

Multicontext Theory

Based on Ibarra (2001); Chávez and Longerbeam (2016); Weissmann et al. (2019)

Summary prepared by Gary Weissman for the 2019 Earth Educators' Rendezvous

Multicontext theory describes how individuals from different cultures approach how they “...interact and associate with others, use and perceive space and time, process and treat information, respond to various patterns of teaching and learning, perform academically or in the workplace, and perceive connections in the world around them.” (Weissmann, et al. 2019, p. 4). These preferences affect how individuals shape their world throughout life, including in the academic environment. The terms “Low Context” and “High Context” are used to describe the end members of a continuum of how people operate. Importantly, no judgement is implied by use of terms “Low” and “High” ... these are both different and valid approaches to the world. Chávez and Longerbeam (2016) use the terms “Individuated” and “Integrated”, respectively, to describe similar attributes of these cultural approaches. Since academic culture primarily values a Low Context (Individuated) approach, individuals coming from High Context (Integrated) or Multicontext (mixed approach) cultures may not feel included and often are required to “context switch” between home and academic life in order to fit in. Weissmann et al (2019) hypothesize that the conflict between context orientation and the academic culture makes inclusion difficult, especially in STEM fields. Since many underrepresented minorities and women (as well as many majority males) tend to value High Context or Multicontext approaches, this conflict influences diversity in STEM. Weissmann et al (2019) hypothesize that a broadening of academic culture is needed to value the entire context spectrum. Chávez and Longerbeam (2016) provide an excellent discussion of how this concept may be applied in higher education classrooms. The following two tables from Weissmann et al (2019) offer some insights into the Multicontext spectrum:

Table 1. Contrasts between low-context (LC) and high-context (HC) academic cultures (modified from Ibarra 2001).

Low context	High context
Information or data may be separated from context (e.g., study something in isolation of other possible interacting factors). A STEM example of this is math worksheets, in which the problems are out of context of any real-world application.	Information or data must be evaluated in context with possible interacting factors, and information out of that context lacks meaning. Systems science is usually contextualized, focusing on relationships among objects.
Examination of ideas is valued rather than broad comprehension of real-world applications; thus, theoretical STEM disciplines are often considered to be more important than local case studies.	Application of knowledge in real-world events (social skills) are most valued. Interconnected thinking fosters broad comprehension of multilayered events. Understanding of science through applied case studies developed in a community setting is valued.
Linear thinking is most valued, and publications in STEM fields follow linear logic.	Nonlinear, relational thinking is most valued and is often relayed in a storytelling sense.
Interactions use direct communication, in which facts and concepts are unembellished.	Interactions use indirect communication, in which facts and concepts are embellished with stories.
Task oriented, in which success is evaluated by how the task was completed.	Process oriented, in which success is evaluated by how cohesively the group conducted the work.
Time is perceived as a commodity, in which it is “spent, wasted, or saved.” Emphasis on schedules, compartmentalization, and promptness. Deadlines are important.	Time is a process in nature, and things are completed in as much time as is necessary and may not fit into a specific schedule. Deadlines are goals to be achieved, but accurate completion of work is more important.
Space, in which personal property is shared less.	Space, in which personal property is shared more.
Academic teaching style is technical. Style is individual, less interactive, and teacher oriented. Research interests include people or communities, but they focus on theoretical and philosophical problems. Writing style uses fewer pronouns.	Academic teaching style is personal. Style is more open, interactive, and student oriented. Research interests are directed to real-life problems with people and the community. Writing style tends toward more use of personal pronouns.

Table 2. Contrasts between individuated and integrated learners (modified from Chávez & Longerbeam, 2016).

Individuated	Integrated
In a culturally <i>individuated</i> framework, a private compartmentalized, linear, contextually independent conception of the world is common, assumed, and valued.	In a culturally <i>integrated</i> framework, an interconnected, mutual, reflective, cyclical, contextually dependent conception of the world is common, assumed, and valued.
Purpose of learning: Knowledge, individual competence, to move forward toward goals and the betterment of humanity.	Purpose of learning: Wisdom, betterment of the lives of those with whom we are connected—family, tribe, community.
Ways of taking in and processing knowledge: Mind as primary, best or only funnel of knowledge.	Ways of taking in and processing knowledge: Mind, body, spirit/intuition, reflection, emotions, relationships as important aspects and conduits of knowledge.
Interconnectedness of what is being learned: Compartmentalized and separate; belief that understanding how the parts work separately, abstractly and in isolation will lead to the greatest understanding.	Interconnectedness of what is being learned: Contextualized and connected; belief that understanding how things affect one another within the whole and within family and community will facilitate understanding.
Time: Linear, task oriented, can be measured and used, to be on time shows respect.	Time: Circular, seasonal, process oriented, dependent on relationships; to allow for enough time shows respect.
Sequencing: Learning by mastering abstract theory first, followed by testing; unlikely to include application, experience or doing in real life.	Sequencing: Learning by doing, listening to others' experiences, imagining, or experiencing first, then drawing out abstract theory.

References

- Chávez, AF, and Longerbeam, SD, 2016, *Teaching Across Cultural Strengths: A Guide to Balancing Integrated and Individuated Cultural Frameworks in College Teaching*. Sterling, VA: Stylus.
- Ibarra, RA, 2001, *Beyond Affirmative Action: Reframing the Context of Higher Education*. Madison, WI: University of Wisconsin Press.
- Weissmann, GS, Ibarra, RA, Howland-Davis, M, and Lammey, MV, 2019, The Multicontext path to redefining how we access and think about diversity, equity, and inclusion in STEM. *Journal of Geoscience Education*, DOI: 10.1080/10899995.2019.1620527 (published online July 5, 2019).