VYGOTSKY'S CULTURAL THEORIES IN EDUCATIONAL PRACTICE: IMPLICATIONS FOR INSTRUCTION IN SCHOOL SETTINGS

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Abstract

This article analyzes the pedagogical implications of Vygotsky's theories of cultural tools, the zone of proximal development, and scaffolding in the context of teaching in schooling settings. The implications for teaching children with experiences of refugee-related trauma are also explored. Findings suggest that Vygotsky's theories provide valuable insight into the learning processes and challenges faced by these students.

Keywords: *Vygotsky, cultural theories, educational practice, refugee trauma, school setting*

1. INTRODUCTION

Lev Semanovich Vygostky (1896-1934) has been a significant name in the study of education, by his theoretical focus on the sociohistorical and sociocultural origins of cognitive development and learning (Duchesne & McMaugh 2016, pp.101-102). This article will delve into an in-depth analysis of Vygotsky's concepts of cultural tools, zone of proximal development, and scaffolding and discusses how these relate to each other in the understanding of children's development and learning processes. It investigates the potential pedagogic implications in the practices of teaching Asian languages and literacy in the context of contemporary Australian schools. The discussion continues with a further examination of the theoretical implications for teaching children with experiences of refugee related trauma.

2. CONCEPTS OF CULTURAL TOOLS, ZONE OF PROXIMAL DEVELOPMENT, AND SCAFFOLDING

According to Vygotsky, a learner's development is a result of their interactions within their sociocultural environment. People are born with certain inherited patterns of actions,

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then constantly acquiring skills and competencies through the interpersonal and intrapersonal processes of gaining control over their usage of the cultural tools (with language being the most important one) (Vygotsky 1987, pp. 19-20) . This then enables them to be the member of a certain society, identified as a certain individual different from others. "People are both products and producer of their societies and cultures and knowledge is both individually and socially mediated" (Woolfolk & Margetts 2016, p. 322).

The concept of cultural tools refers to a set of artifacts (physical or mental) of a particular culture, "through which culture is expressed and passed on" (Duchesne & McMaugh 2016, p. 105). This concept is crucial because it distinguishes things that are uniquely human, having the sociohistorical nature, and being attained through practicing. For instance, dining customs differ among cultures. While some cultures like the Vietnamese, Chinese, and Japanese use chopsticks and share dishes, Western cultures like the French and the British prefer using spoons and forks, with each person having their own plate. The ones using chopstick practice the collective custom of having shared dishes of food on the table, and each individual look at each other to decise their own food taken during the meal, like the Vietnamese, Chinese, Japanese in Asia. Differently, the ones using spoons and

folks practice the more individualist custom of having their own plate, controling their portion of food, and using their singular eating tools, like the French, UK in the Europe. Among the artifacts, Vygotsky sees that language is the most important because it labels the things, shapes the thinking, and enables the communication. Language is at the core of the interpersonal and intrapersonal processes in the cognitive development and learning.

Vygotsky defines cultural tools as a set of artifacts (physical or mental) of a particular culture, 'through which culture is expressed and passed on' (Duchesne & McMaugh 2016, p.105). For instance, consider the different writing systems used across various Asian languages, such as the alphabetic script used in Korean and the logographic characters used in Chinese. The way these systems are taught and learned could be influenced by Vygotsky's concept of cultural tools, as they require different cognitive skills and teaching strategies.

Learning is a process of acquiring new skills and competencies, in which a learner works within his or her potential zone of capacity, which Vygotsky coined as Zone of Proximal Development. Vygotsky's concept of the Zone of Proximal Development (ZPD) delineates the range between the skills and competencies that a learner is already capable to do on his

or her own, to the ones that he or she could not do yet but being able to achieve with guidance or support from outside (Vygotsky 1978, p. 86, cited in Silverman 2011). For example, a learner who can add up to ten may struggle with doing an addition of 9 to 5 but can do it when being advised to make a sum of 9 to 1 to make a 10 first, then add 4 to 10 to make the total sum of 14.

However, this ZPD is not physical to be observed, and not always easy to be measured as in the math example above. A learner can understand what he or she already knows and do not know in a certain time and context, yet might be not clear of to what extend their knowledge and skills can be expanded and developed. An outsider can know what outcome he or she wants from another, but not sure what is already known and where to start the guiding. For its abstract nature, ZPD of certain skills can be miss-leaded by indicator of other skills. For example, a chef who may struggle with communication in the kitchen does not mean that he or she cannot cook well. Therefore, educators must accurately determine a learner's ZPD to provide the right and suitable support for a smooth cognitive development.

