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Vygotsky, Education, and Literacy

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Abstract

This review paper aims to provide a summary and overview of the influence of Lev Vygotsky (1896-1934) on education, language, and literacy from a multidimensional perspective. Vygotskyan perspective toward education in general and literacy, in particular, have been discussed immensely in the areas of language acquisition, child mental development, educational psychology, and social psychology. The current paper strives to provide an inclusive, but brief, vignette on the intersections and variations of implementation of Vygotskyan viewpoints in the above academic contexts. In addition, this paper present the main criticism directed at Vygotsky's theoretical arguments accompanied with the alternative notions proposed.

Keywords: Vygotsky, education, literacy, review, summary, language, overview

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Vygotsky and Literacy

Vygotsky has been referred to differentially in the literature as a social constructivist, cultural psychologists, social constructionist, sociocognitivist, and sociohistorical psychologist (McLeod, 2018; Smagorinsky, 2012). Vygotsky views functional, desirable an observable behavior the ultimate goal of any educational paradigm (Tsui, Lopez-Real & Edwards, 2008; Vygotsky, 1980). Accordingly, learning occurs through the tangible manifestation of skills and knowledge. While he did not reject the role of internal cognitive factors, which are not directly observable, he considered the only way we can gauge and evaluate learning is through observable of required and desired behavior (Holme, 2004; McLeod, 2012). These claims are aligned with the doctrine proposed by behaviorists according to which observable behavior is the primary goal of education because it gives us an objective stance toward the development of curriculum, syllabus design, classroom activities, program assessment and teaching strategies (Boghossian, 2006).

Vygotsky (as cited in Vygotsky, Rieber, & Wollock, 1997) asserts that, "we want to know [is] the content and not the language in which it is expressed. In physics, we have freed ourselves from language in order to study the content. We must do the same in psychology" (p. 327). As noted above, Vygotsky does not refute the influence of innate cognitive factors (memory, brain and mind) in language development. Yet, he believes psychological and behavioral changes "must be explained not on the basis of internal organic connections (regulation), but in external terms, on the basis of the fact that man controls the activity of his brain from without through stimuli." (Vygotsky, as cited in Smagorinsky, 2012). It can be understood that the majority of theories and research concerning communicative speech acts agree on the fact that the produced speech is the rooted in the cognition in order to serve a communicative function (Bucciarelli, Colle & Bara, 2003). Vygotsky (1971) contends that idea produces the speech and the produced speech are regulated and adjusted by the culture. This notion is remarkable in that how observable behavior is a pillar of Vygotskyan perspective toward literacy (Smagorinsky, 2012).

Additionally, the Vygotskyan perspective considers "thought" a structured, analytical and layered unit. Vygotsky (as cited in Vygotsky, Rieber, & Wollock, 1997) explains, "thought undergoes many changes as it turns into speech. . . It moves, grows and develops, fulfills a function, solves a problem" (p. 218). Consequently, "the structure of speech does not simply mirror the structure of thought; that is why words cannot be put on by a thought like a readymade garment" (as cited in Vygotsky, Rieber, & Wollock, 1997, p. 219). The role external factors in speech acts are also noted by Vygotsky as he affirms that thought "is not begotten by thought; it is engendered by motivation, i.e., by our desires and needs, our interests and emotions" (as cited in Vygotsky, Rieber, & Wollock, 1997, p. 252). For Vygotsky, teachers and parents play key roles in the literacy development of children (Tamis-LeMonda & Rodriguez, 2019). Connecting this notion to the above discussion about the roles of thought and speech, it can be inferred Vygotsky believes that the maturation of adults` thought is required for providing a responsive environment within which children learn how to use language in order to be able the succeed in communicative and functional speech acts (McLeod, 2018; Vygotsky, 1986). Correspondingly, the mediation between abstract and tangible (thought and speech) occurs through the environmental and ecological criteria established by the adults in the milieu.

Finally, the produced speech is a reflection of the inner speech (in this sense, inner speech is the reflection of inner thought). Inner speech means "the cognitive processes that follow from the appropriation of both social speech and its ideological framework such that one

adopts cultural means of mediation (particularly that provided by speech) for self-regulation, ideas, and other means of acting in the world in accordance with social standards and practices" (Smagorinsky, 2012, p. 14). According to Smagorinsky (2012), Vygotsky delineated linguistic output as a three-phase process starting from inner speech or verbal thought (which is abstract), mediation through environmental and cultural settings and mandates, and speech act as a manifestation of the first two constituents (Smagorinsky, 2012; McLeod, 2018: Vygotsky, 1986).

