

# TEACHING ACROSS CULTURAL STRENGTHS

*A Guide to Balancing Integrated and Individuated  
Cultural Frameworks in College Teaching*

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FOREWORD BY [TO COME]



Tibetan Symbol of Balance

## Chapter 1

# Balancing Cultural Strengths in Teaching

*I feel like I have to leave my culture at the door to be taken seriously, to not startle people, to have a chance at being seen as intelligent. Trying to learn through someone else's cultural traditions makes getting my education even tougher. I grew up discussing things and comparing my ideas to others but classrooms are mostly just hours of listening. I want to apply what I'm learning at least hypothetically to serve my own communities, but mostly we just regurgitate facts, ideas, and theory in the abstract. I've learned over time how to negotiate this reality yet I wonder sometimes what it would have been like to learn within my own cultural epistemologies. My hope is that when I am a professor, I can teach in ways that embody many cultures, not just my own or the ones that are so prevalent in college and university classrooms.*

- African American doctoral student in education<sup>1</sup>

Culture is interwoven through teaching and learning (Banks & Banks, 1997; Gay, 2000; Tisdell, 2003). Similar to the student quoted above, each college student brings culturally influenced ways of learning, communicating, and behaving as well as expectations about teaching with them into collegiate learning environments (Chávez, Ke, & Herrera, 2012; Ibarra, 2001; Rendón, 2009). Likewise, faculty bring cultural influences into teaching practices and into the interpretation and evaluation of students (Chávez, 2007; Ibarra, 2001). Teaching-learning relationships between faculty and students are embedded in culture. We propose that faculty apply a cultural lens to teach more inclusively across cultural frameworks. By doing so, we make possible teaching across a diversity of cultural strengths to enhance learning for everyone.

This book is designed as a guide for teaching faculty to apply a cultural lens to college teaching and learning for the purpose of understanding how culture manifests in our own teaching and to enhance student learning. We crafted it to assist faculty to design and facilitate learning by drawing from a wide variety of cultural strengths across student populations. Our belief and our assumption guiding the book is that we as faculty can learn how to balance our own cultural norms alongside a full spectrum of cultural norms in teaching and learning practices. Because culture is embedded so foundationally and often unconsciously in how individuals interpret and behave in the world, this text is designed to assist faculty in systematically reflecting, observing, analyzing, uncovering, and considering ways to develop teaching using a range of cultural approaches, while balancing those approaches. Applying a

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<sup>1</sup> All narrative quotes are from interviews with students and faculty. Some identifying information has been modified to protect the anonymity of participants.

cultural or anthropological lens to college teaching and learning unleashes a powerful tool to develop our teaching over time and to understand the great diversity in students as learners. We encourage everyone to try. Some would say that you need to understand every culture before you can move to application. We encourage you to try, not to feel like you need to know every culture, be completely sensitive. It is important to start and to just try. We understand that this takes a kind of academic courage, to face who we are and to reimagine our teaching in fundamental ways. Insights, sensitivity, awareness, and cultural responsiveness develop through our efforts over time. And through this process we learn about different cultures and different ways that students learn.

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Within the field of anthropology, culture is characterized as a learned foundation of individual and collective assumptions, values, beliefs, priorities, and behaviors developed by a population over time (Deal & Peterson, 2009; Mead, 1971; Kuh, 1993). Peoples around the world and within the United States live within distinctive frameworks of culture. This book is designed to assist us in developing greater cultural responsiveness to students as learners by balancing across cultural frameworks in our teaching. Applying an anthropological or cultural lens to teaching practice is helpful to developing our acuity in cultural responsiveness to learners. For a deeper discussion of culture see Chapter 2. Purposefully applying a balance of cultural frameworks in teaching will assist faculty to foster more complex learning processes among students.

Learning can be conceptualized as a layering or weaving in of many ways of understanding and of knowing. The more richly and diversely we explore knowledge and ideas, the more complexly we learn. Balancing teaching across cultural frameworks centers student learning in both natural and dissonant ways when teaching techniques sometimes feel familiar to students' upbringing and sometimes feel unfamiliar, challenging them with new experiences and resulting disequilibrium. Balancing teaching across familiar and unfamiliar cultural frameworks offers a healthy dynamic tension of challenge and support essential to facilitating greater complexity in thinking and processing (Baxter-Magolda, 1999). Further, teaching across cultural frameworks engages the mind as well as the heart, spirit or intuition, and body to develop greater understandings; and encourages consideration of multiple perspectives or lenses. A balance across cultural frameworks in course design and teaching practices makes it possible for each individual student to apply at least some of their own cultural strengths to learning. It makes it possible for each student regardless of origins and experiences to find themselves in the mirror of collegiate learning.

Our intent in Chapter 1 is to expediently introduce a model of *Cultural Frameworks in College Teaching and Learning*, including a discussion of the empirical studies undergirding its development. The model describes integrated and individuated cultural frameworks; discussed more fully through eight continua of teaching and learning. For readers who want background reading on the concept of culture and worldviews in pedagogy, or who desire a thorough description of and definitions for our use of culture and related concepts such as race and ethnicity, please read Chapter 2.

## Reimagining Teaching toward a Culturally Strengths Based Approach

Promoting learning among college students is an elusive challenge for faculty. This is especially so when faculty and students originate in differing cultures, an increasingly relevant actuality as campuses diversify. Though many factors come into play when facilitating learning in collegiate contexts, faculty and student cultural norms engender a significant influence. As teachers, we have the opportunity to draw from and balance cultural strengths originating in highly differentiated cultural frameworks. This may take a kind of reimagining of our teaching toward a culturally strengths based approach and balanced with pedagogies outside our own cultural framework. We understand that reimagining teaching and learning across cultural frameworks can be uncomfortable and as faculty we often believe we should have expertise in something before we apply it to our practice. Yet we believe that teaching across cultural frameworks is an area where the opposite is necessary. We learn as we try. We want everyone to just try, not to feel like we need to know every culture, be completely sensitive...just try. Insights, sensitivity, awareness, and cultural responsiveness develop from our efforts. In the process we become more adept at reimagining our teaching, developing new practices, and honing our abilities as teachers who work with learners from a culturally strengths based approach.

This book offers an opportunity to consider the role of culture, especially cultural strengths, to enhance student learning through development of faculty teaching and cultural introspection. Integrating a variety of cultural norms into teaching practices complexifies learning activities and contexts, deepening learning among students by offering a balance of naturally comfortable techniques as well as naturally dissonant ways of learning to each individual student. While doing so, faculty develop in cross cultural proficiency, awareness, and understanding (Chávez, 2007). This volume offers an opportunity to consider the role of culture, especially cultural strengths, to enhance student learning through development of faculty teaching and cultural introspection.

Through accessing strengths in cultures of origin whether consciously or unconsciously, learners may favor or even assume individual or collective ways of learning; may forefront the mind, body, spirit, or heart as avenues for taking in and processing knowledge; may think and communicate in linear or circular patterns; and may process from applied to conceptual or conceptual to applied pedagogies. Similarly, faculty bring culturally influenced design,

pedagogy, evaluations, assumptions, interactions, and facilitation of learning into teaching practice. Because collegiate learning benefits from a variety of modes of taking in, processing, and applying knowledge it is beneficial to all students to experience a diversity of modes of teaching. Applying a balance of techniques, interactions, and relationships to teaching practice is helpful to developing pedagogical diversity. Using a cultural lens as one means to diversify pedagogy is helpful to including natural ways of learning from across cultures and addressing the cultural frameworks within which students live.

A fundamental shift to a more strengths based approach is an important one for faculty who wish to effectively facilitate learning for all students across cultures, learning processes, and personalities. Research on college student retention suggests that at colleges where faculty believe students have what it takes to learn and consider it their job to make sure students learn, students are more likely to learn and to stay in college (Woodard, Mallory, & DeLuca, 2001). Alternatively, at colleges where faculty consider it their job to “weed students out,” students learn and retain in much lower numbers. This is the case even when controlling for student intake factors such as GPA, test scores, and demographics (Woodard, Mallory, & DeLuca, 2001).

As faculty we make assumptions based in our own cultures about students as learners. For example, based on our own cultural upbringing, student silence in a learning environment may be naturally interpreted as a sign of deep thought, apathy, taking a moment to reflect, disinterest in the subject, showing respect, gathering ideas prior to speaking, active listening, wisdom, or even rudeness. Silence carries different meanings within the cultural individualities and backgrounds of teachers and learners.

Many behaviors among students and faculty are interpreted individually through lenses developed through our upbringing. The following faculty and student interpret similar behaviors from very different perspectives. The faculty member finds concern in the student's personal sharing, worrying that the student may ask for special considerations while the student wants to find a sense of connection and worries that this may be interpreted negatively and that the professor will not understand that they are trying to learn while negotiating many responsibilities.

*I am always on my guard when a student comes to see me and tells me about what is going on in their personal lives. It usually leads to them asking for some special consideration.*

- British American Communications Professor

*I like making appointments with my professors to get to know them a bit and I often start by sharing some things about my own life. It still throws me off though when the professor looks taken aback when I share anything about my kids or my job. I always feel like they immediately start suspecting me of trying to get away with something or that they really don't want to know me. Even when I do need to ask for a bit more time or*

*something, I am not trying to be irresponsible, just juggling many different responsibilities as best I can.*

- French-Italian American law student

As faculty we bring behavioral interpretations with us into collegiate learning environments and this affects how we design learning activities, how we interpret students, and sometimes even the feelings we experience toward students while teaching. It is a natural tendency to interpret cultural and other norms similar to ours in a positive manner while interpreting those different from ours in a negative one.

By developing cultural self-awareness and learning about differing cultural frameworks we can cultivate the ability to reinterpret others cultural norms as strengths and redesign our teaching and courses to engage these strengths among students. Balancing our teaching practices across cultural norms natural to a diversity of student learners then creates learning environments that are more inclusive of many ways of being. Both challenge and support are offered as a context within which a diversity of students can apply their own cultural strengths as well as experience other ways of learning and interacting. See Figure 1.2 for an application exercise.

## Your Turn...

Think of one of the behaviors you often notice among students. It may be helpful to think of one that concerns or even irritates you.

- How might this behavior be interpreted differently? Perhaps as a strength?

Consider approaching students and asking them about the meaning of this behavior in their lives and in relation to their learning.

- Try to find out the 'why' behind the behavior for students.

Notice your own behaviors and how students respond to them.

- How might your specific behaviors be interpreted by students?
- What messages might you be sending differently to students from integrated and individuated cultural backgrounds?

Figure 1.2

## Acknowledging a World with Many Oppressions

We would like to take a moment to acknowledge, honor, thank, and commend the many critical race, feminist, critical, Indigenous thought, womanist, and other activists in education and beyond for their deep, reflective work on the oppressions of racism, sexism, homophobia and all other forms of oppression and discrimination in classrooms specifically—and in education and society more widely. This important work continues and is eloquently and powerfully written about by others. In this book we strive to build on the critical work of these powerful minds and hearts to offer further pragmatic guidance in the area of teaching and learning across cultures.

