

Is Instructional Scaffolding Actually Vygotskian, and Why Should It Matter to Literacy Teachers?

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If you have designed lessons and units using methods of instructional scaffolding and then said that you are teaching according to Vygotsky's zone of proximal development, read on to see why you might be wrong.

If I were to conduct a word association test using the name “Vygotsky,” I suspect that most people would say in response, “Zone of proximal development” (ZPD). Vygotsky has been referenced in publications over 130,000 times, with more than 80,000 of these references citing *Mind in Society: The Development of Higher Psychological Processes*. Most of these citations undoubtedly reference the chapter in this collection where he reviews the ZPD, suggesting that this single construct accounts for about 65% of all references to Vygotsky, even though it appears on only a few pages of his voluminous writing (Chaiklin, 2003).

The ZPD is typically linked to instructional scaffolding, a teaching method designed to provide assistance to learners at the early stages of instruction that is gradually removed to allow for independent performance. Vygotsky, however, never offered scaffolding as a pedagogy.¹ Rather, Wood, Bruner, and Ross (1976), working from the earliest, least reliable translation of *Thought and Language* (Vygotsky, 1962), coined the term *scaffolding* to provide a way to think about a process for one-to-one tutoring with young children.

In this essay, I argue that scaffolding, as popularized by Wood et al. (1976) and repeated by many, is not really Vygotskian at all. Reducing Vygotsky to the ZPD, and then to scaffolding, can cause literacy educators to focus on short-term literacy-learning gains to meet the ubiquitous bureaucratic demands of schools and the routine administration of testing batteries. My broader reading of Vygotskian scholarship has persuaded me that if an idea does not involve long-term human development in cultural contexts, then Vygotsky need not be

recruited to make the point. Also, if the subject is instructional scaffolding, then Vygotsky provides a very misleading and, I believe, erroneous reference, one that distracts from rather than promotes an understanding of his approach to a cultural psychology (Cole, 1996).

If you practice scaffolding in your teaching, you are in good company with many others. I have often recommended it throughout my pedagogical writing (e.g., Smagorinsky, 2018b). If you are an instructional scaffolder, assuming that you are attentive to how students respond, you probably teach with gradually withdrawn supports as learners move toward independence. Most educators would consider that approach as serving students well, assuming that the learning goals and procedures are worth pursuing and implementing. As I review in this commentary, however, you can never take anything for granted, especially when teachers and students have different cultural orientations to learning.

Vygotsky was never oriented to learning today and doing independently tomorrow, even though that is how the ZPD has been interpreted and why it maps so easily onto the scaffolding metaphor. Disembodying his very brief account of the ZPD from his attention to human development strips the notion of the cultural, historical, and social emphases that motivated his research and the

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theory of human development. Without broader reading of his whole project, or consultation of what he wrote in Russian before translators became involved, reducing the ZPD to short-term learning can be justified. Yet, it is very difficult to reconcile this interpretation when considering the broader context in which he offered this notion, the problems of translation that produce confusion about the term *scaffolding*, and the scholarship that has arisen around Vygotsky since his death.

The ZPD has become trivialized in educational writing, I believe, for three reasons. First, many people who refer to the ZPD have often only read selectively from *Mind in Society*, where Vygotsky (1978) is translated as describing how today's assisted learning produces tomorrow's independent performance. Second, teachers tend to be concerned primarily with short-term learning rather than long-term human development. School structures work against process-oriented, long-growth instruction through the institution of grading periods in quarters or, as in one school I taught in, six-week marking periods that required us to issue progress reports (aka "failure notices") within two weeks of the start of each period. This sort of school organization emphasizes the issuance of grades early and often, pressuring teachers to think in terms of the lesson rather than the unit (see Smagorinsky, 2018b). Similarly, Applebee (1991) studied literature anthologies and found them to largely take piecemeal, rather than well-integrated, approaches to linking instructional episodes:

The results indicate that there was very little connectivity among the activities included with each selection. On average, only 6 percent of the activities built upon previous ones, and another 31 percent were clustered in sets of similar types without any relationship among them. (p. 48)

The third reason why ZPD has become trivialized in educational writing is that when the ZPD gets explained in educational psychology textbooks or other reductive forms, it is presented in alignment with information processing, which views thinking as an in-the-head phenomenon such that assistive teaching can produce changes in internal, isolated cognition. However, such a conception was among Vygotsky's most frequent critical targets.

