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ПОДГОТОВКА КАДРОВ С ПРИМЕНЕНИЕМ МЕТОДОВ КУЛЬТУРНО-ИСТОРИЧЕСКОЙ НАУЧНОЙ ШКОЛЫ

PROFESSIONAL TRAINING BASED ON THE METHODS OF THE CULTURAL-HISTORICAL SCIENTIFIC SCHOOL

Научная статья | Original paper

A little knowledge is a dangerous thing: a cautionary tale for users of Vygotsky's work

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Abstract

I was recently at a conference when a question from the floor regarding the challenges of teaching in our overcrowded classrooms in South Africa elicited the passionate response that we should teach reading "by using mediation, like scaffolding tasks". Which is of course, fine, provided, though, that we know what we mean by mediation and scaffolding. And here is the crux of the matter: the popularity of these terms has led to them losing coherence and becoming basically rhetorically hollow. What often follows some of the better definitions of scaffolding is a list of 'how to' that teachers draw on to 'scaffold'. Not unlike a recipe, except one crucial element seems to be missing from many accounts of scaffolding and this is: what exactly is being 'cooked up' when scaffolding is being used and is scaffolding synonymous with mediation? The notion of mediation commonly used in education and psychology comes to us from the Russian psychologist Vygotsky. Scaffolding, conversely, comes from the work of Wood, Bruner and Ross (1976). An investigation of these terms, used so frequently as synonyms, underpins this paper and its focus on recovering the work of Vygotsky as he intended it, showing how concepts such as mediation in the zone of proximal development have become disembedded from their epistemological foundations, enabling them to be used as de-historicized surgically enhanced tools to solve current educational ills. Hence the commitment in this paper is to trace the theoretical roots of the terms: scaffolding, mediation, spontaneous and scientific concepts, and the zone of proximal development, ultimately situating these terms within their epistemological bases. In doing this I hope to show how these concepts have come to be situated within a radical constructivist epistemology and how this has effectively stripped them of their meaning. While predominantly a theoretical paper, the paper draws on data from 39 in-service teachers registered for an Honours degree in education and their perceptions of what effective teaching/learning is. Findings from this data illustrate a trend towards a domesticated view of Vygotsky's work, distilled into simplistic steps for teaching well. This paper represents an attempt to reclaim the legacy of Vygotsky.

Keywords: Vygotsky's work; ZPD; teaching and learning; in-service teachers

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Маленькие знания — большая опасность: предостерегающая история для исследователей, работающих с трудами Л.С. Выготского

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Резюме

Недавно мне представился случай посетить конференцию, на которой из зала прозвучал вопрос о трудностях преподавания в наших переполненных классах в Южной Африке. На него последовал эмоциональный ответ: нам следует обучать чтению через медиацию, например, используя методы поддержки (scaffolding). Это, конечно, звучит хорошо, если мы действительно понимаем, что означают термины медиация и поддержка. Проблема заключается в следующем: из-за популярности этих слов они перестали иметь четкое значение и превратились в пустые фразы, часто употребляемые без глубокого смысла. Обычно после достаточно хороших определений методов поддержки (scaffolding) приводится список конкретных действий, которые учителя выполняют, чтобы «оказать поддержку». Это похоже на рецепт, только в этом «рецепте» часто не хватает одного важного вопроса: что именно «создается» или «развивается» с помощью поддержки, и можно ли считать поддержку тем же самым, что и медиацию? Понятие «медиация», широко используемое в образовании и психологии, заимствовано у российского психолога Л.С. Выготского. В то время как «поддержка» (scaffolding), наоборот, исходит из работы Ууда, Брунера и Росса (1976). Исследование этих терминов, которые часто используют как синонимы, лежит в основе настоящей статьи и ее фокуса на восстановлении работы Л.С. Выготского в том виде, как он это задумывал, показывая, как такие концепции, как медиация в зоне ближайшего развития, были отделены от своих фундаментальных принципов. Это позволило использовать их как гипертрофированные, лишенные исторического контекста инструменты для решения современных проблем в образовании. Поэтому цель данной статьи — проследить теоретические корни таких терминов, как поддержка (scaffolding), медиация, спонтанные и научные концепции, а также зона ближайшего развития, и в конечном итоге расположить эти понятия в рамках их эпистемологических основ. Делая это, я надеюсь показать, как эти концепции были интерпретированы с точки зрения радикального конструктивизма и как это фактически лишило их изначального смысла. Хотя эта статья в основном теоретическая, она опирается на данные, полученные от 39 действующих преподавателей, обучающихся с отличием на степень бакалавра в области педагогики, и их восприятие эффективного преподавания и обучения. Результаты этого исследования показывают тенденцию к упрощенному, «домашнему» восприятию работ Выготского, которое сводится к простым шагам для успешного преподавания. Эта статья представляет собой попытку вернуть истинное наследие Выготского.