It is our experience that often hearts and minds of faculty, staff, and students in higher education begin to open as we become more reflective about our own identities and more questioning of our assumptions about others (Chávez, Guido-DiBrito, & Mallory, 2003). This often seems to happen as individuals strive to work more effectively across cultures and other identities perhaps because then we come face-to-face in very pragmatic ways with our own humanity as well as with the humanity of others. This book is written with pragmatism in mind. With it we attempt to add to existing works on what to *do* about these oppressions, building a sense of agency, instilling hope for, and teaching practices toward a better world.

We acknowledge that our book, while including examples from many cultures, is primarily rooted in U.S. ethnic cultures. There are many cultures we did not include, because we made a choice to focus our examples based upon the cultures with whom we primarily work, and from whom our empirical data primarily derives. The scope of this book is not inclusive of all cultures, especially global cultures, and cultures of religion, gender, sexual orientation, age, and socioeconomic class, among many others. We encourage others to pursue work on using cultural strengths in college teaching and learning with these groups, as work across all cultures is greatly needed.

We firmly believe and have seen it bear out repeatedly that when faculty strive to balance teaching practices across cultural frameworks, they usually grow in understanding, empathy, and awareness. We urge you to continually seek out and learn from the deep body of literature and other works about social equity and diversity.

## Cultural Frameworks, Epistemologies, and Worldviews

Cultural frameworks (see Figure 1.2), epistemologies, and worldviews are underlying tenets of assumptions, beliefs, and values that influence our behavior in everyday life. Much of this is unconscious until we bump up against someone or something that is based in a very different underlying cultural framework. Many individuals experience this immediate sense of different cultural frameworks when traveling in other countries and to a lesser extent to other regions or cities in their own countries. Each of us grows up being taught both subtly and overtly about appropriate and inappropriate ways to do things, what values to live by, and what beliefs to espouse. Though we make many choices about how to live our lives as we grow older; we

continue to carry with us our earliest teachings and interpret the world through these foundational underlying cultural lenses or frameworks.

Anthropological and psychological work on the relationship between culture and learning (Hall, 1959, 1966, 1977, 1984, 1993; Nesbitt & Norenzan, 2004) and on cultural contextuality in higher education (Ibarra, 2001) enhance understanding the role of culture in everyday life and in higher education. Multicultural education K-12 literature (Banks & Banks, 1997, Gay, 2003; Gilliland, 1989; Nieto, 1999) and some adult learning across cultures literature (Rendón, 2009; Tisdell, 2003) provides a theoretical base for teaching and learning. Our focus is on college teaching and adult learning. See chapter two for a synopsis of some of this theory and wider literature on cultural epistemologies, worldviews, and strengths in relation to collegiate teaching and learning.

Cultural worldviews or frameworks can be conceptualized as flowing along a continuum of behaviors, beliefs, assumptions, and priorities from individuated to integrated worldviews. The development of reasoning is influenced by early cultural practices and language in an individual's life. The *Cultural Frameworks of Teaching and Learning Model* (see Figure 1.3) later in this chapter was developed from and honed through research (see Ke & Chávez, 2013; Chávez, Ke, & Herrera, 2012) and in our ongoing practice and research with faculty as they strove to balance cultural frameworks to teach more effectively across cultures.

## From Monocultural to Multicultural

All learners would benefit from a wider integration of cultural norms in teaching practice. Ultimately, this would mean that we engage the cultural strengths of every student in our teaching practices to enrich student learning. Strengths based approaches are commonly invoked in the fields of positive psychology and business, though lack a cultural application (Snyder, 2010). Balancing cultural frameworks in teaching would mean that each student would be able to apply some of their own natural strengths from ways of learning in their upbringing to their learning in college.

Yet college norms and processes including teaching are currently situated primarily in a cultural framework with origins in northern European cultures (Ibarra, 2001; Rendon, 2009; Chávez, Ke, and Herrera, 2012) This cultural framework centers within the individuated side of the model in Figure 1.2. Within this individuated cultural framework an individual, linear, abstract, mind based orientation is the norm. Integrated cultural frameworks are much less common even rare in academic cultures and in collegiate teaching. Working from any one monocultural orientation privileges populations of learners for whom this cultural framework is natural. Working in only one cultural framework also underserves populations of learners who grow up in another cultural framework. Students of color throughout our studies described feeling outside the norms of teaching and learning practices in college while Northern European American students in our study did not.

*I feel like that old song about having to leave my face in a jar by the door when I leave for class. I feel like I have to pretend to be someone else. Someone I don't really know how to be. It all feels so unnatural to me. I was taught that learning is meant to be complex and whole but my college courses are separated and so focused and abstract that I get lost in spending time learning facts, figures, theory, and equations seemingly without their meaning in engineering or in life.*

*Spanish American Mechanical Engineering Student*

A more monocultural basis for teaching makes learning more difficult and unnatural for students whose cultural norms are outside of its specific cultural framework. Difficulty learning happens because a monocultural framework is one based in only one or a few sets of cultural norms. For students who have been raised in cultural frameworks outside the dominant individualized one in collegiate learning environments, learning becomes an additional challenge as individuals try to negotiate academics taught through cultural frameworks not their own.

Culturally dissonant teaching exists when those in cultural groups find few of their own cultural norms in learning environments, assignments, course activities, or academic interactions. Students who feel a sense of cultural dissonance in their courses often originate in cultures with norms in cyclical, mind/body/spirit/emotion, contextual orientations (Chávez, Ke, and Herrera, 2012). In more monocultural learning environments *all* students miss out on learning through a mixture of cultural frameworks, disadvantaging them in a global society where learning and retooling professional skills and knowledge is now a constant necessity. Learners with origins in the dominant cultural framework are often unconscious of missing anything yet some describe a sense of something missing in most of their classes. A few describe unique experiences with a specific professor that go outside the bounds of their educational experiences.

*I have this professor who is always telling stories, giving examples first, and stretching us to do things in class that I haven't done in college. He rarely lectures but instead has us constantly applying concepts and theory to situations going on around us and in our own lives. This was really uncomfortable for me at first because I was so used to coming in, sitting down, and taking notes, then regurgitating facts on a multiple choice exam. I feel like my mind stretches with this professor. I've never worked so hard but I am learning like never before.*

*German Danish American Psychology Student*

We believe that one key to effectively teaching across cultures in college is to purposefully redesign and balance pedagogies, interactions, assignments, and evaluations across integrated and individualized cultural frameworks. The following sections in this chapter as well as subsequent chapters in this book are designed to guide faculty in reimagining teaching toward a balance of individualized and integrated cultural frameworks. We hope that you will find this as powerful a practice as we have.

## A Model of Cultural Frameworks in College Teaching and Learning

In this section we present a model of cultural frameworks in college teaching and learning (Figure 1.3) derived through empirical research and application to teaching practice. The model highlights eight continua in college teaching and learning across integrated and individuated cultural frameworks. The continua are discussed in relation to transforming teaching over time toward more culturally balanced and inclusive practices. Cultural frameworks are provided as a scaffold and decision making tool for teaching faculty to develop understanding of how culture plays out in student learning, in reflection on our own cultural manifestations in teaching, and in the transformation of teaching practice.

We incorporate narrative data of faculty and students from empirical studies to illustrate and enhance meaning of the cultural frameworks and eight continua of teaching and learning. Teaching scenarios and vignettes illustrate the integration of multiple cultural norms in pedagogy, interactions with and among students, and purposeful development of practice. We offer numerous examples to provide concrete examples of teaching strategies.

In later chapters of this volume, we provide:

- Underlying conceptions of culture in teaching;
- Ways to engage in cultural introspection of teaching practices and interpretations of students;
- Rewards, tips, and hazards of developing a more culturally integrated teaching practice; and
- Specific guides for many aspects of pedagogical design and facilitation.

### Development of the Model

The model of Cultural Frameworks in College Teaching and Learning (Figure 1.3) emerged from two narrative studies of college students at two universities and a narrative national study of faculty who attended a workshop on balancing cultural frameworks in college teaching. It was then honed through application, cultural introspection, consultation, and observation of teaching by 37 faculty in a year-long culture and teaching faculty development project at two universities. Because most of the current literature on ethnicity in U.S. higher education has been conducted at Eastern, Western, or Southern U.S. colleges and universities, we based our studies and faculty development work in New Mexico and Arizona, states with large populations of Native and Hispano/Latino American students. These Peoples have been in the region since before the founding of the United States. We believed that this long history of cultural immersion would assist us in gaining a deeper understanding of how culture manifests in teaching and learning.

*Comparative Cultural Study of Teaching and Learning among Graduate and Professional Students*

In this study, 26 graduate and professional students were interviewed individually for 90 minutes. Half of the students were domestic or international students of color and half had ethnic origins in northern European American cultures. Students were sampled from the graduate school at the University of Arizona as well as the medical and law schools. Each student was asked to describe what processes they apply when they need or want to learn something. Students were then asked to compare and contrast these ways of learning to their learning experiences in college as well as to their learning experiences in their families and home communities. From this study emerged a basic cultural frameworks model that served as a precursor to Figure 1.2. Student quotes from this study are included throughout this book to illustrate various concepts.

#### *Comparative Cultural Study of Teaching and Learning among Undergraduate Students*

In this study, 100 undergraduate students were interviewed individually for 90 minutes. The students were sampled across those with northern European, Hispanic/Latino, Native, African, and Asian American ethnic origins. The study took place at the University of New Mexico and students were enrolled in six academic colleges. Similar to the Arizona study, each student was asked to describe what processes they apply when they need or want to learn something. Students were then asked to compare and contrast these ways of learning to their learning experiences in college as well as to their learning experiences in their families and home communities. The Cultural Frameworks in College Teaching model emerged from analysis of this narrative data as well as review of the Arizona study data.

#### *Culture and Teaching Narrative Study among Faculty*

Thirty faculty who participated in a national workshop on balancing cultural frameworks in college teaching were interviewed 6 months after the workshop to gain an understanding of how they were balancing cultural frameworks in their teaching as well as what they were noticing in learning among students from varying cultural origins in their courses.

#### *Culture and Teaching Faculty Development Project*

In a collaborative project, the two authors invited teaching development directors at their respective institutions, the University of New Mexico and Northern Arizona University to work with us to design and implement a year-long faculty development project focused on engaging in cultural introspection to understand how their own cultural worldviews influenced their teaching and then developing a balance of cultural frameworks in their teaching practice. For a more extensive description of this project, see chapter eight. A more sophisticated iteration of the model as well as many teaching scenarios and methods emerged from teaching observations, consultations with faculty, collective brainstorming of pedagogies, and culture and teaching autobiographies written by faculty.

## Integrated and Individuated Cultures in Teaching and Learning

Individuated and integrated cultural frameworks of teaching and learning emerged from the studies described above as well as eight continuas within these cultural frameworks. We believe that the entire spectrum of cultural frameworks is important to student learning and valuable in making unique contributions to the world and to teaching. Our hope is that faculty will find value in drawing from this full spectrum of culture to enhance their teaching and student learning.

