

Cognitive development and its relevancy in youth development

The concept of cognitive development is widely researched and routinely taught in educational courses. The development of the brain is undeniably relevant in the classroom setting, but its relevance extends far beyond teaching youth sitting behind desks. In the field of youth development an understanding of how youth develop cognitively is imperative to effectively reaching youth and guiding them to internalize life lessons taught – both intentionally and intrinsically. With even a rudimentary understanding of concepts of cognitive development, a youth development professional (YPD) can be more perceptive to a youth's cognition of topics and lessons learned. In this article, we will explore some key concepts relating to cognitive development and how the theories of this field apply to youth development. Many of these concepts will relate primarily to the methodologies of mentoring, thus a large portion of this article will focus on that topic. However these concepts are applicable to all facets of youth development and beneficial for all YPDs to understand.

What is cognitive development?

Cognitive development is defined simply as the “change in cognitive structures” (Kohlberg & Mayer, 1972, p. 457), or in more detail, an “increasing complexity of awareness, including perceiving, conceiving, reasoning, and judging, through adaptation to the environment and assimilation of information” (“Cognitive development | definition,” 2012). Essentially, cognitive development is a continual action (whether perceived or not) where an individual is learning and constructing new skills, knowledge, abilities, or opinions based upon some manner of cognitive stimulus.

There are two leading theorists in the field of cognitive development: Jean Piaget and Lev Vygotsky. Both have valid theories about the cognitive development of youth, however this article will focus on the key concepts of Vygotsky’s theories and how they relate to youth development. The key Vygotskian principle that we will focus on is the concept that Vygotsky terms the *zone of proximal development* (ZPD). The ZPD is an area of cognition in the learner where they are able to accomplish something just beyond their level of ability through the help of a teacher or coach. This is done through what Vygotskian theorists define as *scaffolding*. Much like the temporary structures found on the outside of buildings where it receives the namesake, the concept of scaffolding is focused on providing temporary support for building and developing cognitive ideas, guiding the learner to the point where they can eventually process and act without assistance. Essentially, the idea is to help the learner develop through guided assistance and support, then once the concept is understood to remove the support of the teacher/coach and allow the learner to act on their own. The “scaffolding” is then used to push the learner to the next logical step, and the process repeats itself throughout cognitive development.

Vygotsky’s theories on cognitive development are widely taught and applied in educational systems around the world. The concept is simple: to engage a learner in their ZPD a coach with knowledge of the subject is able to scaffold the learner to understanding. This may be a teacher-student relationship, peer-to-peer learning and group work within the classroom, a coach

teaching fundamentals of a sport to participants, a mentor working directly with a learner, or even an instructional video, book, or other media that pushes a learner's cognitive development. Vygotsky's theories are broad enough to have nearly universal application, and we will discover how they can be applied to positive youth development.

How does this all relate to positive youth development?

Youth development professionals have a unique opportunity to interact with youth. Often outside of the classroom and as non-parent adults in the lives of youth, YDPs are a vital part of the development of many youth. In the field of youth development, it often takes a special individual with distinct abilities to positively develop youth. Often this development takes the form of coaching or mentoring. Dennen (2004) points out "some refer to mentoring and/or coaching as a form of scaffolding, [while] some refer to scaffolding as an aspect of coaching" (p. 814). Youth development will unavoidably involve some sort of cognitive development, and it is therefore important for YPDs.

There is a special role that YPDs play as adults of influence in a child's life:

Adults provide children with metacognitive support by breaking down tasks from those that are beyond the child (learner's) abilities into smaller, more manageable ones that are within the child's grasp. Within this method it is important to ensure that the learners' participation is still meaningful and clearly contributes to the overall goal; tasks should not be broken down and segmented to the extent that learners no longer feel like participants in the overall process or cannot see how their work contributes to the end result. (Dennen, 2004, p. 815)

This influence can also happen at a widespread level within an organization. Youth centers and clubs run by adults who empower youth and push them to grow frequently use these methodologies, often found inherently in their programming. This form of widespread cognitive development is parallel to that of a teacher in a classroom – while not one-on-one it is still intentional and seeking to scaffold. Larson (2004) points out one example from adventure programming: "In adventure programs, [adults] may supply provisions for a trip into the wilderness and accompany the youth to ensure their safety ... A main role of adults in this model is that of encouraging and assisting with the final element in the cycle: reflection," (p. 685).

