

## **Whose development? Salvaging the concept of development within a sociocultural approach to education**

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Currently the concept of development is under revision and even attack in education and psychology (Lemke, 1995; Matusov, 1998; Valsiner, 1995). In this paper, we will examine and critique a traditional notion of development and provide an alternative, sociocultural view. As educators working within a sociocultural approach to learning, development, and education, we see human psychological phenomena as rooted in people's participation in sociocultural activities, practices, and communities (Cole, 1996; Heath, 1983; Lave & Wenger, 1991; Rogoff, 1990; Varenne & McDermott, 1998; Wenger, 1998; Wertsch, 1998). We will start our paper with a critique of concepts of development and then shift to a discussion of how to redefine the concept of development to address the critique and become again useful in the area of psychology and education from a sociocultural perspective. Our main critique of a traditional notion of development is that it has been assumed that development is independent of an observer. We argue that development is a social construction emerging in and among communities of practice.

The notion of development has a very long historical and broad cultural tradition. In the nineteenth century, in Germany, there was a growing philosophical tradition represented in such famous figures as Goethe, Hegel, and Marx, according to whom any phenomenon has to be understood as development. Following this call, many sciences previously being very static like astronomy, biology, economy, geography, mathematics, psychology, physics, have become increasingly developmental. The discipline of child psychology emerging at the beginning of the twentieth century almost immediately embraced this developmental orientation.

At the same time, Western educational institutions have experienced an opposing, anti-developmental tendency, exemplified by such metaphors for learners as "tabula rasa for writing important lessons" or as "wax for molding" or as "an empty vessel to fill with knowledge and skills" or as "a sin soul for salvation from its evils" or as "a pedagogical object for fixing from its deficiencies and misconceptions." Contemporary educational practices and theories can be exemplified as at time struggle between but at time a "peaceful" intertwining of both developmental and anti-developmental tendencies.

Acknowledgement of development in education is often represented as constraints for pedagogical actions. For example, such an educational construct as "developmentally appropriate instruction/activity" cautions educators in designing their curricula and instruction, which may not fit a developmental stage of their students. Piaget's child development psychological theory represents a good example of such a cautionary approach (Piaget & Elkind, 1968). According to Piaget, education can enrich and provide opportunities for development but still has to be constrained by it. For example, it may be useless to teach young children the notion of density if

they are non-conservers of mass and volume (i.e., they do not agree that changing a shape of an object preserves its mass and volume).

An exception from this cautionary tradition of treating development as a constraint for education is Vygotsky's socio-historical theory, according to which education can lead development. Vygotsky's famous concept of "the zone of proximal development" (ZPD) when more capable peers, adults, or a sociocultural activity (e.g., play) engage a child in more advanced actions than she/he could have done on her/his own and thus defines the child's potential development (Lev S. Vygotsky, 1978). The notion of ZPD allows new interpretations of development as a social construction and undermines a traditional assumption that development is independent from its observer. It is unclear, however, how much Vygotsky himself was aware of such interpretations (Rogoff, 1990; Veer & Valsiner, 1991).

### ***Traditional models of development: Development is independent from its observer***

Traditional models of development are based on the premise that development is independent from its observer. However, there are not one but many possible models within this assumption. Here, we very briefly describe the most common ones:

#### Development as unfolding of the preprogrammed algorithm within the object

This is one of the most common models. According to this model of development, there is a hidden algorithm (i.e., preprogrammed sequence of actions) that controls changes in the object. The source of the development is entirely inside the object of development. In education, this model is fully realized in some very popular versions of "developmentally appropriate" activities (as well as curriculum and instruction). According to this notion, it is useless to teach students curricula if they are not mature enough for it. Special diagnostics of tests has to be developed to assess "where the student is" on the developmental scale to define appropriate curriculum for the student to learn. There is nothing that educator can do to affect the development but test the students to find where they are on the developmental scale of their maturation. The teacher is a non-participant in student's development.

#### Development as an active interaction of the individual and its environment

In this model, the development occurs as individual actively tries to impose his or her schemes of actions on his/her environment and, as a result of "the resistance" of the environment to be changed in the desired way, the individual's schemes have to be changed. Development has an emergent character. In psychology, this interactive model of development was argued by Piaget (Piaget & Elkind, 1968). As Piaget pointed out, this model is rooted in biology. Vygotsky's version of development as social becoming psychological (L. S. Vygotsky, 1988) can also fit here. The impact of this model on education has been seen in a pedagogical emphasis on active learner and hand-on activities. This model makes new demands on the instruction to focus on what a student does with learning material for his or her own purposes rather than on whether the student follows the teacher or acquires the academic curricula in a way that the student can demonstrate it later on the teacher's demand. In this approach the educator can speed up the developmental process or slow it down, but he or she still cannot shape it since the source of development is solely rooted in an active organism.