### Integrated Cultures

College students with integrated cultural frameworks, interpret the world in a highly contextualized manner, conceptualize and interact through interrelational connections, considering everything within an interdependent whole. Learners from highly contextualized cultures are those for whom learning is situated in a wide milieu of environment, nonverbal communication, and auditory and sensory as well as visual perception. An integrated learner more naturally wishes to first study the entire body, the complete car, or the overall system to get an overview of the whole, then turn to various parts and how they interact with each other and the whole. Integrated learners often struggle with the common academic norms of separated courses and topics with little synthesis or consideration of the whole within a field of study.

In a culturally *integrated* worldview or epistemology an interconnected, mutual, reflective, contextually dependent conception of the world is common, assumed, and valued. Learners operating within an *integrated* cultural worldview grow up in environments where the collective is given precedence and responsibility for others is expected; context, especially relational context is emphasized. Synergistic connections including mind/body/spirit/heart connections are assumed within an integrated worldview of learning. Subjectivity is expected as a natural aspect of comprehension and reflection is considered essential to understanding.

**Individuals from *integrated* origins often learn most naturally when the whole is considered before study of the parts, collective processing happens before individual study, time for reflection is included especially before speaking, application precedes drawing out theory, and knowledge is taken in through multiple senses.**

Individuals from integrated origins often learn most naturally when the whole is considered before study of the parts and collective processing transpires before individual study. Time for reflection is important to many integrated learners to process thoughts especially before sharing. For integrated learners, application precedes drawing out theory so that the whole can be considered and knowledge is taken in through multiple senses. Most U.S. colleges and universities are not organized in an integrated

paradigm though there is movement toward new forms of teaching that integrate content within and across subjects (e.g. active and collaborative learning, teaching across the curriculum). Some of this movement, however, is more conceptual than broadly applied in practice.

## Individuated Cultures

College students with individuated cultural frameworks, conceptualize and interact with the world in a more compartmentalized manner and consider first from an individually operating perspective. Learning is focused on separate components with low context and is likely to entail predominantly visual, compartmentalized, and discrete knowledge acquisition, with less attention to the surrounding environment, including its nonverbal messages. An individuated learner more naturally wishes to study parts of the body, of the car, or the system first to gain an understanding of the parts separately, then possibly turn to thinking about the whole. Individuated learners often spend great attention on the parts and focus or specialize to gain an understanding of what is studied.

In a culturally *individuated* worldview or epistemology, a compartmentalized, private, individualized, contextually independent conception of the world is common, assumed, and valued. Learners operating within an individuated worldview grow up in environments where the individual is given primacy. Responsibility for oneself is expected and prioritized within this worldview. Understanding primarily through an objective mind is given precedence for understanding and subjectivity is likely to be considered peripheral to and sometimes considered distracting from or in contradiction to clear understanding.

Individuals from individuated origins often learn most naturally when individual study precedes collective processing, components are studied individually before the whole, theory is processed prior to application, the mind is prioritized over other senses, and reflection through discussion is peripheral. Most U.S. college and university instruction and curricula are organized in this kind of individuated paradigm. Academic subjects and degrees are often organized into parts relying on one synthesizing course or culminating project and not emphasizing integration of subjects regularly across a degree or even across the major degree courses.

Some learners originate in mixtures of these cultural continuas and have some learning traits on one side of the continuum while others are centered in the other. It is most common however, for learners to originate more completely from one side of this cultural set of polarities or the other,

**Individuals from *individuated* origins often learn most naturally when individual study precedes collective processing, components are studied individually before the whole, theory is processed prior to application, the mind is prioritized over other senses, and reflection through discussion is peripheral.**

though much of the world originates from an integrated worldview. This makes it highly important for college teaching to transform to incorporate integrated ways of learning, especially with the rapid cultural, ethnic, and racial diversification of students in higher education. Higher education ideally will transform to honor, incorporate and balance *both* integrated *and* individuated worldviews in teaching and learning so all learners benefit.

## Both~And: A Cultural Key to Learning

An important key to learning for all in a culturally diverse context is a “both~and<sup>2</sup>” conception and practice of learning and teaching processes. This conception occurs when learners experience *both* their own culturally natural framework of learning *and* the challenge of negotiating other cultural frameworks of learning. Students need to see and experience their own most natural ways of learning in our classes. Drawing on both realms creates the balance of comfort and dissonance necessary for complex learning. This balance of challenge and support is essential to learning (Sanford, 1967). We enrich learning by melding many ways of seeing, understanding, experiencing, processing, reflecting, discussing, and making sense with others.

**COMPLEX LEARNING  
REQUIRES A  
BOTH ~ AND  
CONCEPTION OF  
LEARNING AND  
PROCESS OF  
TEACHING**

Individuals learn most complexly when able to study *both* the component parts *and* the integration of the whole. Different learners may also start at different ends of a sequence of abstraction and application yet learn most deeply from experience with both. Individuals take in knowledge from many senses, perspectives, and sources and may consider component parts both discretely and within their natural contexts. To learn most complexly, it is critical to study, reflect, and process *both* individually *and* collectively. In essence, it is a both~and balance and integration that cultivates the most complex learning.

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<sup>2</sup> The phrase “both/and” in relation to diversity in higher education was originally coined by Dr. Hazel Symonette, University of Wisconsin – Madison. She says that it was inspired while she was doing community action work in the Fillmore District of San Francisco in 1969/70 by a jazz club of that name (H. Symonette, personal communication, November 5, 2013). Though she tied this more generally to diversity in higher education and not specifically to teaching and learning, it is an important characterization of the essential and necessary balance and equality of polarities to working effectively with diverse populations. We decided to use a ~ symbol to further emphasize a synergistic polarity rather than a dualistic oppositionality. For application of both/and to leadership and research in higher education, see Symonette’s 2006 and 2008 works.

We conceptualize integrated and individuated worldviews as *sybiotic polarities* along a continuum, synergistic and essential to each other and the world in ways similar to concepts such as the Taoist *Yin/Yang* (necessity of opposites, see Figure 1.3); the Maori *ako* (reciprocal learning); the Zulu *Ubuntu* (humanism of human beings collectively); and Lakota *Mitakuye Oyasin* (We are all related) rather than as dichotomies in opposition to each other such as good/bad, right/wrong or even either/or (See the chapter on non-Western perspectives of learning and knowing in Merriam, Caffarell, & Baumgartner, 2007, on Indigenous paradigms of education in Cajete, 1994, and on the Aztec concept of blending thinking and sensing in Rendón's 2009 *sentipensante* pedagogy for helpful discussions).

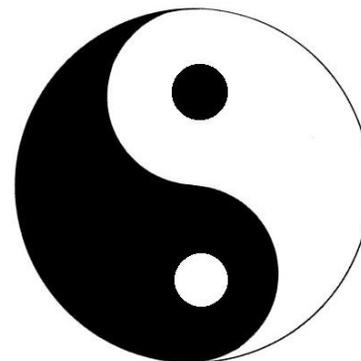


Figure 1.3 Chinese Yin Yang Symbol

In sybiotic polarities, seemingly opposite forces are interconnected and interdependent in the natural world and give rise to each other as they interrelate. We believe that just as biodiversity is necessary for the health of all living beings and overall ecosystems (Wilson, 2010), a diversity of teaching pedagogies, interactions, relationships, and ways of taking in and processing knowledge is necessary to deepen learning among a diversity of individuals in any learning environment. Similarities among learners assist in producing comfort and connection while differences create dissonance which stimulates interest, critical thought, intellectual and personal growth, and multiple lenses with which to ponder and analyze new knowledge. Each is essential to and connected with the other as represented in the circles coming through in the Chinese Yin Yang symbol, the interwoven lines of the Tibetan symbol of balance on the first page of this chapter, and the many circular symbols of balance among Native American tribes. Large studies suggest that diversifying the cultural enrollments of students in college courses increases learning for everyone because a natural dissonance and critical inquiry is created within the learning environment (Hurtado, 2007). Developing a culturally both~and practice in teaching further generates a context for rich learning.

## A Note about Inequity in Learning...

As faculty, we hold the power to create learning environments and experiences that are more equitable or less equitable among students. We may teach in similar ways to how we were taught in college, in our families, or in our home communities and believe this is the way it is done.

Yet if one student in our classes always experiences teaching techniques they grew up with and another student rarely or never experiences teaching techniques they grew up with we set up a disproportional affect, an inequity of learning because one student has to both negotiate unfamiliar ways of learning in addition to learning new subject matter while the other just has to learn the subject matter.

As we interviewed students in our studies about their own learning processes, this became clearer. In our discussions with students, we asked them to share with us what they do when they really need or want to learn something. We were fascinated with the variation in their learning processes as well as with their clarity in understanding and articulating. We learned that students start by applying their own areas of strengths and areas that feel very natural to them. As we had students and some faculty describe their learning processes we learned some really important considerations for teaching. The main one is that individual learners start with their own strengths whenever possible,

*My professor always starts by explaining a theory in only one way but I do best when I can compare and contrast multiple interpretations. So I ask several students in my class to meet me for coffee before class so we can talk through our own conceptions of the theory. Then when we go to class I compare the way the professor explains the theory with all the other ways we have discussed it and then I usually understand.*

- Law student

*I have to chart it out to get it. Doesn't matter what it is, English, chemistry, math, art theory, I draw a flow chart and then I get it.*

Mathematics undergraduate student

*Running is time to think. First I let my mind go blank for a while. I listen to my breathing and my footsteps on the path. Then I focus my thoughts on what I need to learn and thoughts start trickling in and I process them in a rhythmic way with the sound of my footsteps. Later I return to not thinking, just listening to my breath, my footsteps, the birds, my heartbeat. Usually by the time I finish my run, I understand.*

Medical student

*I learn by doing. I'm an "if all else fails, read the directions" sort of guy. So as often as possible I start by putting something into real life, how math relates to a real problem, how a business theory applies to a real business, and then I work out what I would do. If I can actually do something to practice, that is especially helpful.*

Business undergraduate student

All of the students in our classes are more likely to learn if we teach within an epistemology of cultural both~and, incorporating many different techniques from across the integrated ~ individuated cultural spectrum so that each student can engage some of their own strengths in learning. So if we have one student who starts naturally with reflection and another who often begins by visually working something out with a flowchart and still another who feels most comfortable talking about it first then our role as teachers is to move between a variety of techniques so that all students are able to find at least a little bit of their own learning strengths in our classes. In this way we can cultivate and provide more equitable and effective learning experiences and environments for all students.