Ключевые слова: Выготский, ЗБР, обучение, медиация

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Introduction: a context of change

The 1990's in South Africa saw a dramatic shift in the political and social landscape as the country moved away from apartheid to a new democratic dispensation in 1994. The upheaval in various institutional spaces was not unlike the social fluidity encountered by Vygotsky in the shift in Russia's trajectory through the Russian revolution and the resulting moment of change. It is in moments of social crises that contradictions in various systems become more easily seen. For Vygotsky, the revolution brought with it the hope of a new way of talking about development, that encompassed the social, cultural and historical aspects of individual growth. The most obvious place to see this, I would argue, is within the education system and its response to change. While Vygotsky busied himself with understanding how learning could lead development, contra the popular Piagetian notion that development led learning, South African educators in the new democracy sought to move away from the Christian National Education of the apartheid government that had systematically undereducated people who were black[1]. While white children had access to material and

[1] There is a difficulty inherent in using labels such as this which have no basis in reality and are only a product of a biased system, such as apartheid. However, these terms are used here to indicate and focus on the very real fact that black children in South Africa suffered and continue to suffer an education that is inadequate. While previously this was along colour lines, this is now along poverty lines with the poorest receiving a less robust education than the richest.

human resources that were excellent, black children did not. Post-apartheid South Africa brought with it the hopes of a new education system that would be inclusive of all.

The initial Curriculum 2005, introduced in 1997, adopted an outcomes-based education (OBE) framework emphasizing learner-centeredness, critical thinking, and integration across learning areas. However, several serious flaws existed in the roll out of this curriculum, not least in the fact that it was not consistently rolled out and teachers received inadequate training to implement a curriculum that relied heavily on teacher input outside of prescribed texts and worksheets (Jansen, 1998, 1999). The ultimate failure of C2005 led to the development of the Revised National Curriculum Statement (RNCS) in 2002 and subsequently the National Curriculum Statement (NCS) in 2003-2005, which attempted to streamline and clarify learning outcomes while maintaining OBE principles. These iterations sought to redress historical inequalities whilst promoting democratic values and constitutional principles within educational content. The Curriculum and Assessment Policy Statement (CAPS), implemented from 2012 onwards, marked a substantial paradigm shift toward more structured, content-driven, and sequential learning programs with clearly defined topics, teaching time allocations, and assessment requirements. This represented a partial retreat from the constructivist emphasis of earlier reforms in favour of greater curriculum specification and teacher guidance (Muller, 2000). The focus of CAPS, pedagogically, however, still tends towards a view of learning as active, which is premised, however loosely and in a highly recontextualised manner, on the work of Vygotsky (1986) and Piaget (1976).

The basis for drawing on Vygotsky's and Piaget's work lies in the focus on a more constructivist[2] pedagogy than that seen under the Christian National Education system, which favoured a highly regimented approach to education more aligned with a Behaviourist framework, with little to no attention paid to harnessing students' active engagement with learning. Of course, one might reasonably ask how Vygotsky's and Piaget's ideas relate to each other, given their different epistemological and ontological stances. This is not an issue this paper deals with in depth; what can be said is that while there are indeed distinct differences between the two theorists, there is a complementarity that can be seen particularly across Piaget's later work in relation to Vygotsky. Having said this, Piaget was not an instructional theorist; he did not espouse a pedagogical model or method. His interest was in universal cognitive development and his recontextualization as a pedagogical theorist, especially in the West, is somewhat counterintuitive.

