

In Search of Learning Problems of Students in Context of Psychology: An Analysis of Vygotsky's Social Development Theory

Arfi Anjoon¹ & Dr. Pankaj Kumar Paul²

¹Department of Education, CMJ University, Meghalaya, India

²Assistant Professor & HoD, Department of Education, Gourav Guin Memorial College (VU), Chandrakona Road, Paschim Medinipur

Received: 29.10.2024 | Accepted: 22.11.2024 | Published: 23.11.2024

*Corresponding Author: Pankaj Kumar Paul²

Abstract

Original Research Article

During the first ten years of the twentieth century, Lev Vygotsky was employed by the Soviet Union. Recognizing Vygotsky's impact on education in the contemporary era is essential. His work is beneficial not only for exceptional kids but also for those with unique learning or developmental issues. He was particularly interested in cognitive development, and his work has broad applications in education. The entire study is broken down into various parts: Section A: Social media's role in education and growth; Section B: Lessons from social constructivism; Section C: Vygotsky's Theory and Instruments and Mediation; Section-D: Language in Development and Vygotsky's Theory; Section-E: The Zone of Proximal Development and Assessment; Section F: Vygotsky's Theory of Scaffolding and Pedagogy; Section G: Vygotsky's Theory on Gifted Students and Special Needs

Keywords: Learning, Social Development, Vygotsky, Cognitive Development

INTRODUCTION

Lev Vygotsky worked for the Soviet Union throughout the first decade of the 20th century. It is critical to acknowledge Vygotsky's influence on education in the modern world. Not only is his work constructive for gifted students and others with special developmental or learning challenges, but it also has broad applicability to education, and he was especially interested in cognitive development. Vygotsky had a wide range of interests in the arts in addition to writing.

Vygotsky worked with many people, and his views have been welcomed, adapted, and developed by a wide range of philosophers working in different countries. By going over some of Vygotsky's most well-known ideas that are relevant to educational research and practice, this essay gives a summary of his body of work. His concept of cognitive development, the zone of proximal development, the socio-cultural component of education and development, language, and the use of symbols as tools are all highlighted. This strategy will consider the relationships between these ideas. Vygotsky's views are complex and have been developed and discussed in great detail. Like all texts, his writings are ambiguous, which may be especially significant when reading translations. Because of his early passing, Vygotsky was unable to fully develop and perfect many of his theories.

BRIEF REVIEW OF RELATED STUDIES

In their work, Pathan et al. (2018) examined Vygotsky's contribution to socio-cultural theory in the context of applied linguistics in particular and education in general. The purpose of the study is to elucidate how social-cultural theory has affected the corpus of current literature. The study also examines the socio-cultural theory's applications and consequences for second language acquisition (SLA). Additionally, this study evaluates the theory's fundamental ideas as well as the extent to which they have been applied to the field of study. Examining and comprehending key concepts like the Zone of Proximal Development, mediation, scaffolding, internalization, and private speech critically is the main goal. What students learn and how to solve their learning challenges are the main topics of the socio-cultural theory. The notion put forth by Williams & Burden (1997) in the study's conclusion is that education should be linked to learning how to learn and giving educational experiences significance and relevance for the individual student, according to socio-cultural theory. In addition, the study presents teaching and learning strategies in connection to socio-cultural theory and makes some recommendations for pedagogy. Dang and Marginson (2017) examined the early Soviet psychologist L. S. Vygotsky's (1896–1934) social-educational theories in the context of communicative globalization's effects on

