

Blended (Dialectical) Constructivism. Blended constructivism is an interaction between learners and their environments. This perspective on learning is often associated with “contextualism” where “...*thought and experience are inextricably intertwined with the contexts or settings where learning occurs*” (Bruning, Schraw, Ronning, 1999, p. 217). Dialectical, or blended constructivism, is linked with the movement among psychologists and sociologists to jointly understand learning from the perspective of “contextualism” (Bruning, Schraw, and Ronning, 1999).

Cognitive orientation. It is the interaction between the internal and external constructivist views that is of interest here. Learning theorists researching from this perspective are interested in how existing mental frameworks are affected by the environment and how environmental influences affect the way that individuals think and formulate their mental frameworks. The belief is that traditional views of cognition are not sufficient, and sociology and societal influences are also inadequate explanations of learning. It takes a blend of psychology and sociology to begin to understand how individuals orient and learn from their environment and how those interactive influences shape our mental processes.

Nature of knowledge. Within blended constructivism, the nature of knowledge is relative to the interpretation of the individual learner and those who might have social influence in the learner’s environment. Truth from this perspective is submerged in cultural beliefs, tools, and artifacts. While some might believe that truth can be known absolutely, here it is almost as if

understanding of what is true is negotiated through internal and external mental interactions.

Learning assumptions. This learning framework places great value on experiences of the learner and his or her ability to extract meaning from these experiential encounters. The work of Lev Vygotski has contributed to the construction of a theoretical framework that embraces physical and more abstract social-psychological tools. Many theorists believe that learners use physical tools when engaged with the external world. Conversely, socio-psychological tools are symbol systems employed by individuals when engaged in thinking (John-Steiner, 1997). The use of both physical and socio-psychological tools enables change over time as learners internalize and transform interactions into mental frameworks.

Instructional practices. In the same way that learning is an interaction between environment and mental engagement, so is the learning/teaching dynamic. Using Vygotsky's zone of proximal development (ZPD) as a way to think about learning and teaching, teachers and learners can engage in mutual work in what might be called the "construction zone" (Newman, Griffin & Cole, 1989). The ZPD is thought to be the difference between the level of difficulty that a child can demonstrate with independence and a level that can be achieved with the help of a facilitating adult teacher (Vygotski, 1973). This interaction between learner and teacher is similar to the scaffolding/fading strategies described by internal constructivism, but now the emphasis turns to social interactions and mutual interpretations of knowledge and subsequent understandings.

Instructional content rests in contextualized settings. A learning goal in this perspective is to understand relationships between and among knowledge when it is seen as a cultural artifact. The educational goal is to promote understanding and command over information through a social relationship between the student and the teacher. This is not to say that students and teachers must be friends, but they do play social roles that are important to learning and teaching.

The characteristics of content are rooted in unstructured problems, complexities and nuance information. Practitioners of blended constructivism are concerned with how students can use information to solve complex problems encountered in authentic settings.

Instructional methods are varied but for the most part are designed to serve the needs of the learner. The role of teacher might be seen as a guide for a mutual learning journey. The travelers are both the teacher and the student – both as learners. Instruction begins with the teacher as a learner and not the traditional authoritative fountain of absolute truth. Rogoff's work on "apprentices in thinking" is a natural fit with blended constructivism (1991). She argues that cognitive development is inherently social and requires mutual engagement with partners of greater skill. Context, according to Rogoff (1991), consists of the social relationships that children and adults encounter as they learn. The instructional side of the social relationship is with one who is more knowledgeable on a given topic. That instructional guide is likely to use an instructional method known as guided participation where the learner uses

interpersonal communication and stage setting to build mental bridges between that which they already know and new information (Rogoff). Rogoff argues for enriched mental processing because learning occurs in the context of the child trying to accomplish something (Bruning, Schraw & Ronning, 1999). This strongly suggests the importance of accomplishing something (e.g. a scholarly product, or a paper) as a contribution toward motivating learners to learn.

Instructional sequences can vary depending on the journey that is taken by the teacher and the learner. Taking trips is often conducive to finding alternate routes to a destination. During the trip, the learner often sets the sequence of instruction. The teacher and student engage in interpersonal communication along the way. In these interactions, information surfaces that the teacher can combine with his/her expertise and subsequently use to set the stage for later learning activities. As the journey continues to these new stages, the learner has opportunities to make new connections. It is during these events that Rogoff suggests new cognitive growth takes place. The skillful teacher can make the journey seem informal but meaningful for their fellow travelers. Formal teaching is not necessary to realize impactful learning.