For Piaget, development was a precondition of learning. This is not to say that he didn't recognise teaching and its value for development but, simply, teaching is a necessary but not sufficient cause of development. For development to occur, disequilibrium must happen in the child. It is in disequilibrium, an individual endeavour, that a child can develop through attaining equilibrium once again. So teaching is important for development for Piaget, but not the motor of that development. Vygotsky's work, conversely, although also focused on development, is very specifically a pedagogical theory, which situates learning as preceding development. Teaching then, is both a necessary and sufficient cause of development, when teaching is conceived as dialectically linked to learning. It is in how Vygotsky's work has been harnessed in the West in relation to pedagogy specifically, but also to development, that the current paper is focused.

Reclaiming Vygotsky: or how interpretations can obscure theoretical progress

To understand Vygotsky's (1986) approach to development, we need first to understand his notion of teaching and learning. For Vygotsky, teaching and learning are dialectically entailed. This conflictual, intertwined notion is captured in the Russian word *obuchenie* which is difficult to translate but means something like teaching/learning as two sides of one coin. It is impossible to teach, from a Vygotskian perspective, without learning happening; and as learning leads development, teaching becomes not only crucial but absolutely central to development. However, understanding the dialectical nature of teaching/learning is not self-evident. This is because obuchenie requires a very specific type of teaching, mediation. Moreover, the conflict implied in a dialectical concept (such as obuchenie) contrasts with the traditional western view of schooling as conflict free, where the teacher provides knowledge for the student to acquire, with no dissonance implied in the acquisition process.

Perhaps the most pervasive misinterpretation of Vygotsky's work lies in the notion of mediation in the zone of proximal development (or, more correctly translated, the zone of next development; see Smagorinsky, 2018, for more on this) as synonymous with scaffolding. The word 'scaffolding' comes to us from the work of Wood, Bruner, and Ross (1976) in a seminal paper about a method of teaching children in relation to specific tasks. The notion of scaffolding, as a method for teaching a child how to accomplish a single task, is a powerful metaphor for how one provides a step-by-step guide to help a child solve a problem, such as completing a puzzle, for example. Mediation, on the other hand, refers to a much longer developmental process that unfolds not over a specific task, but over time, and which happens in the ZPD, where this socially constructed space refers to that place between what a child can achieve on his/her own and what they can achieve with a more capable other. Importantly, though, this zone is a developmental zone. It refers not to completing a specific task, but to com-

[2] I use the word 'constructivism' with caution; it is a word that has come to mean everything to everyone and its overuse has made it almost rhetorically hollow. In this paper, constructivism relates very specifically to the cognitive constructivism of Piaget and the social constructivism that emerges in the West from Vygotsky's work.

pleting a developmental shift or cognitive growth. For example, I can scaffold the alphabet to grade 1 children by teaching them the alphabet song, since being able to recite the alphabet is a task that can be learnt by rote. Knowing the alphabet does not mean a child can read for meaning, though. For this to happen, the child requires mediation in the ZPD that unfolds over approximately 3—4 years in the first phase of primary school. The ZPD is a conflictual zone, with the child facing the difficulties of moving from what they know to what they do not yet know. One needs only to reflect on your own learning to recognise the unsettling nature of learning; learning is fraught with dissonance as the person struggles to develop new modes of thinking. It is in this sense that learning is actually leading development, forcing a disjunction cognitively between the known and the still to be known. Conflating scaffolding with mediation in the ZPD has led to a misunderstanding of the developmental nature of the ZPD and to a focus on the individual child and teacher interacting with each other, to the exclusion of the socio-cultural and historical context that frames their actions. While treating scaffolding as synonymous with mediation in the ZPD is perhaps one of the biggest misunderstandings of Vygotsky's work, the notion of the ZPD has also come to mean something different through its domestication in educational settings.