educational practices. In order to study higher cognitive processes, Vygotsky postulated four "genetic domains": the ontogenetic (individual lifespan), the microgenetic (immediate occurrences), the phylogeny (humans experiencing natural evolution), and the cultural-historical (human social activity). In educational research, Vygotskian sociocultural theory is frequently employed, particularly his concept of mediated growth through signs and instruments. Globalization of communication has changed the possibilities for education since Vygotsky. Nevertheless, Vygotskian theory remains helpful in socially situated studies of educational development and transformation, provided that modifications are made to his genetic method to include time-space compression, the mutual presence of the genetic domains, and the glonacal heuristic. Jaramillo (1996) did an investigation of Vygotsky's socio-cultural theory and found that his conceptual framework influenced the creation of constructivist theory and curricula. These contributions become clear when one considers the relationship between his theoretical framework and constructivist teaching and curriculum. The theoretical framework of his approach demonstrates the connection between theory and practice through its backdrop, question, conceptual framework, assumptions, and technique. The following elements of Vygotsky's theory and constructivism showed conceptual similarities: adults and more experienced peers serving as learning facilitators; the social and historical aspects of learning; networking; socially negotiated meaning making; experimentalism; collectivism; and active learning participation. The important aspect of teaching and learning foreign languages was evaluated by Daneshfar & Moharami (2018) in light of Vygotsky's theory of social development. Determining the extent to which learners' understanding of the target language is improved by the educational process is one goal of language evaluation. In 2020, Rahmatirad examined Vygotsky's contribution to socio-cultural theory in the context of education as a whole. Based on Vygotskian theory, socio-cultural theory describes how human cognition and higher mental functions develop. The theory places particular emphasis on how social, cultural, and biological factors are integrated into learning processes and highlights the crucial role that socio-cultural circumstances play in the cognitive development of humans. The purpose of the study is to clarify how social-cultural theory affects learning. The research also examines the uses and consequences of socio-cultural theory in the learning of second languages.

STATEMENT OF THE PROBLEM

On the basis of above background the present discussion is concentrated as, "Vygotsky's Social

Development Theory: Conceptual Issues and Concern".

OBJECTIVES

The objectives of the present study are as follows:

1. To discuss the importance of the social in learning and development;
2. To analyse takeaways of Social constructivism;
3. To explain tools and Mediation and Vygotsky's Theory;
4. To enumerate language in development and Vygotsky's Theory;
5. To deal with the Zone of Proximal Development and Assessment;
6. To discuss Scaffolding and Pedagogy in Vygotsky's theory;
7. To explain Vygotsky's theory and Special Needs and Gifted Pedagogy;
8. To draw conclusion and policy implications of the study;

METHODOLOGY: This study is descriptive in nature. It has been enriched by using secondary data as far as practicable. Apart from this, books and journals have been followed to substantiate the study.

DISCUSSION OF THE STUDY

The whole discussion has been carried out under the following heads:

Section - A: The importance of social learning and development

Section - B: Takeaways of Social Constructivism

Section - C: Tools and Mediation and Vygotsky's Theory

Section - D: Language in Development and Vygotsky's Theory

Section - E: The Zone of Proximal Development and Assessment

Section - F: Scaffolding and Pedagogy in Vygotsky's Theory

Section - G: Vygotsky's Theory and Special Needs and Gifted Pedagogy

Section-H: Conclusion and Policy Implications

Section - A

The Importance of Social Learning and Development

Vygotsky was interested in human growth, and he thought that understanding this topic completely required consideration of four quite diverse levels or scales. It was essential to comprehend how the human

race evolved biologically, how human peoples historically formed cultures, how a person's development generally unfolded, and how particular psychological processes emerged in an individual. According to Brock and Taber (2016), comprehensive micro genetic analysis of a single individual when novel processes appeared was required for the latter. When such possibilities emerged during psychological investigations, Vygotsky noted that his contemporaries were usually more interested in studying stable patterns and thus ignored the "training" phase during the establishment of those patterns. In Vygotsky's view, the most curious period of cognitive development was that one.

Vygotsky's studies gave the social aspect of development and learning a lot of weight. He thought that the ability of humans to both teach and learn from others was one of our most basic characteristics (Moll, 1990). Vygotsky even went so far as to suggest that learning generally involved internalizing what is first encountered in interaction with other individuals who have already internalized that learning, either to an intra-personal or intra-mental level. With a more global view, Vygotsky believed that children learn about the world even before they enter school, with the assistance of their parents and other adults. He also believed that children's development involves more than just receiving assistance from social mediation as they grow into adults; rather, because of the very structure of human civilization, we are constantly learning and developing via the cultural medium of encounters with other people, whether in person or through various media. Our ideas about what education should be used to prepare for, how best to arrange it, and our attitudes toward emerging technologies that can mediate enculturation should all change if we take this point of view seriously. According to Vygotsky, the environment itself may change as a result of the changes a learner experiences. This is due to the dialectical character of his beliefs, which prevented him from seeing a person as a one-way recipient of a static culture. Cultures are dynamic, ever-evolving, and influenced by a wide range of circumstances; as such, they exist in an unstable equilibrium that is subject to change. Vygotsky lived in revolutionary era.