The planned and temporary external support provided to a learner by others for the purpose of that learner achieving a certain task is called scaffolding (Wood, Bruner & Ross, 1976, cited in Duchesne & McMaugh 2016, p. 108). This concept is built by Jerome Bruner upon Vygostky's theory of ZPD and cultural tools. First, it refers to essential support that enable one learner to use their previous skills or competencies with the support to be able to acquire another skills or competencies; so, it is relevant for that learner in that particular learning context; when the task is done, the support is no longer needed. Or with other learner, the support might be in different form. Second, the concept of ZPD links to another label of "knowledgeable person(s)", referring to teacher, peers or someone who has better knowledge than the learner in a particular task that the learner needs support. Third, scaffolding can happen in any forms, involve the usage cultural tools, in which language is particularly crucial.

3. VYGOTSKY'S THEORY AND ITS IMPLICATION TO THE UNDERSTANDING OF THE DEVELOPMENT AND LEARNING OF YOUNG PEOPLE

Vygotsky (1978, 1989, as cited in Dorothy and Lave, 2009, p.7) noted that people use cultural artifacts in their environment as cognitive aids, to guide their problem-solving, influence their emotions, and inform their sense of self. Vygotsky's cultural historical theory implies that people learn to be a member of their culture and at the same time gain certain control over their own actions by using cultural

symbols. In essence, this refers to the processes of learning and cognitive development.

Vygotsky, along with his contemporary Piaget, who investigated the stages of cognitive development, significantly contributed to our understanding of human learning and growth. Piaget sees children's development process as "a gradual process of change" from a pre-existing structure to emerging mental schema (Duchesne & McMaugh 2016, p.96), therefore development process of young people can be seen as universal. Yet, Piaget's theory could not explain the diversity of children's development processes.

Vygotsky's concept of cultural tools posits that each culture provides its members with distinct tools to engage with, thereby shaping their knowledge, skills, emotions, goals, thoughts, and identities. It means that the learning of young people in a certain culture is intensively shaped by the set of cultural tools available for them. For example, the fishing kids in a village learn to roll the boat, use the fish rod to catch fish, make fish, cook fish, and eat fish. Meanwhile, the kids in an urban setting school may be introduced to fish, water, and fishing through a book, a film, or a computer with searching tools.

Another key concept in Vygotsky's theory is the Zone of Proximal Development (ZPD), which delineates the range within which individuals can most effectively learn and practice new skills. Essentially speaking, a person is motivated to learn and can only learn in an activity that he or she can use the previous knowledge and skills but putting them in challenge for achievable expansion or development. For example, giving the fishing kids a bigger boat, they would want to know how to work with other kids in a team to roll that big boat for better fishing experience. Yet they would have no idea what to do if being given a giant ship, and so give up the interest of learning.

Building on the concept of ZPD, scaffolding emphasizes the context-dependent and temporary nature of interactions during learning. Young people learn and develop through all daily activities, in their social settings, with intended and unintended interactions with others. The interactions with a more knowledgeable other (MKO) would give the right amount of support for young people to achieve new skills, knowledge, or competencies. Though intended or not, all forms of scaffolding include uncertainty, because it relies on the 'intersubjectivity' (Newson and Newson (1975), and any change of participants, time, place, or tools, can lead to the change of the outcome.

To illustrate how these three concepts interplay in learning and development, I will use the example of