Vygotskyan Perspective in Educational Practice

Vygotsky viewed school classrooms the most significant setting for literacy instruction (van Rijk et al., 2017). As heeded by Glassman (2001), an epistemological and critical analysis of the Vygotskyan theories indicates the existence of a systematic congruence between Vygotskyan views and John Dewy`s progressive theories of education (Sawyer, 2014). They both supported the implementation of a constructionist approach toward schooling systems within which students should be equipped with useful knowledge (and skills) in order to be able to practically implement that knowledge in real life situations. In addition, they both maintain that the learning process should include the consistent involvement of pupils and the instructional material should be authentic (Kaufman, 2003). Furthermore, the source of dissemination of literacy knowledge should be adults (parents and teachers) due to their familiarity and experience with the real world (Smagorinsky, 2012). Yet, there are some noteworthy distinctions between the stances of these two theoreticians on education.

Vygotsky discusses his observation that some children can learn the language with the limited and targeted aid of parents whereas many children require higher levels and more intense support to acquire linguistic skills (Vygotsky, Rieber, & Wollock, 1997). Vygotsky observed that children' cognitive development and knowledge accumulation were not induced merely by

genetic and natural (innate) factors and surrounding environment has a vital role for any type of learning to happen (Verenikina, 2010). The learning process is continuously shaped and reshaped as a result of children's interactions with their parents, peers, siblings, and teachers within the environment (McLeod, 2012; Vygotsky, 1978).

Vygotsky (1978) affirms that "every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people and then inside the child. This applies equally to voluntary attention, to logical memory, and the formation of concepts. All the higher functions originate as actual relationships between individuals" (p. 57). He rejected the idea of categorizing children as non-intelligent and intelligent (Montealegre, 2016). Instead, he suggested that every child has the potential to flourish with the help of others. Yet, the nature and intensity of these assistive mechanisms might differ as a result of contextual and ecological variabilities.

The most salient construct introduced by Vygotsky is the Zone of Proximal Development (ZPD). The Zone of Proximal Development is defined as "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, p. 86).Vygotsky recommended that teacher should always be alert for any mismatch between the requirement of a task and ability of the child to finish that task. In other words, teachers should be aware of the current level of understanding a child has and the difficulty level of the upcoming task (McLeod, 2012).

While Dewy and Vygotsky shared similar views on many aspects, the most crucial distinction between their ideologies is the foci of emphasis. Vygotsky views teacher involvement the primary factor in the successful transfer of knowledge while Dewy considered teachers,

peers, and parents are equally responsible for providing a productive learning environment (Shabani, 2016; McLeod, 2018). For Vygotsky, however, teachers make a bridge between what information and skills the students already know and are capable of and what they need to know and perform (Board, 2013).

Vygotsky contends that children can view their parents and teachers as role models and this can lead them to be constantly in search of learning new materials and add further information to their repertoire of knowledge (Akbiyik, 2017; Tekin, 2011; McLeod, 2012). This process is very similar to the ideas of *connectionism theory* (Ellis, 1998; Smagorinsky, 2012). Yet, for Vygotsky agency lies in the mediator (teacher and parents) whereas in connectionist perspective the agency is situated the people`s thought as well as cognition (Olson, 2015). For Vygotsky, "learning is a necessary and universal aspect of the process of developing culturally organized, specifically human psychological function" (1978, p. 90).

Vygotsky stressed the establishment of a *collaborative conversation* between literacy teachers and students. He defines a collaborative conversation as the continuous interactions between teachers and students during which teachers help children in acquiring new knowledge (Luz, 2015). The assistive process teachers engage in are called scaffolding which is defined as the level of assistance that helps children complete tasks they cannot complete on their own (independently and without help) (Kauchak & Eggen, 2010; McLeod, 2012; Vygotsky, Rieber, & Wollock, 1997).

Dyson (1990) refutes use of scaffolding a proper term for signifying the process of learning through ZPD. He notes that scaffolding connotes the agency lies in the instructor while weaving can be a more representative description since the process of learning is the product of the amalgamation of interactions of knowledge between teachers and students and the agency lies in both teachers and students. It appears that weaving is more representative and logical notion of ZPD since teachers are also reciprocally reliant upon the knowledge their students impart in order to systematize and establish the process of ZPD. Similarly, sociocultural theorists Moll and Whitmore (1993) call a *collective zone of proximal development* as the leading social cognitive domain within which learning occurs in the classroom. While studying ZPD, it should be recognized that every student carries specific schema and prior emotions and this carryover of various individual variables requires incremental attention the particular needs of every student.