Section - B

Takeaways of Social Constructivism

One area where this social focus is important is in the way that Vygotsky is viewed as a constructivist, i.e., as someone who believes that knowledge is actively constructed rather than being inherently present in some

way and revealed through reflection or experience, or being acquired through sensory impressions that imprint fully formed knowledge directly onto mind. Vygotsky was a contemporary of Piaget, and he read and commented on the latter's work. Assuming that the learner is an active constructor of knowledge, Piaget's approach focused on the learner's behaviors in and on the environment. Although Piaget thought that young children were too egocentric to learn well through social interaction and often wrote about his epistemic subject as if the social was secondary, he did.

Vygotsky believed that social interaction was a necessary part of human learning. Piaget's study approach centred on genetic epistemology, which seeks to determine the universal cognitive development path that each person should experience. Nonetheless, Vygotsky's curriculum embraced a sociohistorical viewpoint, which recognizes that cultural mediation and historical context are ultimately responsible for human psychological development.

According to Vygotsky, a child's development is greatly influenced by the interactions they have with other brains beginning at approximately two years of age. In contrast to Piaget, Vygotsky thought that each person's path to human development is unique, irrespective of their cultural upbringing. Vygotsky believed that learning should come before development. He once asserted that the only "good learning" is that which occurs before growth. This seems problematic at first since if a given material needs to be learnt, learning shouldn't be feasible without some progress. Rather, according to Vygotsky, "good learning" begins on the intermental plane and is mediated by others who have progressed farther in their development, enabling the learner to experience the content through a vicarious experience. The learner is now an acknowledged but peripheral participant in the task; they can no longer execute it adequately on their own. However, by contributing to the topic, the student can begin to absorb and own the knowledge, which will ultimately allow them to participate completely in the discussion. The individual will be able to exhibit what they have learnt after going through this process on their own, without the help of others.

Section - C

Tools And Mediation and Vygotsky's Theory

Vygotsky believed that only humans could make widespread use of tools. Even while he was aware that certain other animals used tools, he thought that humans

used tools differently and to a different extent. According to Vygotsky, human evolution has been greatly aided by our capacity to employ tools for the creation and improvement of additional tools. This is related to Piaget's notion of formal operations, which is the most developed of his four fundamental phases of cognitive development. In formal operations, in addition to mental operations to model components of the external world, a human can also mentally operate on those mental operations. In addition to artifacts like hammers and step ladders, tools can also be tokens or other signs and symbols. Mediating is another key idea in Vygotsky's theory. Without mediation, what would not be possible is made possible. We can use tools to mediate interactions, or we can have people mediate on our behalf. The tools that children use to solve problems are seen as inherently social, even when the child solves the problem on their own. These tools can be tangible objects, tangible tokens of other objects, or symbolic tools that are used in cognition in ways that are culturally meaningful.

A child who has internalized symbolic tools and is now capable of using them freely can only do so after having previously had mediated access to these systems through social interactions. Teaching is the deliberate application of this type of learning mediation. The study of activity theory, sometimes referred to as cultural-historical activity theory, is one area that has developed from the research of Vygotsky and his colleagues. This tradition is said to have originated with Vygotsky's work, which is associated with the mediation triangle, which uses visuals to symbolize the mediating instrument as the triangle's apices, the subject (the one acting), and the object (the thing being acted upon to produce an effect). It is believed that every ingredient in this system influences every other element, forming a dialectical system.

Section - D

Language in Development and Vygotsky's Theory

Vygotsky emphasized the role that language plays in human learning and development. He looked at the role of private speech, or self-talk, which is common in young newborns. Piaget was particularly drawn to this characteristic, which he linked to the egocentric character of the child: young children find it difficult to shift their perspective and see the world from a different one. Even though adults often communicate internally verbally rather than vocally, they do occasionally speak out loud to themselves.