As a result, the ZPD tends to be viewed as a very limited sense: learning with guidance today and doing independently tomorrow, with *tomorrow* understood literally not metaphorically. This restricted understanding is well represented by the scaffolding metaphor. However fantastic this pedagogical strategy might be in classrooms, if the claim is that it is a Vygotskian notion, then the claim is ill informed and deceptive

and obscures his more profound points about human development.

I am concerned at several levels. First, it simply bothers me that a rich body of work can be reduced to the wrong thing—a relatively simplistic thing at that. Yet more important, this reduction draws teachers' attention to short-term learning instead of the cultural context in which learning takes place and the role of cultural mediation in human growth. Focusing on short-term learning rather than whole-person development misses Vygotsky's greater, far more important point about attending primarily to the sort of socialized person who emerges from the whole educational process. This attention is especially important when learners and teachers come from different cultural backgrounds and the teachers view their own socialization as optimal, as many have argued is likely the case when the profession is largely populated by white women (Rich, 2015).

Instructional Scaffolding: The Origins Story

Vygotsky was first translated for English-speaking readers in a highly impressionistic version of one of his most widely referenced works, the 1962 *Thought and Language*. Bruner and colleagues' knowledge of Vygotsky came from the first, and most problematic, of the three translations of this text. Wood et al. (1976) first used the term *instructional scaffolding* to describe tightly controlled studies of one-on-one tutoring sessions held for 30 children ages 3–5 years as they engaged with tasks involving manipulatives such as blocks. The scaffolding metaphor in this context described a "process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts" (p. 90). "Well executed scaffolding," Wood et al. continued, "begins by luring the child into actions that produce recognizable-for-him solutions" that allow the tutor to "interpret discrepancies to the child....the tutor stands in a confirmatory role until the tutee is checked out to fly on his own" (p. 96).

The scaffolding metaphor has long had its critics because of its presentation by Wood et al. (1976) as a heavily top-down rather than interactive practice (Dyson, 1990) and because it assumes that the adult's purposes in instruction are what serve learners best (Searle, 1984). These criticisms are worth noting. I later return to what I think scaffolders need to keep in mind as they plan and carry out instruction.

The scaffolding metaphor, in spite of what appears to be a very rigid, top-down, assimilative teaching approach, has been widely adopted in educational writing

to account for all manner of teaching. It has gone beyond this limited, controlled form of assistance to individual children working with tutors to learn specific tasks. It remains a staple of the instructional tool kit, but is it Vygotskian? I don't think so.

The ZPD in the Context of Vygotsky's Career Project

I have found the commonplace interpretation of the ZPD as a short-term learning dyad to be problematic for some time now (e.g., Smagorinsky, 1995, 2018a), along with Mercer and Fisher (1992), Chaiklin (2003), Wertsch (1984), and others who think that when the ZPD began to mean all things to all people, it meant virtually nothing. Vygotsky's (1978) most widely referenced account of the ZPD describes it as

the distance between the actual developmental 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....The zone of proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state. These functions could be termed the "buds" or "flowers" of development rather than the "fruits" of development....what is in the zone of proximal development today will be the actual developmental level tomorrow—that is, what a child can do with assistance today she will be able to do by herself tomorrow. (pp. 86–87)

This account of the ZPD, as translated into English, sends mixed messages. What gets overlooked is Vygotsky's (1978) use of metaphors suggesting a long-term developmental process. The functions are "embryonic," a profoundly developmental notion; and the process involves long-term growth toward the "maturation," the goal of instruction. Further, he referred to the "buds" or "flowers" of development rather than the "fruits" of development," explicitly referencing his emphasis on human development rather than next-day independent learning. Vygotsky's maturational metaphors refer to a season or more of growth in plants, not their immediate changes.

