Attributes of Cultural Frameworks

A broad range of approaches to knowing and doing are present in your classroom, department, and university. These differences are represented as Cultural Frameworks or *Context Diversity*. We present attributes that articulate the spectrum of approaches as a binary below; however, people operate across this spectrum given the needs of the task at hand. Each individual may have a preference for one side of the spectrum or the other, or somewhere in between, but successful individuals are able to operate across the spectrum depending on the situation.

The different approaches presented in this table have been shown to be culturally-based. Because academic culture tends to value primarily the attributes on the left side of this spectrum, people who approach the world from the right side are at best forced to work outside their preferred mode and at worst told their approach to understanding the world is wrong and needs to conform to the "right" way of doing things. This connects to racialized and gender inclusion since underrepresented minorities and women tend to approach knowing and doing from the right side of this spectrum; however, this is a general tendency and CANNOT be used to stereotype individuals. Importantly, these different approaches exist in your academic environment, and by broadening values in teaching and departmental/institution activities (e.g., tenure process, curriculum) to encompass the entire spectrum will create an inclusive environment for all, and it will attract a wide range of people and help everyone thrive in this environment.

This table is based on work by Ibarra (2001; *Beyond Affirmative Action: Reframing the Context of Higher Education.* University of Wisconsin Press), Chávez and Longerbeam (2016; *Teaching Across Cultural Strengths: A Guide to Balancing Integrated and Individuated Cultural Frameworks in College Teaching.* Stylus Press), and Weissmann et al. (2019, The Multicontext path to redefining how we access and think about diversity, equity, and inclusion in STEM. Journal of Geoscience Education, 67:4, 320-329, doi: 10.1080/10899995.2019.1620527).

One-on-One Interactions

Low Use of nonverbal signals.

Messages rely more on words than nonverbal cues. Body language is less highly developed with little attempt to synchronize with words.

Communication is Direct.

May appear to be blunt, even rude, in their directness. Spell things out exactly and value being specific. Getting to the main point quickly is highly valued.

Messages are literal.

Communication is a way of exchanging information, ideas, and opinions but is not intended to unify (identify or associate) culturally with others.

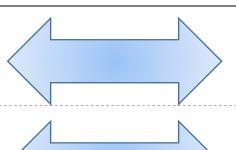
Conversations reflect the occasion, but only one linguistic code is used.

Long-term interpersonal feedback Avoid interfering with or intervening in others' lives. Take colleagues' mood shifts for granted, attributing them to personal problems that should be

ignored.

Disagreement is depersonalized.

Withdraw from conflict and get on with the task. Depersonalize disagreement with a "tough it out" rather than "talk it out" approach. Defuse confrontation by quiet separation. Force means a communication breakdown.



High use of nonverbal signals.

Voice tone, facial expression, gesture, and eye expression all carry significant parts of a conversation. Body language is highly developed and synchronized with words.

Communication is indirect.

Avoid getting to the main point of discussions quickly and talk around them to avoid being pushy. Embellish discussions and expect others to gather the main ideas from the context provided.

Messages are an art form.

Communication is a form of engaging another person, a unifying cultural activity that may include bilingual code switching (beginning or ending sentences or conversations in two languages).



Short-term interpersonal feedback

Constant checking on emotional status of others is important for group morale. Generally are attuned to slight mood changes among friends and colleagues.



Disagreement is personalized.

Sensitive to conflict and criticism expressed by another's verbal and nonverbal communication. Must resolve conflict before work can progress. Use a "talk it out" approach to defuse confrontation and unpleasantness, especially at work. Force means communication.

Group Associations

Task orientation.

Things get done when everyone follows policies and procedures and pays attention to a goal. Being nice to people is not necessary nor is it as important as completing the job.

Success means being recognized.

Seek publicity and like to stand out among their peers to "get ahead" in society. Value individualism and may ask for more information about someone's accomplishments.



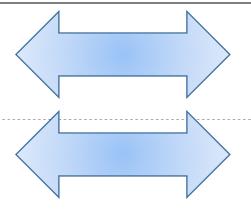
Relationships start and end quickly. Many people can be inside one's circle, but boundaries are blurred. Often highly committed to their job or career. Written contracts are important.

Formal culture is team oriented.

Teams consist of individuals with specific skills who are brought together to work on projects or tasks. The team work may be linked, but it is sequential and compartmentalized (a "baton passing" approach).

Individual achievement is more important than group achievement.

Work is assessed based on individual actions. Individual knowledge/products are most important.



Process orientation.

Getting things done depends on one's relationship with people and attention to the group process. Being nice, courteous, and kind to people is more important than completing the job. Important to insure all voices are heard.

Success means being unobtrusive.

Seek less attention for their accomplishments. Talking about ones achievements is considered brash and boastful. Value humility, which may be misperceived as being unassertive or uncaring about "being successful".