Austin's butterfly from Ron Berger's educational experiment (Austin's Butterfly: Models, Critique, and Descriptive Feedback (Ron Berger, EL Education,
https://www.youtube.com/watch?v=E_6 PskE3zfQ)). Ron gave a task of drawing scientifically a tiger swallowtail butterfly to a first-grade class. Pre-task, he showed the class the photo of a tiger swallowtail butterfly and discussed about the creature's visual features, like color, shape, patterns. He then let the students draw. His case of focus is Austin. After Austin's first drawing, Ron asked his friends to give him the feedback. Ron advised the children about how to give informative feedback, which mainly point out to Austin which detail should be change for the outside shape of the butterfly, and specific changes to be made. Austin kept drawing again based on peers' feedback. After Austin's fourth drawing, Ron asked his friend to give feedback on patterns and colors. At last, Austin finished his drawing of the tiger swallowtail butterfly with amazing look, remarkably close to the original photo (see photo below).
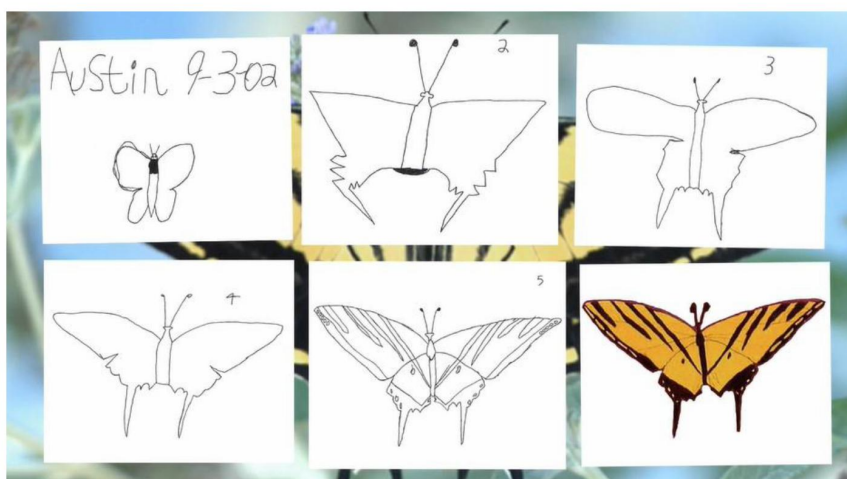

Photo: Austin's Butterfly(ies)

Austin's butterfly proves impressively how far one child can develop his existing skill of drawing and how scaffolding in form of peers' feedback can do to have a difficult task done by a first-grade child. In this case, language has been used as the mediation tool. The children learn to use specific language of shape, direction, measurement, and color to give advises to some one of their same level; and Austin learnt to interpret those comments into action of correction.

Vygotsky's key concepts of ZPD, scaffolding, and cultural tools are interrelated, collectively contributing to a holistic understanding of development and learning. While it implies that learning and development are strictly shaped by available resources; it also implies that learning can be flexible and creative, and

development can be achieved even in difficult situations.

4. IMPLICATIONS OF VYGOTSKY'S CONCEPTS IN TEACHING FOR YOUNG PEOPLE

As partially illustrated previously, these three concepts from Vygotsky's theory can inform a comprehensive learning process. For example, a general process would involve six steps. Initially, the teacher could use a pre-test to assess students' prior knowledge and gauge the class's diversity. This helps to identify learners' ZPD as the result of the second step. Third, teacher designs the tasks for leaners that fit within their ZPD. Step four, teacher apply different scaffoldings to support learners. In the fifth step, both the teacher and student review the final product, enabling the teacher to define the student's post-task ZPD.
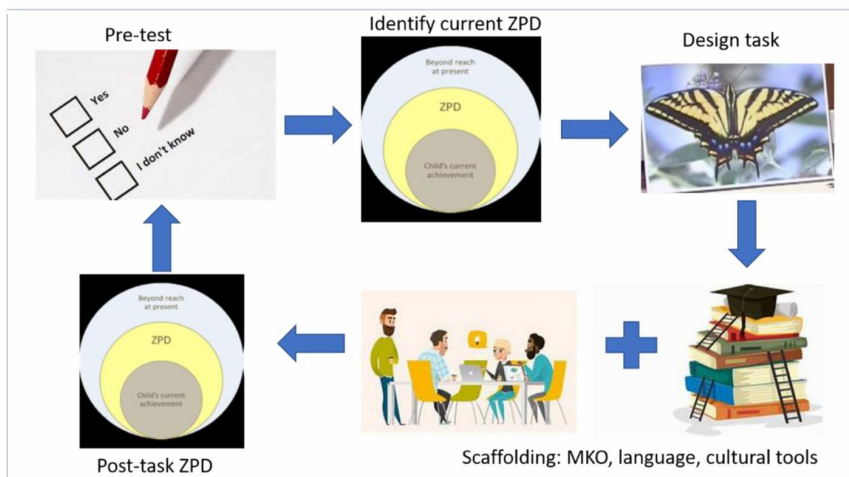
Yet, Vygotsky's theory gives three significant implications for the processing of this model. The first implication is that each learner enters the class with a unique set of cultural tools they have mastered; thus, it is crucial for educators to conduct a pre-test to gather information about these tools. In teaching, the pre-test can be designed as an opened discussion about a given topic. For example, about the topic of food and the food culture for primary level, learners can be given a series of picture of chopstick, fork, spoon, bowl, plate, high table, low table, and so on; they are encouraged to label the object and talk or write about what they know of them. This assessment gives the teacher a sense of what learners already know and how much.