However, youngsters often offer a vocal comment to an activity, even if it is intended solely for them. Talking out loud or inner to oneself induces an explanation. Even though language is not how we convey all of our conscious knowledge, interpersonal communication

nevertheless requires language. Vygotsky suggested that since people's urge to communicate with one another drove the evolution of language, private speech actually contains a significant social component. Even in instances where they were alone, children would use communication tools to help organize and carry out activities, according to Vygotsky. Private discussion has a social component at first, but it will gradually become internalized. This reflects the general notion that experience gained on the inter-personal plane is the source of knowledge gained on the intra-personal level. When this technology is made available, it can be used to help one's mental process as well as planning, problem-solving, experience evaluation, and other objectives. Scientists must be able to critique their theories. While considering any obstacles and objections from others, one should try to make the weaker notions stronger and get rid of the more promising ones. Since both types of notions are altered in the encounter, Vygotsky used the picture of spontaneous and scientific thoughts moving or growing towards one another to demonstrate how the idea of dialectic is at work here. Consequently, what is neither spontaneous nor scientific arises as a hybrid system of thought that combines the thesis and antithesis of each. The ideas we have produced are a synthesis of the inspiration from both sources. A more extensive and recent study on the metaphorical character of human conceptions lends credence to these viewpoints. Metaphors enable us to extend the use of language that initially had direct experiential referents, and this shows that our abstract conceptions are rooted in direct perception. We now understand the significance of this error and the reason the holiday is thought to be lengthy, among other things.

Now, among other things, we know the significance of this inaccuracy and why the holiday is believed to be long. This is consistent with the central thesis of constructivism once again: the human brain gradually creates sophisticated abstractions from what can be instantly perceived in reality (Taber, 2014). Language is a vital tool for these processes. A child who understands what "big" means in terms of enormous dogs, chairs, beds, and boxes will be able to identify how concepts can be huge in a culture even though they are not physical or large. Dialogue or mediation can be used to reach this understanding.

Concept abstractions are challenging to teach, and mental communication is necessarily imprecise even when language is used. The teacher has to expose the student to the cultural tools of the subject matter and then facilitate their interaction and experience so that the student can internalize them and add them to their toolkit of interpretive resources for making sense of the world. The experienced teacher will use pictures, stories, gestures,

similes, analogies, and other mediating strategies. Vygotsky argues that by assisting students in connecting abstract ideas to their pre-existing interpretive repertory of spontaneous conceptions, these tools help students understand abstract notions.

Given the importance of spontaneous conceptions in concept growth, it can be advantageous to take the time to elicit student views at the beginning of a topic. This constructivist approach is quite common in science education. Rather than merely imparting academic concepts in an impersonal way, a skilled instructor endeavours to actively participate in the student's thought processes and guide them towards the intended understanding. Student discussion has a great deal of potential to support this process when concepts are discussed, clarified, and refuted. Discourse is essential for teaching science, according to Mortimer and Scott (2003), and teachers must support students in speaking up and actively participating in conversation as they strive to understand

Section - E

The Zone of Proximal Development and Assessment

One of Vygotsky's most well-known ideas is the "zone of proximal development" (ZPD). Vygotsky argues that giving students an exam to complete on their own, without help or reference materials, is often an inappropriate way to evaluate students. He discussed the kinds of IQ tests that were used to calculate the kids' mental ages. Binet created these tests to determine which pupils were developmentally impaired about their physical age and which students would not benefit from being in a school with classmates of the same age (Gould, 1992). In its day, it was advanced. Vygotsky realized that there might be big variations in students' immediate learning potential even among those with comparable mental ages. A concept of "phase space" for a learner's potential competencies was put forth by Vygotsky. A learner's zone of actual development (ZAD) is made up of a wide range of competencies at any given time, including everything they are not yet competent to execute.

Essentially, the goal of traditional educational assessment was to determine the ZAD's extent concerning a specific domain, such as the student's prior knowledge and comprehension of acids or their ability to solve problems involving equations of motion. However according to Vygotsky, knowing the size of the zone surrounding the ZAD which represented what the learner was prepared to do with the right assistance but could not yet perform on their own—was far more helpful. Similar to the ZAD, each student's zone of next or proximal development

would be unique and would reflect what the learner was prepared to learn.