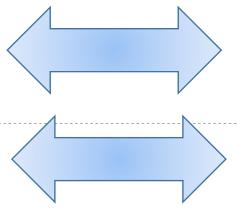
Personal commitment to people is high.

Relationships depend on trust, build slowly, and are stable. Careful to distinguish who is in their circle. Deeply involved with others in the group. Have a strong tendency to build lifetime relationships. Written contracts are less important than bonds of personal trust.

Informal culture is group oriented. Individuals with general and/or specific skills come together to work as a group to complete projects. Work is interactive, and individuals are not territorial about specific tasks (everyone involved in most

Group achievement is recognized as more important than individuals in the group.

Individuals will point to the success of the group and push credit for success to the group.



Perception of Time

Time is a commodity.

Time can be spent, saved, or wasted. One's time is one's own.

Synchrony is not important and tempo of life is faster.

Less likely to consciously or unconsciously synchronize body movements while interacting with others (kinesics). The pace of life is hurried and individualized; synchronizing with others is not valued.



Culture relative to time is superficial.

Perceive culture as something that one can change, put on, or take off. Change means discarding (excluding) old ways for new ones. Because culture is regarded as a superficial difference, people on this side of the spectrum may have trouble accepting differences in others. Tend to expect others to be willing to reshape their culture.



Time is monochromic (M-Time).

Emphasize schedules, compartmentalization, and promptness. Do one thing at a time and may equate time with money and status. Change happens fast.

- Work on a schedule and do one thing at a time. The intent is to do things quickly and see immediate results.
- Value speed and efficiency in work.
- The objective for learning and training is "getting up to speed".
- Concentrate on the job at hand.
- Take deadlines and schedules seriously.
- Adhere religiously to plans.
- Emphasize promptness. Being late sends a message about status or importance.
- See people who juggle several tasks at once (P-time) as being totally disorganized



Time is a process.

Time is a part of nature; it belongs to everyone.

Synchrony and tempo of life is slower.

Body movements while interacting with others are consciously and unconsciously synchronized. The absence of synchrony at work or performing with others may cause stress and tension. The pace of life is slower.

Culture relative to time is ingrained.

Perceive culture as an integral part of everyone and everything. Change means incorporating or adopting (including) new ways with old ones. Because people on this side of the spectrum regard culture as ingrained, they are receptive to what is different in others, and they seldom expect others to reshape their culture.

Time is polychronic (P-Time).

Emphasize people and completion of transactions. May do many things at once (multiple tasking) and do not equate time with money or status. Change happens slowly.

- Because life has its own flow, people on this side of the spectrum are reluctant to schedule time, cognizant that people's needs may interfere with keeping to a schedule.
- Value accuracy and completion of a job. How well something is learned is more important than how soon or how fast.
- Highly distractible and subject to interruptions at work.
- Regard deadlines and schedules as goals to be achieved if possible.
- Change plans often and easily.
- Value promptness if they know it is important to the relationship. Being late does not send a message.
- Perceive people who work in sequence as obsessive. Working collegially is more important than achieving working goals.

Territory and Space Use

Space has more boundaries.

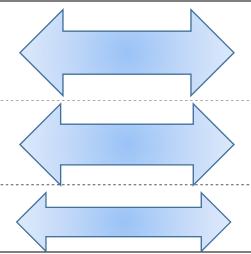
Need more distance for interaction with little if any touching or contact during conversation. Personal space is compartmentalized, individualized, and private.

Privacy is more important.

Concerned about not disturbing others and following social rules of privacy and consideration.

Personal property is shared less.

Tend to show great respect for private property. Seldom or reluctantly borrow or lend things.



Space is more communal.

More comfortable interacting within close social distances, and constant non-intimate touching during conversation is normal. Personal space is shared, and involvement with others is encouraged.

Privacy is less important.

Involved with those who are closely related (family, friends, close business associates) and have few concerns about privacy.

Personal property is shared more.

Respect private property but tend to borrow and lend things often and easily. My home is your home.

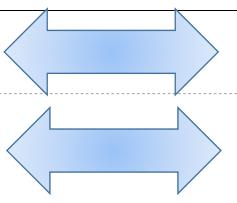
Information Sharing and Use

Information does not flow freely.

Data are highly focused and compartmentalized. Make relatively low use of personal information networks. Information is power.

Information can be separated from context.

Can separate information from the context it comes from (e.g., study a plant characteristics but not the ecosystem it resides in).



Information spreads rapidly.

Information moves as if it has a life of its own. Make relatively significant use of multiple personal information networks.

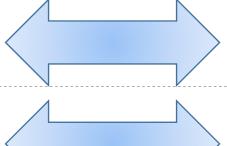
Information without context is meaningless.