Vygotsky's account of the ZPD has further been reduced to short-term learning due to readers' greater attention to *today* and *tomorrow* than to his growth-oriented developmental metaphors. Yet, these terms can, and more properly should, be understood as metaphors rather than dates on a calendar. When I inquired of Russian-born scholar Anna Stetsenko (personal communication, July 17, 2017) about Vygotsky's meaning of *tomorrow*, her response confirmed my suspicions: "It is

100% metaphorical, not 24 hours. 'Tomorrow' is often used [in Russian] in this sense, meaning 'the future', or more precisely (and depending on context as is the case here in this quote) 'soon in the future.'"

I would therefore assert that Vygotsky's account of the ZPD has been misinterpreted because the literal English-language meaning of *tomorrow* has dominated how his statement has been applied. The other metaphors emphasizing long-term development have been overlooked, allowing the short-term instructional prospect to represent Vygotsky's career as a developmental psychologist. That literal reading of *tomorrow* has become embedded in the metaphor of instructional scaffolding, leading many of the tens of thousands of references to the ZPD to refer to the wrong thing.

A developmental, metaphorical understanding of *tomorrow* in the context of Vygotsky's full corpus of scholarship leads to a very different conception of what he was proposing. This far more compelling, rich, and social view of how people learn to think is among the reasons why I believe that if it is not developmental, with development a function of engagement with sociocultural contexts and practices, then it is not Vygotskian. In this sense, instructional scaffolding as a vehicle for promoting short-term learning will never be Vygotskian. Next, I trace my own understanding of this problem, which I have wrestled with for nearly three decades of trying to grasp Vygotskian concepts.

One of my earliest influences in reconceptualizing the ZPD away from the typical limited view was Moll's (1990) contention that the ZPD is commensurate with "social contexts...for mastery of and conscious awareness in the use of...cultural tools" (p. 12). Moll's account pushed me to think how any attention to immediate activity must take into account how the present has been formed by the past. In this sense, as Moll said, the ZPD is

a characteristic not solely of the child or of the teaching but of the child engaged in collaborative activity within specific social environments. The focus is on the *social system* within which we hope children learn, with the understanding that this social system is mutually and actively created by teacher and students. (p. 11)

The ZPD is thus collective rather than dyadic or an individual's cognitive space, as I have seen it described. It is distributed, historically grounded, interactive, and always concerned with long-term development of the whole person.

This expansion of the ZPD requires any instructional episode to be contextualized, not only in terms of the immediate surroundings but also in light of the value systems embedded in the assumptions of these

surroundings through their historical practices and institutional values (cf. Newman, Griffin, & Cole, 1989). Simply putting teacher and learner together will not produce a scaffold, given the importance of intersubjectivity—the degree to which different people share an understanding of their situation—in learning, and the difficulties that many teachers and students have in working according to shared assumptions.

Moll's (1990) study of immigrant students' struggles to fit within U.S. school structures based on individual competition when the students' home cultures emphasize the whole social group's prosperity illustrates this problem well. Without intersubjectivity, teaching and learning can produce deficit conceptions of the student as easily as it can promote new understanding, a problem when the 85% white teaching force of the United States engages with students from diverse racial, ethnic, national, and other demographic groups (see, e.g., Ballenger, 1999; Groenke et al., 2015; Majors, 2015; Strauss, 2014). This long-term process of achieving intersubjectivity—requiring adjustments on the part of the learner and the teacher—is part of the developmental emphasis of Vygotsky's career project.

