

***EXAMINING SECOND LANGUAGE LEARNING: TAKING A
SOCIOCULTURAL STANCE***

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Abstract

Vygotsky's sociocultural theories have been widely referred to in the field of second language learning (SLL) research (e.g. see Donato, 1994; Gutiérrez, 2003; Haas, 1996; Ohta, 2000; Swain, 2000; Warschauer & Kern, 2000). Adopting sociocultural theories offers researchers theoretical perspectives with which to examine language learning as a social practice, consider students as active participants in constructing learning processes, and investigate the interaction between different factors involved. To achieve this, this literature review aims to explore the central concepts of sociocultural theories and how such perspectives assist researchers in examining the interaction involved in the field of second language research.

Keywords: *Sociocultural Theories, Mediation, Zone of Proximal Development (ZPD), Scaffolding, Self-regulation.*

Introduction

In the past decade, there has been a call for a theoretical pluralism for SLL (Breen, 2001; Mitchell & Myles, 2004) and growing attention has been given to the social aspects of language learning. A developing research body supports the use of social constructivism as a theory of knowledge to investigate language learning and to engage language teachers in promoting students' meaningful learning and intrinsic motivation. Social constructivism is defined as "a particular view of knowledge, a view of how we come to know" (Oldfather *et al.*, 1999:8). In particular, taking a social constructivist stance allows language teachers and researchers to view language learning as a co-construction 'through interactions with others, which takes place within a social-cultural context' (*ibid*), and raises questions conventional SLL approaches may not identify. Thus, rather than considering language learning merely as a cognitive process to acquire linguistic rules or knowledge, such a perspective brings a social turn by emphasising the social nature of learning and investigating the complexity and dynamic social interaction involved in language learning processes.

Among the theories related to social constructivism, Vygotsky's sociocultural theories have become employed extensively in the field of SLL research (e.g. see Donato, 1994; Gutiérrez, 2003; Haas, 1996; Ohta, 2000; Swain, 2000; Warschauer &

Kern, 2000). As the purpose of theories is to provide a position from which to view a problem and to help analyse, interpret and build up the framework (Levy & Stockwell, 2006), adopting sociocultural theories offers researchers theoretical perspectives with which to examine language learning as a social practice, consider students as active participants in constructing learning processes, and investigate the interaction between different factors involved. It is essential to explore the central concepts of sociocultural theories that are widely referred to in the field of second language research, including mediation, the zone of proximal development (ZPD), scaffolding and self-regulation.

The Central Concepts of Sociocultural Theories

Mediation

Mediation is a central concept of sociocultural theory (Lantolf, 2000). For Vygotsky, mediation represents the use of tools, which refers to things which are adopted to solve a problem or reach a goal. Among these tools, language is the most significant one. *Mediate* is defined as, ‘to act as a peacemaker between opposing sides’ (Longman Dictionary of Contemporary English, 2007). Through mediation, different tools can mediate the child’s learning and improve the child’s abilities.

Vygotsky emphasises that the human mind is mediated and ‘human consciousness is fundamentally a mediated mental activity’ (Lantolf & Appel, 1994:7).

According to Lantolf’s interpretation, it is noted that language is regarded as one of the symbolic (or psychological) tools of mediation in mental activities (2000). As Vygotsky’s principles state, individuals use psychological tools (Vygotsky, 1981) for directing and controlling their physical and mental behaviour. These psychological tools, especially language, are artefacts and serve as *mediators* for an individual’s mental activity. For instance, to solve problems, people might search for various ways to develop plans and remember certain information (e.g. a phone number) by repeating it. However, during such a problem-solving process, instead of viewing human activities as a passive reaction within a behaviouristic framework, the psychological process should be regarded as part of active participation. The symbolic tools allow individuals to collaborate with others shape their world according to their goals (Lantolf & Appel, 1994).

In addition to language, Haas (1996) extends Vygotsky’s idea, tools of mediation, by proposing the use of technologies as one of the psychological tools and sign systems to mediate interaction between humans and the environment. In particular, Haas’ arguments provide researchers with valuable theoretical perspectives, as she

asserts, ‘Vygotsky’s theory of mediation helps us see tools, signs, and technologies as ... systems that function to augment human psychological processing” (Haas, 1996:17, cited in Levy & Stockwell, 2006:116).