If assessing people solely based on their capacity for independent thought seem sense, then the traditional test or examination makes logic. On the other hand, it would seem more reasonable to assess students in environments that more closely resemble the workplace, organizations, and other social contexts where people work and learn if the purpose of education is to prepare students for their roles in society, where their work will be mediated by others and a variety of cultural tools. As evaluation focal points, it would seem significantly more advantageous to use scenarios such as project-based learning, cooperation, open-book exams, interactive interviews, etc. The transition from summative to formative and diagnostic assessment—that is, assessment to promote learning—has received significant attention in many nations in recent years, if not at the end of educational courses. In the 1930s, Vygotsky was promoting diagnostic assessment or evaluation both within and outside of the ZPD. There has been a continuous program of work in scientific education to create diagnostic instruments to assist diagnostic assessment in instruction.

Section - F

Vygotsky's Theory and Scaffolding and Pedagogy

One of the key ideas to come out of Vygotsky's theories is "scaffolding" education. Given Vygotsky's theory—which maintains that learning occurs before development—teachers should make an effort to have their students functioning inside their ZPD. Students may get rather preoccupied when working in their ZAD, but this does not support ongoing development. Drill and practice help students become more productive, but they don't help them reach a greater level of understanding or skill. However, if a student is given a task that is considered to be beyond their ZAD in their ZPD, they will unavoidably fail unless they get the support they need. Therefore, learning activities need to be both mediated and outside of the ZAD to encourage achievement with the appropriate kind of assistance. The scaffolding structure is used to support students in achieving in a way that makes it easier for them to pick up new skills.

It is the teacher's job to organize the learning in this case so that the scaffolding is first adequate to help the student complete the task, but it is gradually removed as the student internalizes more of the component elements. The task could be broken down into a recipe by the instructor, to begin with, but this would probably only help with a limited amount of learning. A flow chart with all the required steps (to help the students understand the reasoning and how the steps fit into a bigger picture) and a list of the relevant chemical equations could also be

given to the students by the instructor as an alternative. The briefing sheet would ask questions about relevant prior knowledge that will be needed. The teacher may also urge students to work in pairs, which would require them to clarify and share their views. If a similar exercise is completed later in the term, there won't be any chemical equations available, and the flow chart may exclude certain information that the students must locate and enter. Eventually, the students will organize their work and be required to create the flow chart on their own. Eventually, students would only be required to use reference materials when planning and completing the assignment independently.

There are numerous kinds of scaffolding tools that might be introduced. Two examples that I have previously put forth are poles, which are outlines that provide support or epistemic support, and scaffolding planks, which are platforms for learning new information (Taber, 2002). The "poles" help create a framework for finishing the new assignment, and the "planks" help the student identify and categorize previously learned material. It is possible to incorporate a variety of scaffolding tool types. Two examples that I have previously shown are scaffolding planks, which are platforms for learning new information, and poles, which are outlines that offer support or epistemic support (Taber, 2002). The "planks" assist the student in identifying and classifying previously taught content, while the "poles" assist in creating a framework for completing the new project.

Section - G

Vygotsky's Theory and Special Needs and Gifted Pedagogy

Defectology," or the study of children whose development was impeded by some flaw, was one of Vygotsky's fields of study (a name that sounds ugly and incorrect in modern English usage). Vygotsky was a progressive, whatever the term. Instead of attempting to make up for the shortfall, Vygotsky thought that measuring its degree was given too much weight. To help students succeed, learning activities are needed to push them in their ZPD while also providing support, according to Vygotsky's theoretical framework. This suggested that a child suffering from hearing loss or vision impairments, for example, would not be able to

engage in some of the common cultural mediations that support the formation of symbolic tools, the building blocks of higher cognitive functioning. Not because the cognitive apparatus cannot support normal development, but rather because normal growth would not be mediated in the usual manner, and a child with a disability would not grow intellectually properly instead, because normal development would not allow for the availability of traditional channels of mediation. The next step, in Vygotsky's view, was to find compensatory means of providing the instruments needed for development. To support students in their ZPD, alternatives had to be developed or found in case the usual mediation techniques were unavailable. (Alternatively, braille, which is a print alternative, could be used to access texts).