## Teaching within an Epistemology of Cultural Both~And

*An engineering professor<sup>3</sup> is socialized in her profession to teach things in an abstract, theory first manner and expect students to learn applications primarily in lab and field work. She regularly lectures on engineering theories, explaining them in similar ways to her own engineering courses in college yet notices that students struggle to understand and students of color seem especially disengaged.*

*After considering both integrated and individuated cultural frameworks in relation to student learning she decides to try something different. She first asks students to collect in threes for a demonstration and discussion then brings in some water in a plastic cup and begins her class by asking students to observe. She knocks the cup over and water rushes out, cascades off the table, and creates a small pool on the floor.*

*This professor then asks students to discuss the movement of water in relation to an engineering principle assigned in the readings for this class session. Later she encourages students to offer their explanations to the larger class and inserts her own perspectives and questions into this sharing and processing. Then she begins to ask how this theory might play out in other situations. She notices that everyone is highly engaged and seems to grasp the highly abstract theory much more easily. She wonders after class what would have happened if she had also given students a moment or two to reflect prior to discussing in groups and decides to try this next time—alternating reflection with immediate discussion to foster understanding in learners with differing learning processes.*

This professor engaged a both~and design, blending in cultural continua from integrated and individuated frameworks to more fully engage her students, mix application and theory, and interweave discussion among students with guided processing. She also considered adding reflection time to her next class session. This facilitated incorporation of a number of learning processes including doing, observing, discussing, applying, making sense of theory, imagining, and generalizing to other situations (merging facets of Kolb's 1984 Experiential Learning Model, Bonwell & Eison's 1991 Active Learning Models, and Bloom's 1956 Taxonomy of Learning Domains). In essence, she drew from polarities of culture to engage all students in both natural and challenging ways, creating a balance of comfort and dissonance that led to deeper learning than previously observed when using primarily one cultural end of the continuum.

By designing carefully with a combination of cultural frameworks, faculty can intersperse activities, assignments, interactions, course materials, and even evaluations from integrated and

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<sup>3</sup> Teaching examples are compilations of teaching observations and discussions with faculty, pedagogical brainstorming with faculty cohorts, and our own teaching practices. Identifying information is modified to protect the anonymity of participants.

individuated cultural frameworks to benefit a diversity of learners. The following sections provide a thorough introduction to the cultural frameworks model as well as its general application to balancing cultural frameworks across eight continua of teaching and learning. Each of the eight continua includes a teaching vignette to illustrate a blending across cultural frameworks, examples of pedagogies for consideration, and narrative quotes from students and faculty to assist with deeper understanding.

## **Applying a Model of Cultural Frameworks to Teaching Practice**

A continuum model of integrated and individuated cultural frameworks across eight continua of collegiate teaching and learning (see Figure 1.3) was derived from empirical research studies combined with faculty cultural introspection, then honed through application to practice. Look over the model and take a moment for a reflective interlude (see Figure 1.4).

In the upcoming subsections the eight cultural continua of teaching and learning are presented, described, interpreted, and illustrated across integrated and individuated cultural frameworks. Using a teaching and learning context, each continuum is explained, illustrated with a teaching scenario of practices balanced across individuated and integrated cultural frameworks, and interpreted through student and faculty narrative. The model incorporates eight continua showing cultural frameworks of each in a continuum of symbiotic polarities. Cultural continua include purpose of learning; ways of taking in and processing knowledge; interconnectedness of what is being learned; responsibility for learning; time; role of the teacher/control; student interactions; and sequencing.

We encourage teaching faculty to apply this model to analyze the cultural foundations of their own teaching practices as well as systematically observe and converse with students about their natural learning processes. Over time this will assist you to transform your teaching practices to balance integrated and individuated cultural frameworks across all the continua. The cultural frameworks model (Figure 1.3) and the remainder of this book are designed to assist in this transformation.

In our work with faculty, we find that individual faculty members benefit from a variety of contemplative and pragmatic activities over time to transform teaching toward a both-and balanced practice across integrated and individuated cultural frameworks. This allows individual faculty to engage a wide variety of culturally based and other strengths toward enriching student learning. Faculty benefit from deep cultural introspection (chapter four) combined with gaining insight and learning perspectives of students from many cultural origins (chapter four), and incrementally considering cultural foundations from a variety of teaching aspects including design, interactions, pedagogies, assignments, evaluation, and assessment (Chapters five and six).

## REFLECTIVE INTERLUDE...

Take a moment for some cultural introspection...

For each of the eight continua in the *Cultural Frameworks in Teaching and Learning* model (see Figure 1.3), place an 'X' along the continuum where you believe you are in how you teach. Then reflect on the following questions.

- Based on where you are on each continuum, what are some of your most distinctive values and priorities related to teaching?
- From where in your life and identities do these values and priorities originate?
- How might a student with a dissimilar cultural framework than yours experience your courses in contrast to a student with a similar cultural framework?
- What does this mean for student learning?

*Figure 1.4*

<b>Cultural Frameworks in Teaching and Learning</b>		
<b>Individuated</b> <i>In a culturally <u>individuated</u> framework, a private compartmentalized, linear, contextually independent conception of the world is common, assumed, and valued.</i>		<b>Integrated</b> <i>In a culturally <u>integrated</u> framework, an interconnected, mutual, reflective cyclical, contextually dependent conception of the world is common, assumed, and valued</i>
Knowledge, individual competence, to move forward toward goals and the betterment of humanity	<b>Purpose of Learning</b>	Wisdom, betterment of the lives of those with whom we are connected - family, tribe, and community
Mind as primary, best, or only funnel of knowledge	<b>Ways of Taking in and Processing Knowledge</b>	Mind, Body, Spirit/Intuition, Reflection, Emotions, Relationships as important aspects and conduits of knowledge
Compartmentalized and separate; belief that understanding how the parts work separately, abstractly, and in isolation will lead to the greatest understanding	<b>Interconnectedness of What is Being Learned</b>	Contextualized and connected, belief that understanding how things affect each other within the whole, and within family and community will facilitate understanding
Learning is a private, individual activity; responsible for one's own learning so that family and others are not burdened	<b>Responsibility for Learning</b>	Learning is a collective, shared activity, Responsible for one's own as well as others' learning
Linear, task oriented, can be measured and used, to be on time shows respect	<b>Time</b>	Circular, seasonal, process oriented, dependent on relationships, to allow for enough time shows respect
Provider and Evaluator of Knowledge -- best perspectives and ways of learning, predetermined bounded learning; communication primarily between teacher and students	<b>Role of the Teacher, Control</b>	Facilitator of Learning Experiences -- multiple perspectives and ways of learning, emergent constructivist; wide variety of interactions between students, and between teacher and students
Others' perspectives are optional for learning. Primarily rely on verbal messages; individuals are paramount, predominantly verbal in both written and oral communications	<b>Student Interactions</b>	Others' perspectives and interpretations are important, even essential to learning. High use of nonverbals, collective as paramount, and multiple streams of communication
Learning by mastering abstract theory first, followed by testing. Unlikely to include application, experience, or doing in real life	<b>Sequencing</b>	Learning by doing, listening to others' experiences, imagining or experiencing first, then drawing out abstract theory
<b>Chávez &amp; Longerbeam</b> (forthcoming). The earliest version of this model was presented in a paper at the 2009 ASHE Conference and developed from a later version of the model in Ke & Chávez (2013).		

Figure 1.5 Cultural Frameworks of Teaching and Learning

We believe that strengths are inherent in every culture and from the full spectrum of cultural frameworks that emerged from our studies of students and faculty. We also believe that all students as well as faculty will benefit from a range of cultural strengths in college teaching and learning. The following sections are designed to assist faculty to gain an understanding of and learn to purposefully incorporate strengths from across an integrated individuated cultural continuum.

## Purpose of Learning

Purpose of Learning		
<i>Individuated</i>		<i>Integrated</i>
Knowledge, individual competence, to strive toward goals to contribute and not be a burden to society.	↔	Wisdom, betterment of the lives of those with whom we are connected

To balance across integrated and individuated cultural frameworks in relation to purpose of learning, an accounting professor facilitates case studies with students using a variety of settings including budgets for a tribal health clinic, a local school, and a corporate initiative. She balances individual goals and collective purpose by asking students to consider *both* how the case might matter to their future professional lives *and* how the case outcome might matter to those they serve in the organization and community. She personalizes her interactions by calling students by name in her 75-student class to process calculations and share their perspectives on how various financial commitments are likely to impact the organization and the community. To learn students' names the professor relies on name tents each student created in her first class session and places them on student desks as they arrive.

Purposes of learning range across cultures from learning for knowledge, individual competence, and professional goals— so as to contribute and not become a burden to society (individuated) to learning for wisdom and the betterment of the lives of those with whom we are connected and responsible (integrated). Values taught by family and community about the purpose of education can differ sharply across cultures. Northern European American students are more likely to highlight educational and professional goals when discussing a collegiate education.

*I don't want to be a burden so I focus hard on educational and work goals and keep my eye on the ball of graduation and getting a good job.*

- German Danish American undergraduate student

*Learning toward my career is my goal and I make most of my decisions in college with that in mind. My folks often remind me that this is a time in my life to focus on me and my learning and not get distracted by other responsibilities.*

- British American graduate student

Chinese national students though focused on goals are also more likely to overtly relate them to family and country.

*I work hard in my classes so I can get a degree and a good job to make my family and country proud.*

Chinese National graduate student

In our studies, Native, Hispanic, Middle Eastern, and Southeast Asian American students usually relate education to making a difference in their extended families, home communities, and tribes.

*I learn best when the professor starts with real examples from the community and helps us consider larger implications and effects. In my art appreciation class we had a conversation in the first session about how public art like murals and park statues makes us feel and their possible meanings to the community. This made me reflect on public art in my small island home and how when I return I should speak up for this in the community. The professor's emphasis on art in our own communities also made me look more deeply for meaning in art as we progressed through the course.*

– Hawaiian undergraduate student

Some populations of students are oriented in an individualized way for the purpose of benefiting self, especially towards a future career, and not burdening others. Some populations of students are oriented in a collective way for the purpose of benefitting communities of origin through work and contributions such as community or political service. Though we understand that there are regional, community, and familial variations and that Indigenous populations in any country are likely to emphasize collective orientations; students from Northern European American and Northern Asian American origins in our studies often described how their families encourage suspension of family and other responsibilities while their children are in college. Students from African, Native, Southeast Asian, and Hispanic populations described being reminded often by parents and other family about their continued responsibilities. Some faculty also described this distinctive difference. One faculty member shared,

*I was really kind of stunned the first time a Hispanic or Native student shared some of their ongoing responsibilities within their extended families or tribes. One of my advisees drives two hours home on Tuesday evenings so he is there to take care of his*

*Grandmother every Wednesday. Navajo students in our program often return home for numerous traditional ceremonies each semester. At first I felt irritated because I assumed they didn't care enough about academics. Now I am truly humbled by the dedication these students show to their college education and to family and tribal responsibilities.*

He continued,

*Honestly I cannot imagine if my parents or community had expected me to come home more than at winter break. I was encouraged to focus on me and on college.*

Later he discussed how this difference gave him the idea to center his examples, stories, and case studies across these distinctive cultural frameworks.

*I was really excited when it came to me that I could offer both. I could sometimes create a case study or give an example that I connected directly to future professional work and sometimes create one that was related to serving home communities or tribes. Sometimes I combine the two and I see just about all of my students light up and engage.*

An individual orientation is common to some student populations and to many faculty. It is also highly normative in higher education because U.S. colleges and universities were designed from a framework of English and German cultural norms. A more collective or community orientation on the other hand is common to many cultures in the United States and in other countries, making community, family, and tribal orientations important factors to incorporate when designing and facilitating learning.