William and Burden indicate that *mediators* can also be people who play an important role in enhancing a child’s learning ‘by selecting and shaping the learning experiences presented to them’ (2009:40). Interaction with people, usually parents, teachers or peers, with different levels of skills or knowledge often leads to effective learning, which then encourages learners to move on to the next stage of learning or understanding. Apparently, mediation involves broad views with social interaction. Mediators should be viewed as more than merely knowledge providers. As learners’ needs, willingness and affective status (e.g. confidence or anxiety) should be considered during the mediation experience, mediators should aim to empower learners with the necessary abilities and knowledge, and help them become self-directed learners. More importantly, instead of unidirectional and passive input of knowledge or skills, the negotiation and interaction between learners, learning materials and tasks, context and mediators make students active learners in co-constructing knowledge. Thus, for SLL, the above suggests that the role of

mediators, such as peers and instructors should be taken into consideration when designing curricula or learning tasks in a learning context.

In brief, through the mediation concepts interpreted by Vygotsky, the importance of mediated experience for learning is revealed. Learning is considered as a socially mediated process as it is not only mediated through the developing use and control of psychological tools (e.g. language, resources, technologies) but also relies on interaction and shared processes (e.g. discussion) (Mitchell & Myles, 2004). It is noteworthy that socially mediated processes involve individual and social aspects, which can be applied to SLL, by considering students as active learners who learn to control the use of various tools, such as language, and then to engage themselves in processes of interacting and co-constructing experiences with others.

Zone of Proximal Development (ZPD)

Developed from the same line of mediation, the concept of the Zone of Proximal Development (ZPD) has been enthusiastically and widely researched for its crucial implications in helping learners to learn. Vygotsky (1978:86) defines the term, ZPD, as follows,

‘...the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.’

(Vygotsky, 1978: 86)

In addition, Mitchell and Myles interpret the concept of the ZPD as ‘the domain of knowledge or skills where the learner is not yet capable of independent functioning, but can achieve the desired outcome given relevant scaffolded help’ (2004:196). Similarly, Harvard (1997:40) regards Vygotsky’s concept of the ZPD as ‘the distance between the child’s independent capacity and the capacity to perform with assistance’. Therefore, from the above definition, it is noted that essentially, social factors (e.g. help from others or different forms of assistance such as observation, modelling and feedback) are involved in the ZPD which is considered a ‘distance’ or ‘domain of abilities or skills’ the learner lacks, before reaching a state of being capable and self-regulated.

Learning, Development and the ZPD

The relationship between learning, development and the ZPD can help us understand what occurs within the ZPD. To reach such an understanding, Vygotsky investigates cognitive development in school learning contexts and uncovers a relationship between learning and development processes, which is highly complex and dynamic. For Vygotsky, *learning* and *development* processes operate independently but are mutually influential (1978). Referring to the concept of the ZPD, Vygotsky finds that learning through participation precedes and shapes

development. Through internalisation, learning appears to lead to development. Thus, the processes of learning and development are closely associated but occur in a different sequence.

It is noteworthy that, as Vygotsky emphasises, the interaction between people and their environments, and peers, helps activate students' learning in the ZPD, internalises the learning process and then eventually constructs *development*. Therefore, as in mediation, social factors are crucial, as these stimulate learning in the ZPD. Similarly, Mitchell and Myles (2004) stress the concept of a *sequence* of learning with a convergent socio-cultural view, where *social* comes before *individual*, when learning occurs. They pinpoint that, 'all learning is seen as first social, then individual, first inter-mental, then intra-mental. Thus, learners are seen as active constructors of their own learning environment, which they shape through their choice of goals and operations' (*ibid*: 221).

Furthermore, within the ZPD, peer interaction and co-construction with more capable peers inform us with sociocultural concepts, which should also be taken into consideration when investigating language learning. However, it is noteworthy that the source of help learners need during the learning process is not restricted to adults or capable others. Peers with lower or equal abilities can also provide assistance

within the ZPD. Leo van Lier (1996:193) argues that, in certain circumstances, conversational interaction among language learners of similar or lower proficiency might be more beneficial than interaction with more capable peers or with native speakers, as it might 'encourage the creation of different kinds of contingencies and discourse management strategies'.