The second implication is that each learner has a unique ZPD for any given task; thus, it is the educator's responsibility to identify each learner's ZPD for the target task. Returning to the example above, when the teacher has known the diverse situation of learners, he or she can group learners so that each group would have a student with more knowledge than the others. The teacher could then provide the groups with additional activities to

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stimulate discussion and teamwork. Each group can also be provided with supporting tools, such as computer, with guidance of how to use them for information searching. By doing this, the learners can engage into significant expansion of knowledge, with support from MKO(s) as peers, and cultural tools (language, computer, and internet).

The third implication is that while scaffolding must be individually tailored to each learner's needs, it is essential for educators to provide intensive supervision, timely feedback, and flexible adjustments as needed. For example, while supervising teamwork, teacher can recognise some signal of conflict due to the gap of language use or technology skills, then the teachers should have immediate response by releasing the conflict and providing extra support to close the temporary gap. Finally, all planned and spontaneous interactions should be approached with the teacher's awareness of cultural differences and developmental diversity.

5. CONCLUSION

For his focus on socialisation as well as internalisation processes, Vygotsky is seen as both social and psychological constructivist (Harry 2012). The first two parts of this article have proved that Vygotsky contributed significantly for the understanding of children as active agent in their learning, getting knowledge within their social and cultural context, which are still relevant in the contemporary context of education. The following two parts have illustrated how these three key concepts can be flexibly adopted and adapted to accommodate different cultures and curricula.

6. REFERENCES

Silverman, SK 2011, 'Zone of Proximal Development', in S Goldstein & JA Naglieri (eds), Encyclopedia of Child Behavior and Development, Springer US, Boston, MA, pp. 1590-90.

Vygotsky, LS 1987, The Collected Works of L. S. Vygotsky Problems of General Psychology, Including the Volume Thinking and Speech / by L.S. Vygotsky edited by Robert W. Rieber, Aaron S. Carton, 1st ed. 1987. edn, New York, NY : Springer US : Imprint: Springer, New York, NY.

Woolfolk, A & Margetts, K 2016, Educational psychology, 4th [Australian] edition. edn, Pearson Australia, Melbourne, VIC.

Curry, MR 2018, 'School culture and innovation : essential elements for fostering student belonging / by Megan Renee Curry', Thesis (PhD(Education))--University of South Australia, 2018. <https://find.library.unisa.edu.au /primoexplore/fulldisplay?vid=U NISA&search_scope=All_Resourc es&docid=UNISA_ALMA1116347 6590001831>.

Duchesne, S & McMaugh, A 2016, Educational psychology for learning and teaching / Sue Duchesne Anne McMaugh, 5th edition. edn, South Melbourne, Victoria : Cengage Learning

Australia, South Melbourne, Victoria Albany, North Shore, NZ.

Harry, D 2012, An Introduction to Vygotsky, Taylor and Francis.

Ohnuki-Tierney, E 1981, 'Phases in human perception/conception/symboliz ation processes: cognitive anthropology and symbolic classification', American Ethnologist, vol. 8, no. 3, pp. 451-67.

Silverman, SK 2011, 'Zone of Proximal Development', in S Goldstein & JA Naglieri (eds), Encyclopedia of Child Behavior and Development, Springer US, Boston, MA, pp. 1590-90.

Thomson, P 2003, Schooling the Rustbelt Kids: Making the Difference in Changing Times, Sydney: Taylor & Francis Group, Sydney.

Tran, TQ & Duong, TMA 2018, 'The effectiveness of the intercultural language communicative teaching model for EFL learners', Asian-Pacific Journal of Second and Foreign Language Education, vol. 3, no. 6, viewed 10/11/2019, https://doi.org/10.1186/s40862 -018-0048-0.

Vygotsky, L 1962, Thought and language, Cambridge, Mass. : MIT Press, Cambridge, Mass.

Walton, J, Priest, N, Kowal, E, White, F, Brickwood, K, Fox, B & Paradies, Y 2014, 'Talking culture? Egalitarianism, color-blindness and racism in Australian elementary schools', Teaching and teacher education, vol. 39, pp. 112-22.

Woolfolk, A & Margetts, K 2016, Educational psychology, 4th [Australian] edition. edn, Pearson Australia, Melbourne, VIC.