YDPs can easily create programs and activities that support cognitive development and work with youth on a large scale in their ZPDs and even invite youth to take roles of leadership to help their peers with their cognitive development. However, this large group style is not always the most beneficial. This is where the role of mentors becomes a vital part of positive youth development and its contributions to cognitive development.

The role of mentors

Mentoring is a unique opportunity for a YDP to work with an individual youth or small group of youth in an intentional fashion. Dennen (2004) defines mentorship as a “a guiding relationship between an adult and a youth focused on helping the youth realize his or her potential and perhaps overcome some barriers or challenges,” (p. 817). Intentional activities between mentor and mentee are often filled with opportunities for scaffolding and cognitive growth. Rhodes, Spencer, Keller, Liang, & Noam (2006) emphasize: “Regardless of the particular activity chosen, a mentor can approach interactions with the intention of exploiting ‘teachable moments.’ In general, the nature of intellectual challenge and support provided by the teacher is thought to play a major role in facilitating the cognitive development of the learner,” (p. 694). Further, “caring adults may enable youth’s own ‘wonderful ideas’ to emerge; by nurturing their ideas and helping them extend their evolving theories, mentors may give children ‘reason’ that takes their thinking ‘one step further,’” (Rhodes et al., 2006, p. 694). A youth development professional has a high level of influence in these direct mentoring situations and can have significant cognitive impact.

The key here for the mentor to effectively facilitate cognitive development is to allow for release of control of situations and provide guidance as the youth learns. Larson (2006) states: “The expert does not directly teach or impose structure, but rather provides these aids, as needed, adjusting them to the ability level of the novice and supporting the novice in going the next step. Agency is with the novice; the expert provides coaching,” (p. 684). YDPs must be cautious to not directly sculpt the thoughts of the youth, but provide space for individualistic thinking and guidance and formation of the learner’s own ideas. “It is easier to think about molding clay than about helping the clay mold itself,” (Larson, 2006, p. 682). He continues to explain: “The dilemma, then, is that creating too much structure or direction by adults can lead to loss of youth ownership, whereas supporting youth ownership as the top priority can mean that youth are not being challenged to grow and develop,” (Larson, 2006, p. 683). It is indeed a delicate balance to create an effective environment for cognitive development in a youth mentoring environment, but with the aid of Vygotskian scaffolding and ZPD this should be easier to do effectively.

Conclusions

Positive youth development seeks to help adolescents grow into able adults through the influence of non-parent adults. This development happens through a plethora of different activities and in various environments. Cognitive development theories seek to describe how humans develop cognitively, and more importantly methods for effective development. It quickly becomes apparent there is a significant amount of overlap between the two.

A basic knowledge of Vygotsky’s Theory of Cognitive Development and the ideas of scaffolding and the zone of proximal development can do wonders for youth development professionals. Often activities that youth participate in, whether they are large group activities or one-on-one mentoring, involve some flavor of cognitive development and scaffolding. These methods are frequently inherent in the programs and methods that YDPs utilize.

Yet, it is important to always take into consideration the multiple facets of cognitive development whenever working with youth. It is important to provide the support needed, especially as adults of influence in the lives of these kids. The challenge comes in knowing when to push and support and when to let the youth excel chiefly on their own. Awareness of the time to remove scaffolding is a learned practice and one that YDP develop over time.

Cognitive development provides a guideline for youth development professionals to create their programs and environments to most effectively reach youth.

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