Scaffolding

The metaphor of *scaffolding* is a central concept of Vygotsky's (1978) theory. *Scaffolding* denotes the adult's structuring of an interaction by building on what s/he knows a child can already do. In addition, Bruner (1983) investigates social interaction between mothers and young children and defined the notion of *scaffolding* as follows,

a process of 'setting up' the situation to make the child's entry easy and successful and then gradually pulling back and handing the role to the child as he becomes skilled enough to manage it.

(Burner, 1983: 60)

Such a concept puts much emphasis upon the supportive conditions a knowledgeable participant can create in social interaction and the skills and knowledge a novice can extend to higher levels of competence (Wood *et al*, 1976). Furthermore, the notion of *scaffolding* also profiles the dynamism of working within the ZPD. In other words, scaffolding which learners obtain within the ZPD helps to

construct the zone during the learning process and reach the state of self-regulation, which I will discuss further in the next section. To understand the implication of *scaffolded help*, Wood *et al.* (1976) offer specific suggestions regarding how *scaffolding* can be applied to assist learners in various learning context as follows,

1. *recruiting* interest in the task
2. *simplifying* the task
3. *maintaining* pursuit of the goal
4. *marking* critical features and discrepancies between what has been produced, and the ideal solution
5. *controlling* frustration during problem solving
6. *demonstrating* an idealized version of the act to be performed.

(see also Lantolf & Appel, 1994:41)

In addition, Donato (1994) investigates how non-native speakers develop language learning experiences in the classroom setting and how second language development occurs in the social context. His findings suggest that ‘collective scaffolding may result in linguistic development in the individual learner’, ‘scaffolding occurs routinely as students work together on language learning tasks’, and therefore ‘it appears useful to consider the learners themselves as a source of knowledge in a social context’ (*ibid*:51-52). Donato’s findings support the importance of group work in giving students the opportunity of scaffolding when exchanging linguistic artefacts. By recasting the role of learners during social interaction, the discussion among language learners provides *scaffolded help* as in

expert-novice relationships. The important message in Donato's assertion is that learners can mutually assist and scaffold each other's performance in the same way as experts scaffold it with novices. Thus, peer interaction should be taken into consideration in providing language learners with various learning tasks or environments, as such *scaffolded help* from peers as sources of interaction may improve performance.

Similarly, for SLL Swain (2000) supports the importance of a *collaborative dialogue*, a knowledge-building dialogue, as language use mediates language learning. Swain regards language as a mediating tool and explains how language helps knowledge-building, as shown in Vygotsky's sociocultural theory of mind (1978). The fact is that language is one of the most important semiotic tools, which can powerfully mediate our physical and mental activities. The external activities a learner participates in can be transformed and internalised as individual knowledge. Swain (2000) then suggests dialogues as a *mediator* of second/foreign language learning as verbalization appears to *mediate* the internalisation of external activity and help learners become more aware of their learning process (e.g. problems, needs, goals, assessment, etc.).

Self-regulation

Self-regulation involves learners in a process of ‘increasing capacity to formulate plans of action, master and control their own behaviour, verbalising their plans and goals, generalizing skills to new situations and, learning how to communicate and think’ (Harvard, 1997). The concept of self-regulation denotes one of the changes occurring in the ZPD and the different developmental processes that can be explained by Vygotsky’s concept of “*two planes*” (Vygotsky, 1981:163). The first process is the ‘social or inter-mental plane’. With the appropriate help of instruments and signs, learners familiarise themselves with skills, ideas and language. The second process is the ‘personal, psychological or intra-mental plane’, where learners internalise, understand, and begin to use new language, skills and ideas independently. Consequently, in the ZPD, the transition from other-regulation activity/inter-mental to the self-regulation activity/ intra-mental planes represents learners’ increasing control over learning behaviours and the environment (Lantolf & Appel, 1994).

Based on Vygotsky’s theory of learning, Tharp and Gallimore (1988, Cited in Harvard, 1997:47-48) expand the idea of ‘*two planes*’ and proposed a *four-stage model* of transition from other to self-regulation, which further elucidates the

relationship between the *ZPD* and *self-regulation*. More importantly, they assert *teaching* as well as *learning* has to be redefined and teachers as *mediators* should provide ‘just enough support’ to assist learners to make the most of their own ZPD (*ibid*).