In some countries, values predominant in educational environments may differ in certain ways from those in social and familial contexts. In China, Japan, and India for example, individual goals and competition are often encouraged at high levels in educational environments even at very young ages. Work environments are likely to expect similar qualities. Yet in these same cultures, a collective orientation is emphasized in especially social and familial activities (Bennett & Bennett, 1994). Individual competition and goals may be considered detrimental and discouraged in social and familial environments yet encouraged in some aspects of work and educational environments. These cultural orientations may offer us a clue as to why learners from these socially collective cultural populations often do very well academically in the competitive, individuated contexts of U.S. colleges and universities.

The key is to understand that there are distinct variations in ways individual students interpret the purpose of their learning. Similar to the professor's strategies above, it is helpful to incorporate these variations into the way we design learning experiences for our students.

Some disciplines receive critical attention for their student demographics and industry expectations. STEM degree programs, for instance, may find it helpful to incorporate a collective orientation more fully when designing programs, services, and teaching practices. Overtly making connections between commonly individuated and abstractly presented science, technology, and engineering knowledge and clear benefits of this knowledge to communities of origin is likely to serve as a ‘hook’ to capture and maintain learner interest among students of color. In addition, problematizing and considering beneficial and detrimental aspects of science and technology on human and other life forms even in beginning coursework will assist in the development of these fields and the engagement of students from cultural origins embodying integrated, collective worldviews. The following vignette serves to illustrate ways these suggestions specifically played out in a teaching situation.

*I teach at a university in North Dakota where there are many Native American students and I found that I was having trouble engaging them in learning about and getting excited about chemistry. After attending a workshop on culture and teaching and having a conversation with the facilitator, I came up with the idea to create chemistry case studies and team projects based in various communities in the area. It occurred to me that if I could design something that connected chemistry to collectives that matter to students, I might facilitate student learning more effectively across cultures. I created several projects to do so including a project where students tested soil samples from Indian reservation areas known to have toxic residue from mining, a project chemically comparing air quality in a nearby inner city area to suburban areas in the same city, and a project testing water quality in rural agricultural farming areas. I asked students to consider the chemical aspects and their probable impact on communities. It made all the difference; not only did the Native students engage with great enthusiasm, all the students were more engaged and excited about the realities of chemistry in their lives.*

- Welsh American Chemistry Professor

Online learning presents its own challenges to and benefits from teaching across cultural frameworks. In web-based learning environments, designing projects for students that ask them to apply some of what they are learning to local concerns and issues is especially helpful. Application provides activity and critical thinking that may parallel simulated activities in a face-to-face classroom and goes beyond abstraction to apply directly to student lives. The following teaching narrative illustrates.

*I teach an online graduate course in instructional development. I wanted to get students more involved in thinking about the learning needs of students in their communities. I designed an assignment where students had to identify a learning challenge in a class they currently teach in a school. Then I asked students to interview at least three students from a cultural background different from their own about how they learn best and what process they use to learn something they really want to understand.*

*Students then had to write a paper about their findings and teaching recommendations and share this paper with the class as a reading for the next learning segment. I was amazed at the outcome. Not only did students really get excited about what they learned from local learners; they were also kind of stunned at what they learned from the writing and analysis of student peers in the class. I think that by involving students in their work environments and communities and not just in theory or abstract assignments, things became more real and present for them. They learned a great deal from not one but two collectives...the children they interviewed and their fellow students.*

- Diné Education Professor

## **Teaching across Integrated and Individuated Cultural Frameworks: *Purpose of Learning***

To facilitate learning among students raised with differing purposes of learning, faculty can incorporate examples and cases that highlight both individual competence *and* bettering the lives of others. The more a subject can be connected to the lives of learners, the more it will stay with each learner. Creating case studies especially from local or regional situations and issues is especially helpful to this balance. Achieving a balance is sometimes portrayed as situating learning in the lives of students (Baxter Magolda, 1999); the balance facilitates student engagement by connecting subject learning to what matters to each individual. This type of technique offers the added benefit of applying a variety of learning processes so students experience more complex learning and skill development. Professors can take teaching across cultural frameworks a step further by including some activities or assignments that ask students to identify a national, or global situation or issue to process.

We encourage making connections between students and subject matter as a culturally responsive approach to encourage associations to both individual goals and collective value. Encouraging students to consider relationships between academic subject areas and future professional and personal lives will assist students to think about these connections and consider subject areas more deeply in their lives.

Within the purpose of learning continuum, faculty may wish to add pedagogies, interactions, assignments, and evaluation activities from either the integrated or individuated side of the cultural frameworks continuum. The following are a few ideas that might be helpful. Many teaching techniques can be reimagined and then redesigned to facilitate learning in both frameworks.

<b>Teaching Techniques within Cultural Frameworks: <i>Purpose of Learning</i><sup>4</sup></b>	
<b>Individuated Techniques</b>	<b>Integrated Techniques</b>
Connect subject matter to future profession or career realities, practices, expectations, mores	Connect subject matter to needs, realities, challenges, or opportunities in local or student's community, tribe, family
Design individual exams, assignments, class activities	Design paired or group exams, assignments, class activities
Assign optional reading and problem sets	Promote community engagement through action research (e.g. oral history or design to benefit community projects)
Create assignments designed to explore theory without application to a specific situation	Create assignments or activities designed to explore theory in relation to specific situations, especially ones students can relate to in their own lives.
Learning in the course discussed in relation to the subject matter itself.	Learning in the course overtly discussed in relation to the context of a major, becoming a better person, professional aspects, or current realities
Facilitate critique of course content on its general quality without relation to its wider impact...e.g. scientific discovery for the sake of discovery alone.	Facilitate critique of course content in relation to influences on community needs, health, future generations...e.g. scientific discovery problematized for its helpful and detrimental qualities
Assigning all students the same situation to process.	Assigning students the task of identifying and processing real situations for which they are concerned or interested.

It is also possible to mix qualities from both sides of the cultural continuum in any pedagogical technique. For example, mixing from the first set of techniques, a professor might connect subject matter to both future professional and community needs or instead, ask students to brainstorm in both areas.

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<sup>4</sup> Special thanks to the faculty in our Culture and Teaching Faculty Development Project for brainstorming techniques across cultural frameworks for each of the continua of teaching and learning as well as for allowing us the privilege of gathering ideas from observing their teaching.

## Ways of Taking in and Processing Knowledge

Ways of Taking in and Processing Knowledge		
<i>Individuated</i>		<i>Integrated</i>
Mind as primary, best, or only funnel of knowledge	↔	Mind, Body, Spirit/Intuition, Reflection, Emotions, Relationships as important aspects and conduits of knowledge

A landscape architecture professor struggles with students understanding special design concepts through design assignments that are descriptive, hypothetical instructions alone. She decides to try something that engages more of students' senses, emotions, and human input; chooses a walkthrough alley near campus; and gains permission to have students collectively improve the space. The professor encourages students to spend time there, taking in the area through all of their senses, talking with those walking through, and trying out design ideas. As a result, she notices that student learners form a very different relationship with the space; understand theoretical concepts more deeply and pragmatically; are more enthusiastic about applying theory to their designs; and come away with much richer learning. Thanks in great part to the project, the alley is now an attractive walking path students can be proud of and that benefits the community.

Individuals use a variety of ways of taking in and processing knowledge as part of their learning processes. Latino and Native American students as well as many African American, southeast Asian, and Asian American students in our studies described learning most naturally through the use of a variety of ways of taking in and processing knowledge considering the body, spirit, intuition, emotions, mind, relationships, and reflection essential to understanding and learning.

*My bio professor is so cool. She is always taking us out on campus or having us meet at a local park or ranch to explore biological concepts. She has us touch, listen, watch, and even taste. She even asks us to describe what our intuition or spirit might be revealing about something. My parents are from South Korea and we lived there for a while during my high school years. I had teachers often who did this kind of exploratory teaching and somehow even though I was born and raised in the US, it makes me feel more at home, in a way like I'm home with my parents exploring something with all my senses. Like I'm learning more. This professor is rare in that quality though. Most of my classes are really detached and one dimensional in focusing on the abstract only.*

- Korean American Computer Science Student

In contrast, learning and processing through the mind were characterized as the best, primary, or even the only way to learn by many Northern European American students in our

studies. Some students from these cultures describe being encouraged to work at keeping other influences from distracting processes of their minds.

*I'm usually really comfortable in my classes. I like the way we can immerse ourselves in theories and philosophy of things. It's really straightforward and I don't really have to worry about the real world. The professor tells us what is critical and I can keep it in my head you know? I was always cautioned growing up not to let other things cloud my head or my learning, not to get emotional, not to be subjective, not to personalize. I'm most at home when none of these things are part of the classroom.*

- Scandinavian American Literature Student

Striving toward an abstract and often detached, compartmentalized mind is traditionally at the core of teaching and learning in U.S. higher education. Learning is facilitated through many senses in the very early grades, especially kindergarten, yet U.S. education leaves much sensual learning behind for an increasingly cerebral orientation in teaching techniques. These techniques can be traced back not only to the early U.S. history of separating the mind from the body but further yet to what is often called the age of enlightenment in Europe when certain aspects of Indigenous belief systems were discarded (Takaki, 1993). Yet some learning theory as well as some neurological research in learning suggests that all individuals learn better when a wider variety of learning processes, lenses, techniques, and modes are applied in learning contexts (Medina, 2011; Zull, 2002).

Emotions influence learning; this is especially important to consider for those emotions that inhibit learning such as fear of a subject. One faculty member discussed how he works through fear with students to improve their learning in his courses.

*I teach all levels of math and learned long ago that many students are really frightened of math and that this is a significant barrier to their learning. I thought about this and realized that this is true for many so it is something I need to pay attention to in my teaching. I talked with students and colleagues over time to gain a better understanding. I tried different things and eventually found that the simplest thing helped. In the first class session of every course I ask students to reflect for a moment on how they feel about calculus or algebra or geometry depending on the course. I ask them then to share with another student and then ask for a few to share with the whole class. Inevitably there is a range of emotion and many are really terrified. This gives me a chance to lead them in unpacking this, coming up with strategies to cope, and reassuring them that I'll be there. It also gives me an opening to have them brainstorm how this area of math might relate to their lives and be useful in future work. I've come up with many pedagogical techniques to facilitate through these fears, encouraging fun and confidence that leads to learning math.*

- English, Welsh American Math Professor

Many students of color in our studies described a need to learn by doing, sometimes called kinesthetic learning or learning through the body.

*I just don't learn something until I do it, practice it. I could read all the books and talk about it forever but until I do it myself it doesn't sink in. When someone tries to tell me how to do something on a computer or on my phone, I always tell them to wait a moment while I sit down with it and then I ask them to walk me through it, having them pause as I try it myself. I've heard that this sets up a kind of muscle memory in your body and that is certainly true for me.*

*African American graduate music student*

## **Teaching across Integrated and Individuated Cultural Frameworks: Ways of Taking in and Processing Knowledge**

Many cultures in the world emphasize learning through a wide range of techniques, sensory lenses, and experiences. Teaching processes that include a variety of pedagogies make it more likely that learners will benefit from both those more natural to them and those more challenging. Faculty can develop teaching in the area of taking in and processing knowledge across cultural frameworks by observing ways we engage student minds, bodies, emotions, intuition, and spirit. We enrich learning with a greater variety of ways to engage students with the subject matter through different sensory lenses.