For Vygotsky (1986) the ZPD is a developmental space that is social and opened in dialogue between a more competent other and a novice. In the instance of teaching, the teacher would be the more competent other and the student the developing novice. It would be a mistake, however, to think that the ZPD represents a simple dyad; for Vygotsky, the student and teacher's values, culture, society and history are formative of the ZPD, which is the space where higher cognitive functions, developing over time, are created, refined and finally internalised. Higher cognitive functions, which we would today call executive functions (author, 2023) are imbued with culture, history and social values. The abstract knowledge acquired through development in the ZPD has both meaning and sense across contexts. The reference to abstract concepts brings us to another misunderstanding in Vygotsky's work, that between scientific concepts and spontaneous (or everyday) concepts.

Scientific concepts should not be seen as narrowly related to scientific knowledge; rather, they need to be seen as an abstraction that must be taught, as it cannot be acquired through empirical means. Spontaneous concepts, conversely, are context-dependent and are empirically acquired. The slippage in some commentaries on Vygotsky's work regarding these concepts is the misunderstanding that they can function separately in development (Wink, Putney, 2002). For a child to develop cognitively, they require both concepts working together to generate both the sense and the meaning of what is being acquired. An example illustrates this. If it is cold outside, I might put on a jumper to keep warm. The knowledge that a warm woollen jumper will keep me warm is spontaneous. I don't need someone to teach me that a jumper will keep me warm; I can simply feel this. However, if I decide to go surfing in the Atlantic Ocean and need to keep warm, a jumper is not going to help me achieve this. For this, I need knowledge of thermodynamics, which enables me to understand why a wetsuit is the best choice for my Atlantic swim (Fleer, 2009). Moreover, scientific and everyday concepts are dialectically entailed; you cannot have one without the other if development is your intended outcome. If I approach the world entirely through spontaneous concepts, I cannot acquire abstraction and therefore not fully develop. It is also important to note that in a teaching — learning setting, one works from the abstract to the concrete, not the other way around (Hedegaard, 2020). This is because abstraction necessarily relies on the everyday for making sense, while the everyday only becomes conscious through interpenetration with the abstract. These two concepts (scientific and spontaneous) need to be seen in a relational rather than opposing sense. The question now is to what extent these misunderstandings of Vygotsky's work continue to persist in teaching, given that most pre-service teachers are, in fact, taught Vygotsky in their diploma or degree courses. To answer this question, I now turn to a study carried out at a large university in the Western Cape province of South Africa. I focus on the in-service teachers' perceptions of how a child comes to learn and, consequently, how a teacher should teach.

A brief study

To test in-service teachers' knowledge of teaching and learning from a Vygotskian perspective, and to ascertain how they think children should be taught and how children learn, I carried out a survey with 30 in-service teachers registered for an Honours education course. The course runs over a semester (24 hours) and is held at an affluent university with a student cohort of approximately 25000. All students who took part in the study were registered for a module on teaching and learning. Sixty-seven percent were female and 33% were male, with an average age of 29 years and an age range from 22 to 55. The participants were all in-service teachers from a wide range of schools, ranging from high socio-economic to no-fee paying schools.

The questionnaire

Participants filled in an online questionnaire that contained demographic data and asked two questions: 1) have you been taught about Vygotsky in the past and 2) How do you think children learn and how should you teach? Ethical clearance for the study was obtained under the reference number HUM/02009/2025.

Analysis

Thematic analysis was used to elicit trends in the data regarding how participants approach their knowledge of

Vygotsky that they have learned in previous studies, specifically focusing on their understanding of how children learn. Four clear themes emerged: (1) active participation, (2) empirical engagement through the senses, (3) scaffolding as central to learning, and (4) a focus on learner-centred pedagogy as optimal for learning and teaching.

Findings and discussion

The questionnaire that participants engaged with was open-ended and elicited their understanding of how students learn and how they should be taught. A single, closed question — "*Did you learn about Vygotsky in your teacher training*?" — was asked. Participants could answer '*yes*', '*no*', or '*don't know*'. Twenty-seven of the participants indicated they had learned about Vygotsky in their teacher training, while three said they didn't know. Two open-ended questions were posed: 1) How do you think children learn? and 2) What is the best way to teach? Thematic analysis of the open-ended questions uncovered four clear themes related to learning and teaching, which are discussed below.

