.

Fourth Generation

In this generation, Fariñas (2005) thoroughly analyzed activity theory in her work "Psychology, Education, and Society," integrating it within a critical approach that highlights its relevance in contemporary educational and social contexts. Based on the foundations established by Vygotsky and developed by Leontiev, the author articulated how this theory provides a robust conceptual framework for understanding the relationship between human development, learning, and social dynamics. Fariñas emphasized that activity theory approaches the human being as an active subject interacting with their environment mediated by cultural tools, signs, and social norms.

Fariñas (2005) emphasized that activity theory views the human being as an active subject who engages with their environment using cultural tools, signs, and social norms. In the university context, students and teachers actively engage with academic content and within a broader educational social system mediated by symbolic and technological tools. They use digital platforms, teaching materials, pedagogical methods, and classroom interactions as mediating tools in teaching-learning, constructing meaning within a shared social and cultural framework.

In his work, Fariñas (2005) offers a critical interpretation of activity theory that is fundamental in analyzing and improving current educational systems. He connects psychology, education, and society in a way that directly applies to the university context. Through this lens, he encourages teachers and students to reflect on educational dynamics, explore the internal tensions that shape them, and identify opportunities for innovation. His approach promotes meaningful learning tailored to individual and collective needs in a constantly evolving educational environment.

Conclusions

In conclusion, activity theory has evolved significantly over its three or four generations, allowing for a comprehensive understanding of human dynamics and their interaction with the social, cultural, and technological environment. This evolution directly influences the educational field, such as the university context,



where cultural tools, historical contexts, mediate learning, teaching, and classroom relationships and the activity systems present within the institution.

Students learn not only through academic content but also by interacting with teachers, using educational technologies, and engaging with academic language. Cultural mediation in this context implies that tools such as teaching resources and digital platforms are not simply neutral instruments, but key elements in the construction of knowledge and social interaction within the university. This impact is significant as a university that trains personnel to participate in the educational field at the different levels of the Ministry of Education. The social impact is relevant, hence the need to expose this topic and its importance.



References

- Cordeiro, K., Souza, D., Caixeta, M., Caixeta, V., & Aversi, T. (2021). Neuropsychology of the frontal lobe and III functional brain unit:

 A Luria's studies and perspectives for the clinic approach. Research, Society and Development, 10(7), e16760. https://doi.org/10.33448/rsd-v10i7.16760
- Engeström, Y. (2005). Developmental work research: Expanding activity theory in practice. Lehmanns Media. https://philpapers.org/rec/ENGDWR
- Fariñas, G. (2005). Psicología, educación y sociedad. Un estudio sobre el desarrollo humano. Editorial Félix Varela. https://indigenasdelperu.wordpress.com/wp-content/uploads/2015/09/psicologc3ada2ceducacic3b3nysociedad_gloriafaric3b1as.pdf
- Leontiev, A. (2009). Activity, consciousness, and personality. Prentice-Hall. https://www.marxists.org/archive/leontev/works/activity-consciousness.pdf
- Luria, R., Leontiev, A., Vygotsky, S., & outros. (1991). Psicologia e pedagogia: bases psicológicas da aprendizagem e do desenvolvimento. Moraes. https://www.unifal-mg.edu.br/humanizacao/wp-content/uploads/sites/14/2017/04/LEONTIEV-Alexei-N.-Os-princ%C3%ADpiois-do-desenvolvimento-mental-e-o-problema-do-atraso-mental.pdf
- Maia, L., Silva, C., Correia, C., & Perea, M. (2006). El modelo de Alexander Romanovich Luria (revisitado) y su aplicación a la evaluación neuropsicológica. Revista de la Facultad de Ciencias de la Educación, Universidad de A Coruña. https://ruc.udc.es/dspace/handle/2183/7027
- Manoharan, D., & Subramania, R. (2024). Teoría de la Actividad Histórico-Cultural: Un marco conceptual para el análisis de la pedagogía posmétodo. *Traducción y Lenguas*, 23(1), 222–236. https://doi.org/10.52919/translang.v23i1.980
- Sahagún, C. (2022). Análisis de la organización y dinámica del proceso de enseñanza-aprendizaje en un ambiente flexible [Tesis doctoral, Instituto Tecnológico y de Estudios Superiores de Occidente]. Repositorio ITESO. https://hdl.handle.net/11117/8447
- Solovieva, Y. (2020). Las aportaciones de la teoría de la actividad para la enseñanza. Educando Para Educar, 20(37), 13–24. https://beceneslp.edu.mx/ojs2/index.php/epe/article/view/51
- Vygotsky, L., & Cole, M. (1978). Mind in society: Development of higher psychological processes. Harvard University Press. https://doi.org/10.2307/j.ctvif9vz4