Probably the principal ramification of Vygotskyan perspective within the walls of classrooms is that children's cognitive development can be immensely directed toward specific objectives decided and mandated by the environmental factors. These factors also include their parents and teachers; however, the potentials for cognitive growth exist in all children, and they are able to learn knowledge through countless ways and styles if being instructed in a fertile ecology. Vygotskyan view stresses that higher-level mental processes are more susceptible to changes in the environment (Vygotsky, 1980). Examples of the higher mental capacities are self-regulating, critical thinking and inferencing (Star, 2005). Then, children are more independent in acquiring axiomatic pieces of knowledge referred to as *descriptive knowledge* contrasted with *procedural knowledge*.

Vygotsky and Literacy Development

During the beginning years of literacy development, according to Vygotsky, two elements of thought and language become two autonomous systems, and he called the new systems verbal though and representational speech (Schütz, 2016). From a psycholinguistic and semiotic perspective, Vygotsky sees literacy development highly reliant upon the language sign systems that adults use. For Vygotsky, language is not developed as a unitary concept only through conditioning and habit formation. He considered literacy and language comprised of different pieces and levels and children must go through consecutive stages in order to be able to absorb and digest the information provided in the upcoming stage (Au, 1998). Vygotsky (1962) argues that

> Inner speech is not the interior aspect of external speech - it is a function in itself. It still remains speech, i.e., thought connected with words. But while in external speech thought is embodied in words, in inner speech words dies as they bring forth thought. Inner speech is to a large extent thinking in pure meanings. (p. 149).

In short, I may summarize the Vygotskyan perspective towards language and literacy development. First, language is a primitive tool children use to gain and construct knowledge. Second, the relationship between language and knowledge is mutually constitutive. Third, language reflects the thought of children. Fourth, language paves the way for self-reflection and problem-solving.

Currently, two prominent concepts of scaffolding and reciprocal teaching are widely in use in the educational settings of the Western countries (Riddle, 2005; Van de Pol, Volman, & Beishuizen, 2010). Reciprocal teaching is implemented to enhance reading comprehension skills as a result of collaborative conversations between teachers and learners (Clark and Graves, 2005). Based on the notions of reciprocal teaching, teachers` role in helping children learn reading comprehension should decrease as time passes. In today`s literacy classroom four types of strategies aligned with

reciprocal teaching are implemented. The four strategies are questioning, clarifying, summarizing and predicting (Jennings, Caldwell & Lerner, 2014; Oczkus, 2018). The effects of the ZPD paradigm are noticeable in today`s literacy classrooms wherein teachers provide direct and explicit instruction alternating with independent tasks (including discovery learning), critical thinking and peer (pair) activities (Goodman, 2003). Scaffolding strategies and techniques are widely utilized in classroom activities such as think-aloud, question and answers, puzzle-solving, inferencing and outlining.

Vygotsky's theories have also influenced the popularity of collaborative learning techniques requiring advanced learners to help the other less advanced learners through consistent social interaction (Hufakker, 2005). In sum, Vygotskyian perspective toward literacy practice has had an immense effect on literacy education and development mainly through teaching techniques of reciprocal teaching and scaffolding. Plus, home literacy learning and collaborative learning methodology have borrowed from the Vygotskyan ideology.

The significance of home literacy activities is another example of the influence of Vygotsky's ideology in the educational systems. According to Vygotsky, a rich literacy home environment is essential for triggering and solidifying the literacy development of children as parents can help children through reciprocal teaching and scaffolding (Vygotsky, 1981). Research evidence has corroborated this perspective as children raised in families with higher socioeconomic status where the environment is linguistically more stimulant. On the other side, children raised in family environments devoid of consistent linguistic verbal interactions have slower literacy development (Bradley & Corwyn, 2002; Perkins, Finegood, & Swain; 2013).

Conclusion

It goes without saying that in spite of having a short-lived professional endeavor, Vygotsky's ideas still prevail in different fields of studies including psychology, sociology, linguistics, and education. I believe there are three main reasons why Vygotskyian perspective has been less powerful than other prominent pioneers such as Piaget and Dewy. First, Vygotsky's work was done in the Soviet Union during a period when communist propaganda infiltrated every aspect of Soviet citizens. We know for sure that political climate and orientation can have a profound influence on public views toward a concept or a person. As Smagorinsky (2012) rightly noted, many parts of the Western academia viewed Vygotsky's work aligned with the Soviet ideologies.

Second, there have been numerous translation inconsistencies in the literature as some authors may have interpreted the semantics and pragmatics of Vygotsky's writings. Third, Vygotsky's educational views have been considered very general and holistic without provision of concrete guidelines for curriculum development, assessment, teacher training, and program evaluation (Cherry, 2018). Maybe if he had lived longer, he would have discussed these issues in more significant details.

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