A Better Translation: The Zone of Next Development

The documentary film *The Butterflies of Zagorsk* (Dean & Paul, 1990) focuses on deaf and blind children in a Soviet school of defectology in Zagorsk, Russia. *Defectology* (Vygotsky, 1993) is the awful name, irredeemable in translation, for the study and education of deaf, blind, and/or cognitively impaired children following exposure to explosives during World War I, the Russian Revolution, and the Russian Civil War between 1914 and 1923 (for a summary, see Smagorinsky, 2012). To Vygotsky (1993), however, these children were anything but defective. His whole approach to their education focused on assets and potential. Significantly, any and all problems associated with these children were social in origin. The primary problem with blindness is the attitude of the sighted and how their pathological treatment of the "other" produces feelings of inferiority. He considered these negative feelings the secondary disability, one far more damaging than whatever primary disability appeared to limit a person's possibilities.

In the Zagorsk school, the children were taught to communicate through a long, laborious process of spelling words on one another's hands with their fingers. Through this extended, multistage developmental process, the children grew tomorrow in the metaphorical sense: in competencies that allow for their fuller participation in their culture's practices and processes.

In the film, Michael Dean's (Dean & Paul, 1990) narration includes a different translation of what is customarily known as the ZPD. The commonplace translation of *proximal* is confusing because it does not suggest human growth into a new stage. The film's narration instead describes the process as promoting the zone of next development. The zone of next development indexes long-term developmental processes such as those illustrated in *The Butterflies of Zagorsk*. In that setting, the goal was not to teach children something to do independently within 24 hours. Rather, the educational goal was to provide acculturation to communication practices that teach a form of competency that bypasses conventional means.

Significantly, that goal served a broader goal of inclusion so the deaf and blind children could maximize their human capabilities such that they would be able to participate in cultural activities and thus live satisfying lives, affirmed by others as valued and important in building a society over time. The lengthy, complex task of both teaching the alternative means of communication and socializing the children so they could use it productively is far better suggested by the zone of next development than by the ZPD.

Conclusion

I offer readers two suggestions for moving ahead based on these understandings. First, scaffolding is not a magic wand. Designing a scaffold into a lesson plan is important but must take into account the possibility that problems of intersubjectivity will make the plan work better on paper than in practice. Searle's (1984) question, "Who's building whose building?" (p. 480), remains important today as white, middle class teachers guide diverse groups of students through learning processes.

The assumption in policy is that culture, poverty, and other demographic factors are irrelevant to effective teaching, but the fact that policymakers are often ignorant should not dictate how teachers go about their work. Kids living in urban food deserts with limited health care may respond differently to an attempted instructional scaffold than those who come from other surroundings. As Dyson (1990) asserted, there needs to be far greater flexibility on the teacher's part, based on careful attention to how learners do and do not engage with the process and purpose of a lesson. Just designing an instructional scaffold does not guarantee learning. If teaching and learning are based on relationships, then those relationships must be understood and maintained, in contrast to the stark assumption of people making policy that a good lesson plan will work regardless of who is teaching and who is learning.

The second takeaway concerns attempting to teach in ways consistent with Vygotsky's long-term developmental orientation. Such work will require asking and answering questions such as these: Whose culture dominates the school? Which students are best acculturated to participate in its practices? Which ones struggle to adapt? What role do teachers have in adapting to students, rather than assuming that it is always and only the students' task to assimilate? What are the implications of operating a school as a monoculture when its students bring diverse orientations to teaching and learning to their studies?

If you take these questions seriously, then you are practicing a Vygotskian approach to pedagogy, one that I believe is far more powerful than attending to individual lesson design for students' immediate independent performance. It is a lot more comprehensive a way of thinking, which I believe will be increasingly important as student demographics shift and the teaching profession remains largely white and middle class.

NOTE

¹ René van der Veer (personal communication, February 14, 2018) reminded me that Luria and Vygotsky (1992) used a scaffolding metaphor in *Ape, Primitive Man, and Child: Essays in the History of Behavior* to describe a child's learning to walk: "His ability to walk is...surrounded...by the scaffolding of those external tools with which it was created. Within a month or two, however, the child grows out of that scaffolding, discarding it, as no more external help is needed; external tools have now been replaced by newly formed internal neurodynamic processes" (p. 145). In this conception, there is no adult providing Brunerian scaffolds, only external tools that the child locates, uses, and discards as needed.

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