Assessment of student performance is always in an authentic context. Using this approach provides a natural place for a journal, graphic representations of learning, or even video and digital pictures that illustrate learning. These approaches strengthen the important role in learning that is played by those in our social context and settings. Because social relationships are so important to this learning paradigm, it is essential to conduct assessment

using social contexts as a foundation for determining how appropriately individuals can identify, employ, and evaluate their use of socio-cultural tools to solve problems.

Example UGA CTL practice from this perspective. The contextual teaching and learning project at UGA utilizes this instructional approach extensively. Examples of principles of blended constructivism are inherent in the practice of Dr. Elizabeth Pate, Associate Professor of Elementary Education, with an emphasis in Middle School teacher preparation. The following is a brief description of her service learning classes and literal journeys taken by Dr. Pate and her students:

Service Learning and Blended Constructivism

Dr. Elizabeth Pate has masterfully used blended constructivism to guide her students on literal and virtual journeys in service learning. In her course Academic Community Learning, EDMS 5060/7060, undergraduates and graduate students examine service learning while providing for real experiences in the community. From a list of topics that she provides, the students and the instructor collaboratively select the topics for that class. Topics on the list include “attitudes,” “reflection,” “stakeholders,” “citizenship,” “empowerment,” and many more.

Dr. Pate begins her course with a mostly blank syllabus. Immediately this has literal and figurative meaning to her students. It tells them that the power to choose among topics rests mostly with them -- the learners – and not as traditionally expected with the teacher. It also suggests that the journey is truly uncharted and that many unanticipated opportunities for learning are likely.

After introductions and a discussion of the blank syllabus, the meaning of service learning, curriculum integration, and examples of service learning projects from the past are discussed. As the course evolves, students engage in establishing service learning projects, criteria for their assessment, rubrics, and portfolios.

As the semester continues, students are expected to make contacts and to provide a service to an organization where a community good might be realized. Much of the time is devoted to service in the community, keeping some type of documentation of the impact, and reflections on the meaningfulness of the activity.

Late in the semester, students compile the documentation of their service-learning project into a portfolio or other type of representation of their work. The students ultimately present these activities in a public forum.

Dr. Pate utilizes elements of blended constructivism by assisting the learners throughout their journey and is also actively engaging in service learning projects of her own. She is affectionately known among the students as one professor who walks the walk and talks the talk.

Dr. Pate’s instructional approach to her service learning class is a good example of blended constructivism because she employs such practices as identifying the learners level of prior knowledge, encouraging exploration, and

arranging for learning by setting the stage through the use of reflection and identification of meaningfulness.

Relationship to continuum of context. Blended constructivism



intersects with the continuum of context right of center signifying a strong inclination to contexts and settings that might be considered more authentic. This approach is learner centered and situated in real life. The often informal relationship between the learner and the teacher approximates more natural relationships as they are found in everyday society and culture. Blended constructivism is also more contextualized because it relies on cultural tools and symbols to promote interaction between the environment and the learner's cognitive processes.

The next learning perspective continues toward a more complete orientation toward learning occurring in social settings. In the next few pages we will explore situated cognition and communities of practice theories.

Situated Cognition/Communities of Practice. In recent years, Jean Lave and Etienne Wenger have written about learning in a different way. As ethnographers, they have employed principles of sociology, while emphasizing

the importance of *context* and *participation in communities of practice* as critical elements in the learning process. Another distinction of their theory from the other various forms of constructivism is that the authors consider situated cognition as a “socialization” theory. It is about how individuals become members of communities. This could be restated to ask how do novice teachers become a member of the professional community of teachers in a given school. These concepts and ideas are potentially important to the design, delivery, and assessment of contextual teaching and learning especially applicable to the training of new practitioners for the profession of teaching.

Jean Lave, an anthropologist, has spent recent years studying learning as it occurs in natural settings. Her research often examines elements of partial and full membership in some type of community. This body of literature has come to be popularly known as *situated cognition*, or legitimate peripheral participation. Lave’s collaborator, Etienne Wenger, has extended this body of research in his most recent publication, *Communities of Practice* (1998). Like the research on constructivism, this research also has important possibilities as a framework for authentic instruction and assessment.