Students are invaluable partners in this endeavor, so asking their input is useful. We could ask students: how the class might apply various sensory lenses; how they feel about something and follow up with processing through these feelings; what intuition tells them about something; or how they learn best, most naturally, or most easily. Theoretical tools such as the Cultural Frameworks Model in this chapter, Gardner's Multiple Intelligences (2006), Rendón's sensing/thinking pedagogies (2009), Tisdell's framework on spirituality (2003), and the Myers-Briggs introvert/extrovert typology (1995) are especially helpful for developing a wider mixture of pedagogies.

Gardner (2006) in his theories on intelligence encourages us to consider not a dualistic *whether* learners are intelligent but rather *how* they are intelligent. Gardner (2006) suggests eight types of intelligences or ways of knowing: verbal, visual/spatial, logical/mathematical, musical/rhythmic, bodily/kinesthetic, naturalist, interpersonal, and intrapersonal. By incorporating activities, assignments, evaluation processes, and interactions based in a variety of intelligences, and across cultural frameworks and personal characteristics, we can engage a variety of sensory lenses and strengths of individual students.

In a similar manner, Rendón (2009) urges faculty to incorporate pedagogies that facilitate both sensing and thinking ways of knowing and processing. Rendón's research suggests that

including both sensing and thinking and alternating between starting with reflection and starting with application is helpful to student learning. The Myer's Briggs introvert, extrovert typology is a helpful tool for designing ways of taking in and processing knowledge. Even a moment of reflection often benefits learners who are naturally internal processors (introverts), allowing them to gather their thoughts before discussion. External processors (extroverts) often benefit from starting with discussion as a way of gathering and processing their thoughts. By incorporating a balance of both kinds of techniques, faculty assist learners from cultures whose norms are based primarily in internal processing and those based primarily in external processing.

Learning is positively influenced by intuitive, spiritual, and emotional aspects of taking in and processing knowledge (Tisdell, 2004). This is confirmed by recent neurological research that indicates humans learn more deeply and with higher retention when multiple senses and responses are invoked, in particular vision and positive emotion (Mayer, 2001; Medina, 2011; Zull, 2002). The ontological place where a learner is oriented influences their ways of knowing. Some learners connect all learning to the spiritual aspects of their lives, while others are highly attuned to intuitive urges or gut feelings as they go about their daily lives.

*My Grandfather urged me all of my life to run in the morning to stay in touch with my spirit and to process everything I am learning through spirit. How does this connect to the larger world? How is it important to who I am and to my community? What is the deeper lesson here? I find it invaluable to stay grounded in spirit as I take my engineering courses.*

*- Zuni Engineering Student*

Faculty can apply simple approaches by validating multiple sensory lenses including those of spirit and intuition, encouraging students to process knowledge related to the subject area that arises from intuitive leaps or spiritual connections. Many advances in professions arise from natural leaps of intuition or spirit as well as through logical and other means. Acknowledging, encouraging, and facilitating these approaches and lenses deepens learning and encourages complex thinking and processing. Faculty at minimum can acknowledge sensory lenses and go further to offer examples, tell stories of their own, and encourage multiple sensory lenses in activities, discussions, and assignments.

Encouraging students to reflect in their own ways and through guided assignments and activities provides students with opportunities to access various facets of their natural learning processes. Connecting knowledge construction processes to cultural images, symbols, rituals, and metaphors is an additional way of assisting learners to develop understanding (Tisdell, 2004). The more abstract a concept, the more helpful it can be to have students brainstorm symbolic, visual, metaphorical, rhythmic, or other examples to represent the concept. The process of making these connections individually and together allows students varied means to understanding. By having students share what they come up with in class, understanding is enhanced through both the process of explaining to others, and the natural comparisons made

across representations of a concept. We find that often students share things under these circumstances that strengthen their own grasp of a concept and assists others to understand.

<b>Teaching Techniques within Cultural Frameworks</b> <i>Ways of Taking in and Processing Knowledge</i>	
<b>Individuated Techniques</b>	<b>Integrated Techniques</b>
Encourage students to deeply engage their minds in their discovery and understanding of knowledge.	Encourage students to listen to and engage their intuition, body, mind, emotions, and spirit as part of their discovery and understanding of knowledge
Encourage focus on thought and abstract processing in assignments and class activities	Include reflective, philosophical, emotional, interrelational, and physical components in assignments and class activities.
Facilitate student objectivity in relation to the subject matter in a course	Facilitate student emotions related to subject matter in a course
Include lectures, memorization, problem sets, derivations, and papers to enhance knowledge	Include multiple means of sharing knowledge such as video, audio, stories, examples, application to specific scenarios, conversing with those affected or served

## Interconnectedness of what is Being Learned

<b>Interconnectedness of What is Being Learned</b>		
<i>Individuated</i>		<i>Integrated</i>
Compartmentalized and separate; belief that understanding how the parts work separately, abstractly, and in isolation will lead to the greatest understanding	$\longleftrightarrow$	Contextualized and connected, belief that understanding how things affect each other within the whole, pragmatically, and within community will facilitate understanding

A planning professor assigns a series of *Empathy Papers* in which students must develop, process, and offer rationale for solutions based on five different perspectives of individuals intimately involved in building projects including the owner, the architect, the safety inspector, a construction worker, and a building resident. The class processes similarities and differences across the needs of these individuals as well as a variety of solutions to challenges and issues that arise during discussion. The professor encourages students to consider win-win outcomes, interconnections, and how to meet varying

constituent needs. He facilitates discussions on resolving conflicting needs and perspectives as well as shared ways former students resolved the same issues in their papers.

Students from Northern European American cultures in our studies described comparatively compartmentalized ways of thinking about teaching and learning. These students prefer to start by learning about the parts of something prior to consideration of the whole or the context in which the whole is situated. Many are fascinated with one specific part of a system, wishing to specialize in the study or application of one aspect whether in medicine, engineering, literature, or education. Some neglect or even avoid connecting the parts to understand the whole at all, as if this is not in their minds unless it is brought specifically to their attention. Others find it helpful to study the components of something deeply to gain a better understanding of the whole later. This stance in learning is consistent with an individuated cultural framework. An individuated thinker may begin with this focus or may protest when asked to consider across the components of something, its history, or the context in which it is situated. When queried, these students often explained that these *external* factors serve as distractions from specialization of expertise or understanding; some students lament a loss of objectivity toward understanding a specific component.

*It is important to me to understand various parts of something and then put things together as a whole later. In this way I am able to get a sense of smaller things first before tackling the larger picture. Sometimes I actually don't want to hear about the whole because I fear it will sidetrack me from understanding the specific part I am studying.*

- German American Radiology Student

Students in our study from Middle Eastern, Italian, Hispanic, and Native American cultures often spoke of the benefit from learning processes that start with an overview of the whole and facilitate connection between the subject of study and the world around them, including history, context, and their own lives. Though these students discussed some interest in the components or parts, they tended toward a greater interest in the whole subject and the connections to its context.

*I need to understand how things connect and interrelate. What I don't get is how to understand something without thinking about the whole of it first. So many of my classes focus on the components of something first without considering the overall system. Even my degree separates learning into discrete classes that we never interrelate or connect. How can we ever understand the parts or the whole without both? And how can I begin to design the parts without first thinking about and even designing the whole first? Even more than that, it is critical to understand the surrounding context, the place where a building will stand, the community it will serve, the history of architecture in the area, and the land on which it will sit. I relate more to famous architects who started with this than I do those who were so into their own design without much regard to anything else.*

For Native American and other tribally raised students in our study, opportunities to place knowledge in historical context was described as a critical part of learning. Many of these students discussed practices of returning to previous course materials as similar to oral history and learning from often repeated teaching stories within tribal communities. These students expressed relief when professors used web-enhancement to make previous lectures, discussions, and other materials available throughout the semester.

Students in our study, especially those in rural areas, often identified online learning as providing a way for them to integrate their learning with the world around them. Online courses make it possible for students to stay involved in their home communities, tribes, and families. They described being more able to make local associations assisting them to understand what they are learning through college courses in deep, pragmatic ways. Sharply contrasting with much of the rhetoric about students needing to be on campus for the richest learning experiences, many students frame remaining in their home communities while in college as directly enabling complex learning through interconnections between collegiate learning and their own lives (Ke & Chávez, 2013).

We believe learning can occur regardless of whether students choose to immerse themselves wholly in a collegiate campus environment, remain within their home communities, or some combination of the two. We also believe that all students benefit from *both* study of discrete components *and* study of connections, relationships, context, and history. Indeed, research on gender differences in learning supports interconnected approaches with women, especially in STEM fields (Becker, 1995; Belenky, Clinchy, Goldberger, & Tarule, 1986). Faculty can facilitate learning for all students by purposefully facilitating activities, assignments, and interactions that ask for and promote understanding of components, connections, and whole systems.

## **Teaching across Integrated and Individuated Cultural Frameworks: *Interconnectedness of what is Being Learned***

Deep learning occurs for both individuated and integrated learners when the parts and the whole, as well as the system and its context and history are examined. Neurological research suggests that learners benefit from combining deep with broad understandings of anything studied (Medina, 2011). It is helpful to alternate learning experiences that start with the whole and its context and history with learning experiences that start with studying discrete parts in isolation. Faculty can do this by alternating starting activities and assignments that focus on component parts with those that focus on the whole, the context, and the history. It is often helpful for faculty to point out connections as well as facilitate student reflection and discussion

of additional components and connections. Curricular movements to integrate and synthesize across courses, programs, and degrees are helpful ways to do this beyond discrete courses.

In various course formats, faculty can assist students to make connections by providing ways to continually return to course resources, lectures, readings, and visual materials. Many technological sites are available for faculty to provide access to these resources and allow students to continually return as needed for additional study and connections. Faculty can provide an archive by: posting Power Points, notes, videos, and other summaries of lectures; providing ongoing access to grades, class agendas, handouts, and class activity instructions; and building final papers, case studies, and exams using multiple concepts from the course. By enabling students to return to course materials, faculty facilitate learning for students who find course history helpful.

<b>Teaching Techniques within Cultural Frameworks:</b> <i>Interconnectedness of What is Learned</i>	
<b>Individuated Techniques</b>	<b>Integrated Techniques</b>
Facilitate class activities and assignments in which students process components and the whole in objective and discrete ways	Facilitate class activities and assignments that promote understanding of component parts, their connections between the parts, their relationship and function within the whole, and the relationship to the contextual environment
Ask students to consider a phenomenon	Ask students to consider more than one perspective of the same phenomenon
Discuss course concepts incrementally and discretely	Regularly discuss and ask students to identify connections between concepts across a course, between courses, and across the curriculum
Expect that students will keep notes and refer to past materials on their own	Provide past lectures, notes, online discussions if applicable, and other materials for students to return to for study. Encourage students to utilize these materials for their own learning
Offer multiple ways of building upon knowledge components, using definitions, classifications, quantitative assessments, and proofs	Offer multiple ways of connecting knowledge, using case study, service learning, study abroad, group work, and community based research

## Responsibility for Learning

<b>Responsibility for Learning</b>		
<i>Individuated</i>		<i>Integrated</i>
Learning is a private, individual activity; Responsible for one's own learning so that others are not burdened	$\longleftrightarrow$	Learning is a collective, shared activity, Responsible for one's own as well as others' learning

A professor of management information systems encourages learning, collaboration, and responsibility for self and others by designing regular quizzes that encourage all three. Near the end of a class session, she hands out quarter sheets of paper with multiple choice questions and directs students to gather in trios around the room. She asks students to work together to discuss the questions and then individually fill out the quizzes, add their names, and hand them in prior to exiting the classroom.