### Development as a self-organizing dynamic system and ecology

This model pushes further an often-unpredictable character of transactions among different elements of dynamic system. It does not assume relative independence of the environment from a developing actor as the interactive model does. A newborn child defines young couple as new parents and their parenting is shaped by the newborn infant. Instead of tracking dynamically interacting functions and actions of individual participants, this model focuses the researcher's attentions on the emergence of stable patterns of relations among the participants as well as dynamic processes disrupting the patterns (Fogel, 1993; Lemke, 1995; Thelen & Smith, 1994). In education, this model of development shifts educator's focus from the student – how much he or she learns and how well he or she behaves – to the student's emerging relationships with the teacher, peers, and parents as “hidden curricula” of education. A student's learning how to participate in the stable relationships emerging in and around school arguably becomes the most important learning that the student does in (and around) school (Eckert, 1989). This model also attracts the educators' attention to the relational contexts and “factors” within which the institutionalized education operates like gender (e.g., sexism), class (e.g., poverty), race (e.g., racism), culture (e.g., ethnocentrism), political regime (e.g., oppression), social status (e.g., minority), institutional regime (e.g., hierarchy), and so on. Within this model, it becomes increasingly difficult to sustain independence of the phenomenon of development from its observer due to the interdependence and mutual definition of participants of the system. However, the model still neglects at the conceptual level the fact that observer participates in co-construction of the observed phenomenon of development.

#### ***A case of developing sitting disability in a child***

The following case illustrates challenges that have led to introducing a sociocultural notion of development. Prof. Eugene Matusov (the first author) was visiting local elementary schools where his students were placed for teaching practicum. In one of the placements, he encountered a puzzling experience. It was in a second grade classroom of a public local elementary school during a loosely planned language art activity at the very beginning of the school day. There were two white middle-class teachers Mrs. Grove<sup>1</sup> and Mrs. Smith working in teams. Both teachers had about 20 years of teaching experience. One teacher, Mrs. Grove, worked on writing with a group of 8 children sitting around a long table, while the other teacher, Mrs. Smith, was reading a book with two other children. The rest of the class (about 20 children) was doing some independent writing work apparently assigned previously by the teachers. They worked at their desks arranged in clusters of four. The children could talk and even walk in the class. The class looked well organized because the children seemed to know what to do and to be staying mainly on their tasks.

Eugene was floating from one cluster of desks to another, observing children's work, asking kids questions, and occasionally helping them with their work. At some point, an African-American boy named Mike came to Eugene with a slip of paper and a pencil and asked how to spell the word "brain." Eugene had remembered seeing a big poster on the classroom wall with the diagram of the brain when he first entered the classroom. There was a big title with the word "brain" on the poster. Eugene pointed out at this poster to Mike and asked whether he knew what the poster was about. Mike replied that the poster was about the brain. The professor asked whether Mike knew what the word with big letters in the title of the poster said. The boy guessed

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<sup>1</sup> Names of the teachers, students, and children are pseudonyms.

with some doubts, “Brain?” revealing to the professor that he had a difficulty to read on his own. Eugene nodded in confirmation. Mike happily picked up his slip of paper and carefully copied the word form the poster letter-by-letter.

Eugene heard clearly that another boy next to them said, “Cheating!” This boy went immediately to Ms. Smith, who was working with a group of kids, to report about our double cheating. The first cheating was Mike asking Eugene for help; the second one was Eugene showing how to find the answer on the wall. The teacher punished Mike for cheating on the spelling test and for "deceiving the visitor" (i.e., the university professor). Eugene felt embarrassed and apologized to the teacher.

In a moment, a special ed teacher came in the classroom. She picked up Mike and said to Eugene standing near the boy’s desk that Mike couldn’t read or write and they were going to work on letter recognition. Eugene was shocked that the teacher knew perfectly well that Mike had no resources to even approach the task but gave him the spelling test anyway. At a recess break, he asked the teacher, Ms. Smith, if she knew that Mike could not read and write and that the spelling test was a way beyond of his skill level. The teacher replied that she knew about that but the test was a mandatory requirement from the district. Eugene made a point that the test had a clearly harmful effect on the boy by asking him to do something that he could not do. It could destroy Mike’s confidence in his learning ability. Either Mike should be excused from the test or help should be offered to him. The teacher agreed with the professor’s concerns but said that exempting the boy from the test or helping the boy with the test was not in her power.