Active participation

The first theme emerging from the data was the strong belief that children learn through actively engaging with the world. The notion that children are active cognising agents is well established in the literature and, moreover, is a cornerstone of Vygotsky's work. For example, AM (24-year-old female) indicated that "*children learn by doing*." BE (male, 42 years old) echoes this when he says: "*Learning by doing. For example, if I am teaching them color theory, in order for them to fully grasp it, they need to do it practically*." CN (52-year-old female) indicates that "*I think children don't just absorb knowledge passively, they make sense of the world by doing, experimenting, and testing ideas*." DN (25-year-old female) says: "*I think the best way to teach is to allow learners to be active participants during lessons. Treating learners as empty vessels that you pour knowledge into is very ineffective*." The theme of active participation was widespread in the data collected, with 19 of the 30 teachers mentioning some form of student active participation in learning. The notion of the active as opposed to passive student derives from the work of Vygotsky, and it is interesting to note that this aspect of Vygotsky's work is reflected in the participants' responses. This finding, however, is not surprising. As noted at the beginning of this paper, South Africa embarked on a significant period of curriculum change after the end of apartheid. Outcomes-Based Education (OBE), with its focus on active children learning actively, has become so well established that it is almost a cliché in school settings. Alongside this, the term "learner-centred" teaching has also become quite vague, and this will be discussed below.

Learner Centred

The term 'learner-centred' has come to have immense significance in South African schooling since the end of apartheid. What exactly this term refers to, however, is somewhat vague (Bremner, 2021). There is a sense in the literature that learner-centred pedagogy focuses on the learner and not the teacher; that is, a distinction is made between learner-centred and teacher-centred pedagogy, with the former falling under the broad umbrella of constructivism, and the latter being associated with a behaviourist notion of teaching as an entirely didactic affair, where the knowledgeable teacher fills the passive student with knowledge (Bremner, 2021). From a Vygotskian perspective, these two polar opposites make little to no sense. As noted earlier in the paper, Vygotsky referred to teaching as 'obuchenie,' which roughly translates as teaching and learning as dialectically entailed. If teaching is developmental (as it must be in Vygotskian theory), then it cannot happen in a vacuum: there is no teaching without learning, and conversely, no learning without teaching. The focus on learner-centred pedagogy as the best way to learn and teach is echoed throughout the data, with XM (female, 32 years old) stating that it happens by "*making sure my lessons are learner-centred*." CK (25-year-old female) suggests that "*teaching should be interactive and learner-centred*," and BM (53-year-old male) states that the best teaching is "*learner-centred teaching*."

What we see with a focus on learner-centred pedagogy is not a Vygotskian understanding of teaching/learning, but rather a recontextualised version of his work that sees learners as active, which he would agree with, but moves this outside the realm of the dialectic between teacher and taught, giving the teachers' role little attention. While there is little doubt that purely didactic, 'chalk and talk' teaching that tends towards rote learning is not optimal for learning, this does not mean that such teaching is useless for learning. In fact, reinforcing knowledge and laying down memory pathways in the brain require a certain level of rote interaction. However, when teaching conceptual understanding, the student's voice must be valued — not in the sense that the student already has access to abstract concepts, but in recognizing that the student brings prior knowledge to the classroom. Abstract knowledge must be taught; it cannot be empirically derived (Karpov, 2005). The focus on learner-centred pedagogy leads into the participants' notions of what constitutes good teaching: scaffolding.

Scaffolded engagement

In the beginning of this paper, I discussed the difference between Wood et al.'s (1976) notion of scaffolded instruction and Vygotskian notions of mediation, focusing on the understanding that scaffolding is task-specific while mediation refers to a developmental process that takes place in the ZPD. I noted there that there is a tendency to conflate scaffolding and mediation in the ZPD in literature and in understandings of Vygotsky. Scaffolding is very specifically aimed at task solution. As a mechanism for guiding actions in relation to a discrete task, then it is a very effective method of guidance. However, it is not geared towards developing conceptual understanding of abstraction. The conflation of scaffolding and mediation is evident across several participant responses in this study.