Prefer information in context; otherwise, it is unreliable (e.g., studying a plant characteristics without knowledge of the ecosystem it resides in is has little meaning or confused meaning).

The Purpose and Process of Learning

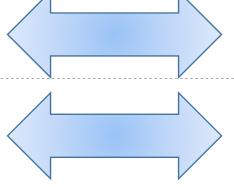
Purpose focuses on the individual.

Knowledge and individual competence used to move forward toward goals and the betterment of humanity.



Knowledge is obtained by linearlogical reasoning.

A rational step-by-step model of analysis yields information. Reality is elemental, fragmented, compartmentalized and thus easier to isolate for analysis.



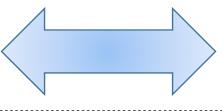
Analytical thinking is important.

Prefer an inductive reasoning process, to go from the specific to the general. Focus on compiling details. Have difficulty translating their thinking process into symbols so that comprehensive thinkers can easily understand it.



Learn best by following directions.

Assemble or combine facts according to rules they memorize. Things are spelled out with explicit explanations even in an apprenticeship model. Theoretical and philosophical problems are treated as



Learning is oriented toward individuals.

Prefer to approach tasks and learning individually. Tend to work and learn apart from others. Teamwork means individuals are assigned tasks to accomplish.



Creative learning process is externalized.

Prefer to learn or create complex knowledge like mathematics externally with the aid of pens, paper, books, computers, and so on. The learning process is highly visible and accessible for others to evaluate and correct. Externalized creative processes help to speed up change, but they may be slower and less productive than internalized processes.



Purpose of learning focuses on the community.

Wisdom used for betterment of the lives of those with whom we are connected family, tribe, and community, sometimes the global community.

Knowledge is obtained by a gestalt model.

Facts are perceived as complete units (gestalts) embedded in the context of situations or experiences; they can be recalled as wholes, and they are not easily separated for analysis. Things are interconnected, synthesized, and global.

Comprehensive (systems) thinking is important.

Prefer deductive reasoning, to go from general to specific. Use expanded thinking ("big picture" actions, ideas, and/or complex forms). Have few problems translating their thinking processes symbolically (nonverbally) for others to understand.

Learn best by demonstration.

Learn by hands-on methods: observing and mimicking others, practicing it mentally and physically, demonstrating it to others, and by apprenticeship. Real life problems are as important as theoretical and philosophical ones.

Learning is group oriented.

Prefer to work in groups to learn and solve problems. Some groups prefer constant talking (interacting) in proximity when working or learning.

Creative learning process is internalized.

May be capable of learning or creating complex knowledge like mathematics or music in their heads rather than by using learning extensions like pen and paper. The creative learning process is comprehensive, and integrating complex ideas can happen all at once. Internalized creative processes are less visible for others to evaluate and correct, but they are much faster and more productive than externalized process.

Academic System Values

Theoretical and quantified thinking is emphasized.

Value examining ideas rather than broad comprehension of real-world applications. Linear thinking is ultraspecific and inhibits a broad mutual understanding of multilayered events. Thinking uses words and math to communicate.



Applied and qualitative thinking is valued.

Value application of knowledge in real world events. Interconnected thinking fosters creativity and broad comprehension of multilayered events. Often uses stories or illustrations to express complex concepts.

Academic/teaching style is technical.

Style is individual, less interactive, and teacher oriented. Research interests include people or communities, but 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.

Approaches rely on Linnaean-style taxonomies.

Taxonomies favor linear analysis that classifies living things mainly for information retrieval. Taxonomic systems emphasize the processes of collecting specific information more than its integration into usable, intelligible patterns.



Approaches include folk-style taxonomies.

Taxonomies function beyond information retrieval to communicate *about* the living things being classified with those who already know culturally significant properties of the things being discussed. The intent is to integrate the information collected with contextual thinking to open new areas for research.

Low-context disciplinary culture.

May favor fields that tend to conduct analysis with methods that often eliminate context (separate information from context). Research analysis usually deals with large numbers of quantitative and easily measured variables; results are more deterministic and context is less important. New research projects are directed toward strongly projected predetermined outcomes.



Contexted disciplinary culture.

May favor disciplines that are more directly involved with contextual thinking and research about livings systems and people. Research analysis is more qualitative and probabilistic and requires attention to variables in which cultural context is important. New research projects are clear about the direction and methods of analysis, but projected outcomes are less predetermined and more open-ended and flexible.

Disciplinary divisions are logical and necessary.

Disciplinary expertise is valued, and students learn best by taking disciplinary-based classes.



Disciplinary divisions are arbitrary and limit understanding of natural systems.

Though disciplinary expertise may be helpful, it may limit understanding of the system. Broader, non-disciplinary approaches (or multi-disciplinary approaches) are needed to address natural systems.