In a nursing program, professors use an online health community that includes great detail about individual and community health characteristics. One professor designs projects, online discussions, and activities that alternate between collaboration and competition to build both capacities in student learners. Competitive activities are typically designed as fun, game kinds of activities that increase excitement, positive kinds of tension, and healthy competitive skills without encouraging paraprofessionals to work against each other. Collaborative activities often direct or encourage students to develop the ability to identify strengths in each member of a team toward fulfillment of the project objectives.

Conceptions of responsibility for learning differ substantially between integrated and individuated. Individual self-reliance and responsibility primarily to self in a learning environment characterized most of the Northern European American students in our study. These students shared beliefs about taking care of yourself and being self-reliant as important responsibilities in college courses and in a healthy society so that one does not become a burden to others. Some individuated learners also discussed the importance of competition to their learning. Competing for time to share thoughts in class, competitiveness about presentations, and striving for the highest grade are important motivators for many of these students. Working together with other students is usually seen as a distraction, a threat to one's grade, or a waste of time by students with individuated cultural frameworks. Resistance is often less to collaborative efforts that are ungraded or during a class session than to graded or outside of class efforts.

*My classes are really intense and competitive which works well for me. I get revved up by the need to compete with other students. This often helps me to discover what I believe about the work. I look out for myself and they look out for themselves. The profession and the world benefit from this kind of competition.*

- English American Medical student

*It's really important for me to be self-reliant. When I graduate I'm going to be on my own and I have to practice those skills now. So I study on my own and try to avoid classes with group assignments. I really want to be able to take care of myself and think for myself so I don't become a burden on anyone else.*

*Danish & Austrian American Business student*

For individuated learners, providing a balance of individual class activities and assignments is helpful to developing skills in the area of self-reliance and for some to developing a sharpening of individual perspectives and interpretations. Healthy competitive components can increase energy in a class and provide motivation to some kinds of learners.

In contrast, a sense of responsibility for peers and peer learning was described by many Native American, Pacific Islander, Latino/Hispano, African American, Middle Eastern, and Southeast Asian students in our study. Integrated learners are often raised in learning environments where understanding and clarity are facilitated by comparing and contrasting multiple interpretations and perspectives as well as assisting everyone to learn for the common good.

*In my family and community we are taught from a very young age to take care of each other out there, away from home especially, and to help everyone to be their best for the good of the community. For me that translates to a sense of responsibility for others in a class. I tend to form study groups, offer assistance to those who are struggling, and suggest ways we can all do well. It is good for everyone if we all do well. I also find that I learn best when I can compare and contrast my ideas to others. This assists me to hone in on and develop my own perspectives while also considering others'.*

- Spanish American Communications Student

Guided interactions in class discussions online or in face-to-face classes are helpful to an integrated orientation to learning. Reciprocity and mutuality are important within integrated cultures and students from these origins often feel a sense of responsibility for helping their student peers to learn and be successful, believing that this will benefit everyone. Because teaching another person is one of the more helpful pathways to learning, designing with this kind of process is helpful to everyone.

Some students from these cultures discussed their discomfort with competitive activities in relation to learning and college courses by explaining that competition is helpful to some activities such as sports and games but can be hurtful to relationships in a learning or working environment.

*I really hate it when a professor has us debate or sets up an assignment as a competition. I find that not only does it break down relationships between teams and individuals, it causes problems within teams because some people in my classes are more motivated by winning than by maintaining relationships with peers. At home on the Rez we are careful not to bring competition into education or into work and family situations. Competition is*

*fun in sports and in playing games but in my experience it can be really hurtful to relationships in other activities including learning.*

*Acoma Pueblo Finance student*

Having both individually and collectively oriented learners in the same course can be a challenge. One faculty member discusses the challenge of differing senses of responsibility for learning among students.

*It hadn't occurred to me that students might think about learning together so differently until I attended a preconference on culture and teaching. Then I started to talk with and observe students. I noticed almost right away that some students would go out of their way to assist others to learn and when asked they shared that they felt responsible for others' learning. I noticed that this was almost all the students of color. Some students stay more to themselves instead believing in competition for air time in class, with grades, etc. and putting your energy into your own learning as best for improving the world. I realized that both have merit and so I started working on pedagogies that drew from and encouraged both.*

- Jewish American Professor

Group assignments however, differ markedly from group discussions and other forms of learning responsibility in courses. The added burden of group assignments outside of class time can become overwhelming especially for those with children and full time work responsibilities. Miscommunication, power struggles, differing definitions of responsibility, trust, and abilities all make group assignments difficult for some learners. In many cases, collective learning in classes combined with individual assignments provides a helpful balance for students. However, group assignments can be developed intentionally in ways that are equitable, helpful to learning, and not so overwhelming. We suggest some of the literature in this area for those who are interested specifically in group assignments.

## **Teaching across Integrated and Individuated Cultural Frameworks: *Responsibility for Learning***

Teaching across varying senses of responsibility for learning is a thought-provoking challenge for faculty in interactions, activities, and assignments. It means paying attention to immediate dynamics within a class session, to interactions between students, and to the ways students respond to each other and to activities and assignments.

In relation to classroom activities, it is helpful to vary individual and collective activities and styles of interactions throughout each class session. Varying activities allows students to benefit from some time learning in their own natural orientations and some time in orientations not as comfortable. It is also helpful to vary collaborative and competitive activities. Competition is most helpful in the form of games such as ungraded activities, where less is at stake.

Competitive activities must be monitored carefully to minimize unhelpful or hurtful forms of competition or interaction detrimental to learning and learning relationships. Faculty should be ready to step in and reframe or mediate when necessary. Collaboration is most helpful when it is designed and monitored for individual strengths to come to the fore as well as for equalizing forms of evaluation to minimize an unfair balance of burden on some individuals. Facilitating students in identifying specific skills they bring to a project or activity can assist both individuals and groups to engage and appreciate the role of varying abilities to learning and to accomplishing a task. Power dynamics are also a consideration in collaborative activities, especially when the stakes are high such as in presentations because of their public nature and in graded group assignments.

In relation to classroom discussions, students from individuated cultures interpret discussion in classes as a form of opportunity offered and believe that “important learning” will rise to the top through this form of opportunity or competition. This can become problematic, as is often the case, when only the ideas and perspectives of a few individuals are regularly shared with the class. When faculty shift thinking away from encouraging opportunism toward seeing it as their role to draw out many ideas from the whole class, learning is enhanced. Many collective activities provide a turn taking approach to glean insights from all students. This also assists students to develop important listening, supporting, and speaking skills. Students from some cultures expect discussion to be a time when each person is individually invited to share for the good of everyone’s learning. This type of learner is likely to wait respectfully until invited to share and may seem confused and a bit lost when professors do not reach out regularly or who use only opportunistic techniques to elicit responses such as asking those who wish to speak to raise their hands. Students tied heavily to opportunistic forms of speaking may become angry when they suddenly experience a class with different expectations. In addition, students who are used to remaining quiet may be intimidated at first by this kind of expectation. We find that students tend to “step up” when expectations are consistently and fairly facilitated.

<b>Teaching Techniques within Cultural Frameworks: <i>Responsibility for Learning</i></b>	
<b>Individuated Techniques</b>	<b>Integrated Techniques</b>
Incorporate opportunity based discussions among pairs, trios, and small groups in class sessions	Incorporate turn-taking discussions among pairs, trios, and small groups in class sessions
Facilitate consideration of what each individual brings to a particular individual assignment or activity	Facilitate consideration of what strengths each student brings to a particular group activity or assignment and discuss how each might benefit the task at hand
Design competitive activities, exams, and assignments	Design collaborative activities, exams, and assignments
Employ opportunity based questions from the professor to the whole class	Employ turn taking and invitation- based questions from the professor to each individual in the class

Ask for volunteers to write insights gleaned from the readings or an activity on the board for processing by the student or professor	Have all students write insights they gleaned from the readings or an activity on the board for processing by the whole class
Offer clear objectives and goals for each learner to succeed in class; give regular updates on course progress and class grade	Use peer review incorporating detailed, positive feedback; assign shifting roles to students—facilitator, participant, leader

## ACADEMIC DISCIPLINES...

Take a moment for some cultural reflection on academics.

For each of the four constructs in the previous sections, place an 'X' along the continuum where you believe your academic discipline is generally in relation to teaching and learning. Then reflect on the following questions.

- Based on this reflection, what are some of the most distinctive qualities of your academic discipline in relation to teaching and learning?
- Do the cultural norms of your academic discipline center primarily in an integrated, individuated, or balanced framework?
- How might students from different cultural frameworks experience your academic discipline?
- How might your own teaching within your academic discipline evolve toward a more balanced foundation of cultural frameworks?

Figure 1.6

## Time



Linear, task oriented, can be measured and used, to be on time shows respect		Circular/seasonal, process oriented, dependent on relationships, to allow for enough time shows respect
------------------------------------------------------------------------------	-----------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------

In a web-based course, an art professor uses a variety of kinds of interactions throughout the semester including twice monthly online class sessions where she facilitates synchronous spoken discussion as well as week-long written interactions where students can log in any time, read peer postings, then post their own comments. She finds that individual students engage more deeply in peer interactions with which they are most comfortable at first and by the end of the semester, more equally in each type of peer interaction as they gain confidence, practice, comfort, and skill. She designs class interactions alternating synchronous classes (all able to listen and speak online together) with asynchronous (students able to write in their thoughts when they are ready) because she believes it is important to engage students in a variety of ways and facilitate new interactive skills that will be beneficial in the art profession. Alternating kinds of interactions has the added benefit of offering some learning activities where students react in the moment and others where there is time to think before discussion.

Time and how time is conceived is an important component of teaching and learning across cultures. In a traditional 50-75 minute class session, time is highly bounded and most faculty use every minute to share knowledge with students through lectures (Rendón, 2009). Students are expected to be on time to class and to submit assignments. It is often acceptable for students to leave early presumably to make it to another important engagement. The business of the class session usually starts right away and time for questions and interactions are usually left until the end of class if they are present at all.

In online courses, students have time to reflect between most learning activities. For example, in asynchronous written discussions there is time enough for everyone to contribute because students can post comments anytime 24 hours a day before instructor deadlines. This also allows students to work when they do academics best and work within busy schedules. Deadlines are still in play and some instructors mark down for late work or do not accept it at all. In most U.S. academic environments being on time is expected and lateness is usually interpreted as a sign of disrespect or irresponsibility. Timed, bounded exams are usually expected and are often the only form of evaluation in a specific course.