According to Tharp and Gallimore (1998), in stage one, a more capable *other* appears to regulate a learner’s behaviour and offers directions or modelling. The learner initially has limited understanding of purposes or situations and gradually becomes aware of how each part of the task is arranged and of the connections between them. Therefore, it is crucial to enhance the learning process with conversation and questioning, feedback and explanation throughout the whole task so that eventually the learner becomes responsible for their own learning. In stage two, with increased self-control and regulation, a learner starts to self-direct what s/he does. Through self-talk, s/he is able to give guidance regarding what s/he should do to reach the ZPD (of the particular knowledge or skills). For example, some learners give verbal instructions (e.g. murmuring or talk to themselves) step by step while doing particular learning tasks. In stage three, the performance is ‘internalised’ and ‘automatic’, which does not require assistance from others. However, sometimes, assistance can be disruptive at this stage. The above three stages cover the usual

processes involved when learning new skills or capacities. In stage four, the earlier form of assistance might be needed when learners intend to maintain or improve performance. Vygotsky calls such a process ‘de-automatisation and recursiveness’, through the ZPD (Tharp & Gallimore, 1988, cited in Harvard, 1997: 48). In brief, the concepts of *two planes* and *four-stage model* illustrate the process, sequences and changes learners may encounter to reach the ZPD. They also offer mental pictures of how learners may move from other-regulation to self-regulation through the use of tools (e.g. language or technology) for interaction with others.

Summary

The important concepts of Vygotsky’s sociocultural theory, including mediation, ZPD, scaffolding and self-regulation, have been explored. To summarise, I would like to refer to van Lier’s (1996) work in his book, *Interaction in the Language Curriculum*, which clearly depicts Vygotsky’s concepts of mediation, the ZPD, scaffolding and self-regulation. In the following figure, van Lier (1996:190) illustrates the concepts of the ZPD and self-regulation, and the relationship between them. The space between the two circles shows a range of knowledge and skills that the person can only access through others’ assistance. For instance, to perform a complicated task, one might need others’ help/scaffolding through modelling,

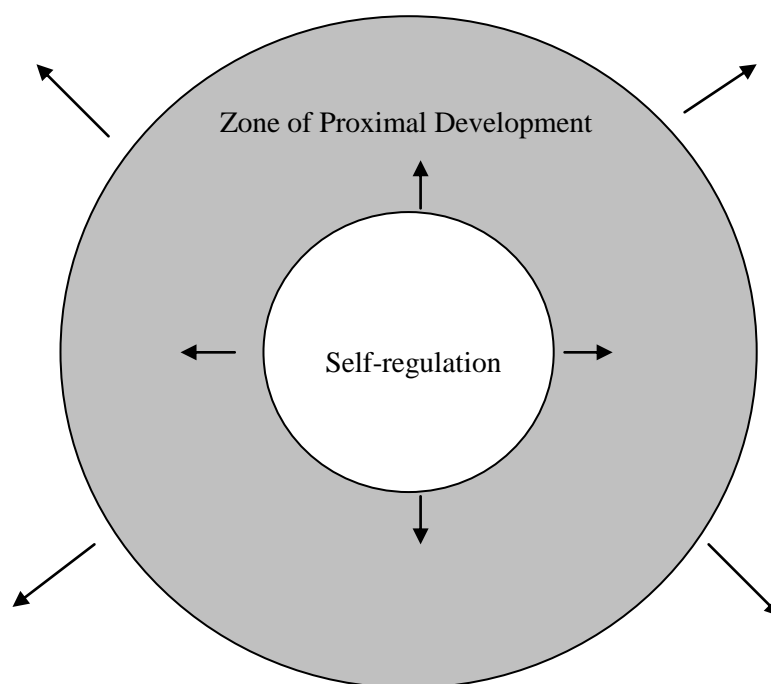
imitation or guidance to link existing knowledge with experience. Subjects or knowledge outside of the range of the ZPD circle are not available for learning.

Additionally, the learner's zone of self-regulation can be expanded when they are provided with appropriate and balanced resources for construction within the ZPD.