In his own undergraduate class, Eugene presented the case to his students and asked the students what they thought about the case and how would they resolve the problem. Many students agreed that the spelling test probably had a detrimental effect on Mike and that as a special ed. student, he could and should be excused from the test. Karen, a student who was placed in Mike’s class for her teaching practicum, reported that the teacher, Mrs. Smith suspected that the boy had Attention Deficit and Hyperactivity Disorder (ADHD) and he should be put on medication. Eugene asked Karen and Jessica why the teacher thought that way. The students said that they were asked by Mrs. Smith to record how many times in a 30 min. period this boy would violate the appropriate sitting behavior (i.e., to sit quietly, work on his own assignment and not to distract other kids). As the teacher said, this report was necessary for the school to request learning disability support as well as to put Mike on medication. The teacher had complained to Jessica and Karen that with kids like Mike the class easily become unteachable.

Eugene suggested that Mike’s distracting sitting behavior could come not from any organic or psychological disorder but from a simple fact that the reading-writing activities were simply far beyond his skills and there was simply no way for him to participate in those activities. He argued that the disability might be rooted not in the child but in the insensitive demands of the classroom activity. Eugene illustrated this point by asking his undergraduate students for how long they would sit still and attentive if his instruction had been in Chinese that they couldn’t understand. The students agreed that very soon they would exhibit Mike’s behavior. Eugene also pointed out that although the teacher’s desire to inhibit Mike was understandable – indeed it is very difficult to teach class when some kids distract other kids – putting Mike on medication for that purpose might not be in the best child’s interest. Besides, even if Mike were sitting quietly

during language art activities, it would be unlikely that he would learn much. After some more class discussion, the students came to the conclusion that in any case (whether or not Mike had truly ADHD) there was a big gap between Mike's skills and the classroom learning activities, which had to be addressed by the teacher.

Mike did not seem to have access to learning how to participate in classroom literacy practices and events. Mike's own ways of participation in literacy practices and events that he probably did in his home community were not welcome in the class. The only available developmental pathway left to Mike was development of a learning disability in school as a result of the negotiation between the teacher's expectations about Mike's participation in class activities and his performance. There was not much dialogue among the teacher, Mike, his parents, school administration, the state, the district, other teachers, the university professor, and preservice teachers about the values that should define Mike's development in literacy. However, there was such a dialogue between Eugene and his students.

### ***How development is defined by its observers***

Below we list the four compelling reasons why development cannot be viewed as fully independent of its observer and the act of observation in psychology and education:

#### Value relativism

In this case, the value system of the teacher and specialist, as well as the classmate who reported the cheating behavior, all contributed to Mike's development. Within the value system they share, asking for help during the spelling test was considered cheating, a symptom of moral decay. Within a different value system, for example in an innovative classroom, Mike's behavior might be seen as progress toward learning how to be active and responsible for advancing his own learning. Development is in part determined by the observer's values. Different observers not only can recognize different patterns of change but can also define different developmental directionalities. For example, in a traditional classroom a student's unsanctioned asking for help from another student can be viewed by the teacher as cheating while in an innovative classroom the same action can be seen as the student's progress toward learn how to become more active and responsible for his or her own learning (Matusov, Bell, & Rogoff, submitted). While in an innovative school Mike may have developed a positive reputation through actively seeking help, in this class he developed a learning disability. In this way, the case illustrates that the development can only be identified along the trajectory determined and valued by the observer.

#### Reflexivity

There is a loop of information circulating between the observer and observed, and both parties are often active in trying to shape this flow of information. Teachers' opinions about student potentials guide how they organize instruction and relate to students, who in turn arrange their own actions based on what they know about the teachers' expectations (Cole & Cole, 1993; Wineburg, 1987). A mistake of a "good" student can be viewed as an opportunity for the teacher to provide instruction while the same mistake of a "poor" student can be viewed as evidence of the student to be poor (Lemke, 1995; Rosenthal & Jacobson, 1968). Mike performs his act of "cheating" with some awareness of the teachers' expectations (he is not able to read, he is likely to need help) as well as his teacher's values (asking for help is cheating). It is probably not a coincidence but a calculated decision to request help from the outsider, who may not share these expectations or values or may not know the classroom rules. Mike was punished not only for

cheating but "deceiving the visitor." His subversive actions based on his understanding of teacher expectations may have resulted in reinforcing teacher expectations (that he is underachieving) and possibly to create or reinforce another (that he is dishonest). In this sense, feedback (often unconscious) of teacher/observer interpretations serves to shape Mike's development. In brief, the observer is always a participant, development is always an ideology, – it mobilizes participants to act (Gee, 1996).