CK (27 years-old female) says that learning (and therefore teaching) requires that "*Children learn by being shown through modelling, prompted to try, repetition, practice through consistent trial and error. This is what Vygotsky refers to as scaffolding*." It is worth pondering what a child can possibly learn through trial and error in the absence of a culturally more competent other. Trial and error learning is empirical in nature, and can lead to the acquisition of misunderstandings. It is also difficult to conceive how a child could learn abstraction (which by nature is not empirical) in the absence of teaching.

The notion of scaffolding is repeated by TS (42-year-old male), who claims that "*Children learn through step-by-step help. Vygotsky calls this scaffolding*." Adding to the scaffold metaphor as developmental, GR (50-year-old female) states that "*They learn if you scaffold for them showing how to do the task*." This focus on step-by-step guidance and trial and error learning leads us into the realm of empirical engagement with objects, which is the final theme dealt with.

Empirical engagement through the senses

Extremely useful concepts can be acquired empirically. However, this acquisition is not learning in the Vygotskian sense, which, in a developmental context, is developmental. The concepts gained empirically are what Vygotsky refers to as spontaneous (or everyday) concepts (Vygotsky, 1986). They are acquired as the child navigates their world and do not need to be taught. However, for learning in a developmental sense to occur, spontaneous concepts must be interwoven with scientific or abstract concepts. Spontaneous concepts make sense of our idiosyncratic experiences, which are not necessarily shared with others. The interweaving of abstract concepts with these spontaneous concepts leads to shared meaning, which must be taught by a culturally more competent other. The participants in this study tended to view learning as moving from the concrete to the abstract, rather than the other way around, which is how Vygotsky conceives of it (Hedegaard, 2021). So YJ (40-year-old male) considers that "*Children learn through the use of their senses: before they register something abstractly, they should be able to see something concretely*." This is echoed by DM (27-year-old male), who states that "*Children learn through thinking, talking, feeling, and trying." MN (29-year-old male) suggests that "they learn by experiencing (touching and seeing) things*", and TS (42-year-old male) says, "*Children learn through using their senses such as touch and sight*". GR (50-year-old female) indicates that "*They learn through observation and experience*". MM (27-year-old male) suggests how he teaches: "*I feel you must always use concrete examples when you teach students so that they can see what you are doing*".

The understanding that children learn empirically is not based on Vygotsky's work. In fact, the kind of knowledge that can be obtained through empirical means relates specifically to spontaneous or everyday concepts, rather than to any kind of development. Without the scientific or abstract concept being taught and intertwined with the everyday concept, development cannot occur. A child who learns solely through empirical means, moreover, is likely to have misconceptions, as abstraction needs to be taught, and meaning — that which is shared amongst a community — can only be taught and not acquired solely through the senses (Karpov, 2005). The notion of moving from the concrete to the abstract is of interest here too because it is contrary to Vygotsky's work.'

This notion comes directly from policy documents in South Africa around OBE, where the focus directs teachers to work from the concrete to the abstract. In my opinion, it may reflect a recontextualization of Piaget's (1976) claim that concrete operational children require concrete instances of objects to learn abstraction (DBE, 2011). Certainly, this view reflects a version of constructivism that seems to have equated concrete engagement with active engagement. It assumes that children must manipulate objects to develop understanding before they can be taught abstraction. This is a misunderstanding of the notion of active learning, which focuses on children as active cognising agents — bearing in mind that thinking, using the brain, is an activity as much as concretely manipulating an object is. Evidence from nearly a century of work in educational psychology (Fleer, 2009; Hedegaard, Edwards, 2023; Coles, Sinclair, 2019; Hedegaard, 2020) has challenged the idea that children, in the developmental sense, learn from the concrete to the abstract — most especially in the field of cultural-historical and socio-cultural research. The notions of concrete and abstract should not be seen as opposites but rather as relational. That is, there is no individual action as such; rather, a child interacts with a world that is socially, culturally, and historically meaningful. Every individual action is really an interaction between the child and the object of meaning. An example illustrates this: Think of the word 'democracy,' which is entirely abstract when introduced to students in a classroom, before becoming more concrete when linked to systems of government and notions of voting and citizenship.