As van Lier (1996:193) suggests these resources include,

- a) assistance from more capable peers or adults
- b) interaction with equal peers
- c) interaction with less capable peers (e.g. peer teaching)
- d) inner resources (e.g. knowledge, experience, memory, strength)

Figure: Zone of proximal development (van Lier, 1996:190)



In addition, *scaffolding* which learners obtained from their teachers, peers and interaction with learning materials, curricula and other inner resources helps them to

construct the ZPD and eventually reach the circle of self-regulation, where learners can transfer from the *plane* of social/other-regulated/inter-mental to the *plane* of self-regulated/ intra-mental. The process of learning occurring in the ZPD signifies the *mediation* that learners may experience. Mediating the mental processes with symbolic cultural artefacts, especially language, is crucial. The purpose of the directing process is not only to have the learner finish the task but to guide him/her on how to take over responsibility and accomplish it independently with the strategic functions they have developed (*ibid*).

To conclude, Vygotsky's sociocultural theories clearly provide social-constructivist perspectives by which to view SLL as a social practice, which also echoes the call for a need to investigate language learning from a social stance. More importantly, instead of considering learning as merely a cognitive process of gaining linguistic knowledge, the central concepts of sociocultural theories (e.g. mediation, ZPD, scaffolding and self-regulation) offer a comprehensive framework to analyse, interpret, and examine the interaction language learners may be involved in while constructing the language learning processes from multiple angles. Consequently, this literature review has employed a sociocultural approach to reconsider SLL for its potential in helping language educators and researchers raise

questions from a holistic viewpoint and gain contextual understanding of the learning processes.

References

Breen M. P., 2001. ed.. *Learner Contributions to Language Learning: new directions in research*. London: Pearson Education.

Bruner, J.S., 1983. *Child's Talk: Learning to use language*. New York: Norton.

Donato, R., 1994. Collective scaffolding in second language learning. In J. P. Lantolf and G. Appel, eds. *Vygotskian approaches to second language research*. Norwood, NJ: Ablex, 33-56.

Gutiérrez, G. A. G., 2003. Beyond interaction: The study of collaborative activity in computer-mediated tasks. *ReCALL Journal*, 15 (1), 94-112.

Haas, C., 1996. *Writing technology: Studies on the materiality of literacy*, Mahwah, NJ: Lawrence Erlbaum Associates.

Harvard, G., 1997. The key ideas of Vygotsky and their implications for teaching and schooling. In R. Fox., ed. *Perspectives on constructivism*, *Perspectives* series No. 56, 38-56. (University of Exeter, School of Education).

Lantolf, J., 2000. ed. *Sociocultural theory and second language learning*. Oxford: Oxford University Press.

Lantolf, J. P. and Appel, G., 1994. Theoretical framework: An introduction to Vygotskian approaches to second language research. In J. P. Lantolf and G. Appel, eds. *Vygotskian approaches to second language research*. Norwood, NJ: Ablex, 1-32.

Levy, M. and Stockwell, G., 2006. *CALL dimensions: options and issues in computer-assisted language learning*. New Jersey: Lawrence Erlbaum Associates, Inc.

Longman Dictionary of Contemporary **English**, 2007. Oxford: Oxford University Press.

Mitchell R. and Myles, F., 2004. *Second language learning theories.*, 2nd ed. London: Arnold.

Ohta, A. S., 2000. Rethinking interaction in SLA: Developmentally appropriate assistance in the zone of proximal development and the acquisition of L2 grammar. In J. P. Lantolf (ed.), *Sociocultural theory and second language learning*. Oxford: Oxford University Press, 51-78.

Oldfather, P., West, J., White, J. and Wilmarth, J., 1999. *Learning through children's eyes: social constructivism and the desire to learn*. Washington DC: American Psychological Association.

Swain, M., 2000. The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf, ed. *Sociocultural theory and second language learning*. Oxford: Oxford University Press, 97-114.

Tharp, R. G. and Gallimore, R., 1988. *Rousing minds to life: teaching, learning and schooling in social context*. Cambridge: Cambridge University Press.

van Lier, L., 1996. *Interaction in the language curriculum: Awareness, autonomy & authenticity*. London: Longman.

Vygotsky, L. S., 1978. *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S., 1981. The development of higher forms of attention in childhood. In J. V. Wertsch, ed. *The concept of activity in Soviet psychology*. Armonk, NY: M.E. Sharpe, 189-239.

Warschauer M. and Kern R., 2000. eds. *Network-based language teaching: Concepts and practice*. Cambridge: Cambridge University Press

William, M. and Burden, R. L., 2009. *Psychology for language teachers: a social constructivist approach*. 13th ed. Cambridge: Cambridge University Press.

Wood, D., Bruner, J. S., and Ross, G., 1976. The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17, 89-100.

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