Section - H

Conclusion

Vygotsky's theory states that since "good learning" takes place in the ZPD, experiences that are both challenging and suitably supported fall under the category of education. Activities that are in the ZPD for most students in a class could also be in the ZAD for brilliant students, which indicates that they are not particularly good for their education. In theory, the solution is simple, but in practice, it may not be so easy: each student in the class needs to have their challenge to support the ratio adjusted by the instructor. In contrast to other pupils in the class, gifted learners require more difficult assignments or less support.

Policy Implications

While it is widely accepted that these students require greater challenge, Vygotsky's theory offers an alternative perspective that suggests designing lessons so that the most capable students in the class find the most challenging activities first. Differentiated scaffolding is then created to provide the perfect balance between challenge and support for each student. If teachers are successful in implementing differentiated education in this way, there is no longer any benefit to labeling individual students in a class as gifted or special needs.

REFERENCES

- Andersson, B. (1986). The experiential gestalt of causation: a common core to pupils' preconceptions in science. *European Journal of Science Education*, 8(2), 155-171.
- Brock, R., & Taber, K. S. (2016). The application of the microgenetic method to studies of learning in science education: characteristics of published studies, methodological issues and recommendations for future research. *Studies in Science Education*, 1-29. doi:10.1080/03057267.2016.1262046
- Cole, M. (1990). Cognitive development and formal schooling: The evidence from cross-cultural research. In L. C. Moll (Ed.), *Vygotsky and Education: Instructional implications and applications of sociohistorical psychology*, (pp. 89-110). Cambridge: Cambridge University Press.
- Collins, H. (2010). *Tacit and explicit knowledge*. Chicago: The University of Chicago Press.
- Crain, W. (1992). *Theories of development: Concepts and applications* (3rd ed.). London: Prentice-Hall International.
- Darwin, C. (1871/2006). *The Descent of Man, and Selection in Relation to Sex*. In E. O. Wilson (Ed.), *From So Simple A Beginning: The four great books of Charles Darwin* (pp. 767-1248). New York: W. W Norton & Company.
- Dirbaga, K. K. (2018). A comparative analysis: Vygotsky's sociocultural theory and Montessori's theory. *Annual review of education, communication & language sciences*, 15(1), 113-126.
- Daneshfar, S., & Moharami, M. (2018). Dynamic assessment in Vygotsky's sociocultural theory: Origins and main concepts. *Journal of Language Teaching and Research*, 9(3), 600-607.
- Jaramillo, J. A. (1996). Vygotsky's sociocultural theory and contributions to the development of constructivist curricula. *Education*, 117(1), 133-141.
- Marginson, S., & Dang, T. K. A. (2017). Vygotsky's sociocultural theory in the context of globalization. *Asia Pacific Journal of Education*, 37(1), 116-129.
- Pathan, H., Memon, R. A., Memon, S., Khoso, A. R., & Bux, I. (2018). A critical review of Vygotsky's socio-cultural theory in second language acquisition. *International Journal of English Linguistics*, 8(4), 232.
- Piaget, J. (1932/1977). *The moral judgement of the child*. Harmondsworth: Penguin Books.
- Piaget, J. (1959/2002). *The language and thought of the child* (3rd ed.). London: Routledge.
- Piaget, J. (1970/1972). *The principles of genetic epistemology* (W. Mays, Trans.). London: Routledge & Kegan Paul.
- Piaget, J. (1997). *Development and learning*. In G. M. & C. G. M. (Eds.). *Readings on the development of children* (2nd ed., pp. 19-28). New York: W. H. Freeman.
- Rahmatirad, M. (2020). A review of socio-cultural theory. *Siasat*, 5(3), 23-31
- Vygotsky, L. S. (1934/1986). *Thought and language*. London: MIT Press.
- Vygotsky, L. S. (1934/1994). The development of academic concepts in school aged children. In R. van der Veer & J. Valsiner (Eds.). *The Vygotsky reader* (pp. 355-370). Oxford: Blackwell.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, Massachusetts: Harvard University Press.
- Vygotsky, L. S., & Luria, A. (1994). Tool and symbol in child development. In R. van der Veer & J. Valsiner (Eds.). *The Vygotsky reader* (pp. 99-174).
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89-100. doi:10.1111/j.1469-7610.1976.tb00381.x.