Conclusion

This paper begins as a largely theoretical paper addressing the misunderstandings that continue, even in the 21st century, around Vygotsky's work. There is a tendency in school-based work to approach Vygotsky's work as a neat toolbox for step-by-step teaching. One of the most pervasive slippages in the literature relates to the notion of scaffolding as a mechanism for development. As discussed in this paper, scaffolding is a strong instructional tool for task completion, but it does not represent a developmental mechanism for cognitive growth. The idea that scaffolding and mediation are synonymous continues to inform many teacher education programmes, as can be seen by the findings in this study from a group of in-service teachers. The findings of this study indicate that while in-service teachers have been taught about Vygotsky, they have been taught a domesticated version of his theory that deviates from the actual developmental thrust of his work. The hope, then, that Vygotsky's work is being taken up as he intended seems to be somewhat displaced, even in the 21st cen-

tury. The paper presents an argument for a return to the developmental foundations of Vygotsky's work, focusing specifically on the fact that children are active cognising agents who develop through interactions with the world that are mediated by culturally more competent others. However, this is a small case study and cannot be taken as a general view. Further research in this area is required. What we can note, though, is that the South African policy documents that appear to derive from Vygotsky's work and, to a certain extent, from Piaget's (1976) theory, understand active learning as referring to concrete manipulatives, rather than to the act of thinking. This itself poses a challenge to all teachers who rely on these documents in South Africa.

References

1. Bremner, N. (2021). Learner-centredness. *ELT Journal*, *75*(2), 213—215.
2. Coles, A., & Sinclair, N. (2019). Re-thinking 'concrete to abstract' in mathematics education: Towards the use of symbolically structured environments. *Canadian Journal of Science, Mathematics and Technology Education, 19*(4), 465—480. https://doi.org/10.1007/s42330-019-00068-4
3. Department of Basic Education. (2011). *Curriculum and Assessment Policy Statement (CAPS): Foundation Phase Mathematics, Grades 1—3*. Government Printing Works.
4. Fleer, M. (2009). Understanding the dialectical relations between everyday concepts and scientific concepts within play-based programs. *Research in Science Education*, *39*(2), 281—306. https://doi.org/10.1007/s11165-008-9085-x
5. Hedegaard, M., & Edwards, A. (2023). *Taking children and young people seriously: A caring relational approach to education*. Cambridge University Press. https://doi.org/10.1017/9781108980869
6. Hedegaard, M. (2020). Ascending from the Abstract to the Concrete in School Teaching-the double Move between Theoretical Concepts and Children's Concepts. *Psychological Science & Education*, *25*(5).
7. Jansen, J.D. (1998). Curriculum reform in South Africa: A critical analysis of outcomes-based education. *Cambridge Journal of Education, 28*(3), 321—331. https://doi.org/10.1080/0305764980280305
8. Jansen, J.D. (1999). Why outcomes-based education will fail: An elaboration. In: J.D. Jansen & P. Christie (Eds.), *Changing curriculum: Studies on outcomes-based education in South Africa* (pp. 145—156). Juta.
9. Karpov, Y.V. (2005). *The neo-Vygotskian approach to child development*. Cambridge University Press.
10. Muller, J. (2000). *Reclaiming knowledge: Social theory, curriculum and education policy*. London: RoutledgeFalmer.
11. Piaget, J. (1976). Piaget's theory. In B. Inhelder, H.H. Chipman, & C. Zwingmann (Eds.), *Piaget and his school: A reader in developmental psychology* (pp. 11—23). Springer-Verlag.
12. Piaget, J. (1976). *The grasp of consciousness: Action and concept in the young child*. Harvard University Press.
13. Smagorinsky, P. (2018). Deconflating the ZPD and instructional scaffolding: Retranslating and reconceiving the zone of proximal development as the zone of next development. *Learning, Culture and Social Interaction, 16*, 70—75. https://doi.org/10.1016/j.lcsi.2017.10.009
14. Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.
15. Vygotsky, L.S. (1986). *Thought and language* (A. Kozulin, Ed. & Trans.). MIT Press.
16. Wink, J., & Putney, L. (2002). *A vision of Vygotsky*. Allyn & Bacon.
17. 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. https://doi.org/10.1111/j.1469-7610.1976.tb00381.x

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The author declares that there is no conflict of interest.

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