#### Social construction through negotiation

Not only does feedback from the observer influence development of the observed, but also both parties participate in a negotiation of the nature of the development. We refer to "negotiation" as the process of establishing an agreement among involved parties of what are considered valuable and desirable directions for change. Following Wenger (Wenger, 1998), we urge readers not to assume that this is necessarily a harmonious process – it can be oppressive and even violent. In this example, Mike participates in the negotiation that results in his developing a learning disability. One possible response to this could be that his family/friends/community find the label a challenge and, with Mike's collaboration, spend hours working intensively after school until Mike is reading at grade level. In this case, Mike may be able some day to tell the story of academic success against the odds. Another possibility is that Mike will reject the teacher's notion of literacy and his subsequent failure, instead defining for himself and developing along another, possibly oppositional, trajectory (i.e., creating rap lyrics, poetry or music of protest). However, another possible scenario is that he will become bored and disenfranchised in the classroom. As this case suggests, already this seems to be the most likely possibility, since his teachers are already starting to negotiate with Mike the development of another social construct, ADHD, that probably will lead to Mike's medication.

#### Dialogism about educational values

Educational stakeholders are involved in a dialogue about what constitute educational values and priorities that in their own turn define development. This dialogue may take a form of "cultural wars" about values or a form of collaboration on building a reform or an innovative school or program. In the present case, there were two of such dialogues. One dialogue was between Eugene and Ms Smith, one of Mike's teachers, about why the teacher gave the spelling test to Mike knowing well that he could not do it. Their brief exchange involved issues of the teacher and student's safety (and well-being) and whose agency the teacher should be – whose demands and needs the teacher should prioritize (Blaker, 19xx): the district that requires mandatory testing or the student who could be harmed by the test. This dialogue revealed the difference in the assumed educational priorities between the teacher and the professor of education but did not have any resolution.

The second dialogue was between Eugene and his undergraduate students. This dialogue was about what constitutes a learning disability and where it is rooted: solely in a child or in an activity system that includes the child. It also involved the issue of whether child should fit the classroom or the classroom should fit each child. The dialogue revealed that it might be not necessarily an either-or solution but both possibilities and their combinations should be considered to benefit all students in the classroom. In essence, a dialogue about educational values is a part of participants' efforts to transcend their individual circumstances, backgrounds, attitudes, and values for "a new good" (or "an old good") that emerges in the dialogue and practice at large.

### ***Is redefining of the notion of development a new utopia?***

We suggest that the notions of development and progress, as changes undergoing in a desired direction, can be "saved" in the postmodern and social constructivism reigns via revealing and emphasizing their social (and cultural, and historical, and political, and economic, and aesthetic, and so forth) constructionist nature. Both notions are based on implicit recognition of what is good.

It is important to make values behind the desirability explicit. This means shifting from imposition of one's own hidden values, which are perceived and promoted by the observer as natural and/or objective, to an invitation for collaboration with involved others to develop shared values. Asking questions like why is this direction of changes good, good for whom, good at whose and at what expense, what are the limits of these benefits, and so forth will allow us not only to deconstruct the notions of progress and development but to reconstruct them to make them negotiable, relativist, subjective-objective, sociocultural, critical, and collaborative.

Sounds like a new utopia? Well, nobody promises a success in this endeavor. Its possible failure (of collaboration of the involved parties) will be a "new failure" in a sense that it will be a failure to collaborate about developing shared values of good with others and not a failure to impose values of one's own good on others as it was/is in traditional definitions of the notions of progress and development. The analysis of the failure to define progress in a given situation can be very informative about sociocultural and political contexts of each specific situation. We personally prefer the "new type of failure" because it is more transparent about social relations than the old failure that is assumed to be inside the individual rather than a breakdown of social relations and sociocultural practices.

We think it can be useful to apply these new postmodern notions of progress and development to the practical issues of accountability and sustainability of innovative projects of (re)forming existing/new educational institutions like traditional schools, innovative schools, and afterschool programs.

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