CS6795 HW#7 Jarrad Reddick

In his explanation of the interaction between learning and development, Vygotsky supposes the notion of the Zone of Proximal Development, whereby the mental abilities of school-age children can be best judged not by their performance when independently tested, but instead by their propensity, when given subtle assistance or interaction, to solve problems consistent with their next level of cognitive development. His argument states that those students quickest to respond positively to minor clues, group cooperation, and/or leading questions are, in so doing, demonstrating mental superiority over their peers who do not, and he posits that these students are ready to more easily move to this next level.

A major weakness in this argument is the notion that the cognitive differences noted cannot be determined by more thorough independent testing, as opposed to testing with guidance or in collaboration. That is: the fact that a child (in his paper “Interaction between Learning and Development”) showed, though testing, a higher level of potential (or proximal) development while performing at the same level of actual development as another is noteworthy, not as an indication of a weakness in the lower performing child, but as a failure in the test itself. More robust testing methodologies would show, even in the absence of adult guidance, subtle clues, leading questions, etc., that one child had a higher level of *actual* development than the other.

This point makes clear the fact some ideas associated with the Zone, like McCarthy’s demonstration of 3-5 year olds displaying functionality consistent with kids in the 5-7 range, can be attributed to a simple difference in actual development. It is not ground-breaking to consider the fact that a 3-year old, more cognitively advanced than his peers, would demonstrate abilities consistent with the average 5-year old. Emphasis should be placed on development of evaluation strategies that more appropriately identify these cases in children, with and without adult guidance. The claim that “the zone of proximal development today will be the actual development level tomorrow” is as intuitive as the statement: after thinking as a 3-year old, children most often think as 4-year olds, and then 5…

Throughout this same paper, Vygotsky, in promotion of the benefits of ‘teaching to the appropriate zone,’ uses language speaking more to the *spirit* of intellectual progress than any actual or substantial gains made by one group relative to another. He warns against “orienting learning toward yesterday’s development” when, in fact, it is clear that students fare better when challenged and pushed, with assistance, to new levels. With respect to neurally atypical children, he notes that the absence of abstract concepts does a disservice to attempts at teaching and learning despite the obvious lack of ability. Again, the notion is that *everybody likes a challenge.*

Another argumentative flaw in Vygotsky’s discussion of his zone has to do with the fact that he believes it lacking in primates (and other non-humans, it can be concluded), stating this as the basis behind which animals “are incapable of learning in the human sense.” This notion that non-humans cannot solve problems independently goes against studies we considered while analyzing the work by Penn, et al: “Darwin’s Mistake.” Several of the dissenting opinions (including, but not limited to Herman, Uyemama, and Pack; Gardener; Pepperberg; and Emery and Clayton) gave indication that, contrary to the common belief and, specifically to Penn et al, there do exist non-human species that are capable of processing high-level relationships and representing unobservable states. Whereas the zone of proximal development can be described as intimating an ability to “solve…advanced problems independently,” studies have shown Vygotsky’s non-human exclusion to be invalid.

In summary, Vygotsky’s claims regarding his zone of proximal development, while indicating and promoting pedagogical methods that are socially beneficial, are based on experimentation that could be better developed. Both human and non-human cognitive development has been shown to occur in ways counter the arguments described.