Yet there are different conceptions of time and responsibility across cultures. This student from our studies explains,

*It took me awhile in college and work to understand about differences in time. At home on the Rez, it is important to stay somewhere as long as it takes because that is what is important to our relationships and to the needs of the People. Gatherings and ceremonies start once everyone is gathered. But in college and other situations off the Rez, I notice that folks get really upset if I'm not there at a certain time. I notice also that at home we start with social stuff so folks can arrive as they need to and the other purposes of a*

*gathering take place later. Here in my campus job and classes the “business” comes right away and social happens during the breaks and most of the time it doesn’t matter much if people leave early. At home, we stay as long as we are needed and people really notice if someone leaves early before activities are completed.*

- Santa Clara Pueblo Biology Student

Students we interviewed raised in integrated cultures which are highly relational and contextual such as those originating in Africa, southern Europe, the Middle East, and Latin based countries as well as Native American students often experience incongruence between time orientations in traditional classes and their own sense of time. These students described growing up with time based in relationships, less structured definitions of time, and taking the time needed to complete something instead of using only a time assigned. For many of these students, time to allow for internal processing through reflection, dreams, and prayer are considered essential to deeper levels of learning. For Hispanic American students, time is often highly relational and comparatively less bounded and these students often described time needed to process with others. Most of these time norms are not designed for in academic learning.

For Northern European American students in our study, time was often conceptualized as bounded and divided between activities. This is in sync with the ways most academic realms operate, especially face-to-face classes. Specific starting and ending times, a schedule that allows only short amounts of time between activities, class sessions filled with specific activities, and timed exams meet the common expectations of most students and faculty from Northern European cultures. For some, online courses allow for the flexibility helpful to busy, constantly changing life schedules. For others, online courses are too intrusive into their time, too unbounded. These perspectives are often influenced by levels of responsibility to work and family.

*It drives me crazy when professors or students come in late to class or if we don’t get down to it right away. My time is valuable and I don’t want someone else to waste it.*

- Czechoslovakian American Geology Student

For faculty raised in Northern European cultural frameworks with a sense of time as bounded, related to tasks, and where *being on time* is a sign of respect; working with learners from cultures where time is instead shaped by relationships and cycles can be a confusing challenge. Student behaviors can be easily misinterpreted by faculty as a lack of respect for someone else’s time or acting irresponsibly instead of as a difference in time orientations. The following example illustrates:

*I spoke up kind of complaining to the culture and teaching facilitator about the Mexican students in my classes; how they always seem to walk in after my class starts and how I think they are not committed to learning. Right away she brought me up short by asking me when I did the question and answer portion of my classes. I said that if I did this at all it was at the end of class. She then asked me if these same students ever stayed after class*

*and I looked at her with amazement because they do and they usually stay to talk with me about the class and often invite me to have coffee and keep talking.*

*The facilitator then explained that in some cultures and countries, it is considered respectful to stay with people until things conclude naturally and not so important to be on time. She suggested that their staying after class so often showed that these students seemed very dedicated to learning. She then suggested that I try placing a question and answer time at the beginning of class and see what happened. I did and these students started coming early. I e-mailed the facilitator to ask why and she explained that some students come from very relational or collective cultures and so are often highly motivated by class activities that are more relational like discussions and Q&A. I really learned something about the assumptions I was making in my perceptions of students and in my teaching.*

If we learn to frame the realities of time differences as an opportunity to innovate teaching techniques across culturally divergent interpretations of time, we can develop ways to work with both and to reinterpret our judgments about students.

## **Teaching across Integrated and Individuated Worldviews:**

### ***Time***

To teach effectively across differing cultural conceptions of time it is helpful to alternate pedagogical activities, sometimes starting with those that are more interactive and relational and sometimes starting with those that are more task oriented. This assists student learners to benefit from sometimes prioritizing their own natural sense of time and sometimes benefiting from a not so familiar prioritizing of time. Faculty can do this easily in face-to-face courses by moving question and answer, and discussion time around between the beginning, middle, and end of class. This also has the added benefit of mixing up activities which assists students to stay engaged. In an online course specifically, alternating asynchronous interactions and discussions which allow large amounts of time for student reflection and response with synchronous discussions and interactions which are more in the moment and trigger immediate thinking and response skills is a good strategy to including a variety of time orientations. Including both communicates to students that both relationships and tasks are important to learning, to the subject area, to other students, and to the professor.

Additional areas highly influenced by cultural orientations of time are exams and quizzes. Most examinations in collegiate courses are timed and conducted in class. This typically privileges learners who are raised in individuated contexts where time is often bounded. Professors can balance time orientations of exams by including some that are timed and in class as well as some that are done outside of class and untimed. In this way, learners benefit from both kinds of time orientations in their learning. Alternating time orientations has the added benefit of offering students practice in multiple kinds of deadlines and varying pressures to produce, realities that will be present in future professional and other responsibilities.

<b>Teaching Techniques within Cultural Frameworks:</b>	
<i>Time</i>	
<b>Individuated Techniques</b>	<b>Integrated Techniques</b>
Administering timed, bounded exams and quizzes either in class or online	Administering take-home exams, untimed exams online
Facilitating learning activities in class that focus students on a specific task	Facilitating learning activities that focus students on both the task and relationships with other students
Designing timed activities that remain within the class period	Designing activities that include both time within a class period and time outside
Synchronous written discussions during a bounded online class session	Asynchronous written discussions over a week long time period
Assignments with firm deadlines; option for submitting late work with penalty; no revision option	Assignments with negotiable deadlines; options for revision and late submission without penalty
Class time bounded by beginning and end of class session	Class time extends to discussion after class, in groups or one on one
Exams serve as culminating activity and closure	Exams followed by discussion of results and reflection on learning

## Role of the Teacher / Control

<b>Role of the Teacher / Control</b>		
<i>Individuated</i>		<i>Integrated</i>
Provider and Evaluator of Knowledge -- best perspectives and ways of learning, predetermined/bounded learning; Communication primarily between teacher and students	$\longleftrightarrow$	Facilitator of Learning Experiences - - multiple perspectives and ways of learning, emergent / constructivist; wide variety of interactions between students, and between teacher and students

A twenty year teacher and engineering full professor tries every kind of engaging lecture technique she can think of and learns in teaching workshops. She shares her conclusion that lecture doesn't engage student minds enough even when she uses metaphor, examples, visuals, stories, and even some interactive query in class sessions. She

concludes from her experiences that she must move from being a provider of knowledge to becoming a facilitator of student learning experiences. She plans to observe faculty who teach in collaborative learning classrooms, especially other faculty in fields where students need to learn complex calculations and theory. She has been reading about active learning, multiple intelligences, and some aspects of culture and learning and is looking forward to recreating her courses to more fully engage student learning.

Students across cultural groups applaud faculty who: facilitate activity that enhances their learning; share personal experiences; have a confident, enthusiastic, positive presence in classes; and provide tutorial support promptly in person, through emails, and in web conferencing sessions. Students often drift off or “learn only for the test” in classes containing mostly lecture, even with some question and answer time. This is true even when faculty are highly engaging lecturers. Although more facilitative faculty often believe that making instructional content fluid and not predetermined is helpful for active learning, most students also want a well-structured and predetermined content with clear guidelines on assignments to help them remain “on the right track.” So once again, effective teaching design includes a balance—in this case, a balance of structure, faculty knowledge, active forms of interaction, and engagement with the course content, the faculty member, and student peers.

Higher education pedagogy entails two predominant course instructional approaches. An individuated *content + support* approach is more instructivist and highly structured with predetermined course content and tutorial support (Ke & Chávez, 2013). The learning process comprises reading, comprehending written, video, or class lectures, and completing assignments or taking tests to evaluate knowledge intake. Peer interactions represent little to no class time whether the course structure is face-to-face, online, or hybrid. In this approach, the professor is the main conduit of knowledge and students act in a primarily receiving role, what is often referred to as a banking teaching philosophy (Freire, 1993). The banking approach does not tend to engage students at any great level nor facilitate deep learning. One student described,

*I can't remember a time when I wasn't sitting in a class with the professor or teacher talking to use, telling us, showing us. My whole education has been filled with this kind of lecture based teaching. Mostly I show up and sit there but I'm not really learning much that I couldn't just get by reading the text myself. I have friends who are able to skip most of their classes, come in for the tests and get straight A's. So what is the use of this kind of teaching?*

A professor in Earth Sciences recounted the following from a Native American student:  
*"Please don't re-teach yourself, by standing at the front of the room reinforcing what you already know".*

On the other end of the continuum a *social constructivism* or *active learning* approach sets immediate engagement with course content to “figure things out,” usually with peer interaction at the heart of class activity. In this approach the course content is more fluid and less structured. Social constructivist course design comprises reading, interactive discussions for content comprehension, interactive activities for content application, and then completing assignments collaboratively or with peer help (e.g., peer reviewing or collaborative processing). In this approach, the professor is a designer and facilitator of engagement with course content rather than purely a source of knowledge. A student describes their experience of a history class using this approach,

*My history of the Americas class is unlike anything I've ever experienced. Usually I just hate history because it is just a recitation of dates and events, so unconnected to my life. But this professor engages us in history by having us write our own histories, read and discuss first-person narratives about real people's experiences of important historical events, and even drawing timelines of critical developments in communities around us. I show up for class and in a blink it is over because we are so engrossed, so involved. Our professor is constantly challenging us, offering additional questions to consider, teasing us to go further in our thinking.*

Students vary in their preferences but most are accustomed to the first approach with faculty acting as the primary bearer and evaluator of knowledge. The second more constructivist or active approach engages students across cultures especially when other elements of course design are balanced as noted throughout this chapter. In a more active or constructivist approach, students still see the professor as having expertise yet want to be a part of learning within the whole group. Student learning is deeply enhanced when the role of the professor is more of a facilitator of learning than a disseminator of knowledge.

## **Teaching across Integrated and Individuated Worldviews:**

### ***Role of the Teacher***

Balancing across content and process is a matter of designing a wide variety of ways to engage with subject matter and each other. Professors can interweave mini-lectures or lecturettes with more interactive and application activities. This constant mixing of intake and active processing draws from the best of both to deepen student learning. Mixing kinds of assignments, forms of engagement with each other and the professor, and types of evaluation offers a complexity of interaction with subject matter that enhances learning. Faculty integrate short lecture, processing and application of content by students, a variety of means to assess student learning, and many other processes to create a deep learning environment. There are many media and other sources of content to mix things up and faculty who teach in this way tend to include many visual, audio, and interactive resources and activities. One hallmark of this engaged

teaching is a focus on designing ways for students to *figure things out* together in class combined with individual work, usually out of class. Some professors also assign, encourage, or provide extra credit for students' out of class work together.

A more balanced approach to the role of the teacher may take some getting used to by both professor and students. Discomfort and even fear may be present especially at the beginning of class. It can be helpful to discuss the way class will operate and provide *roadmap* kinds of explanations periodically for students. Road mapping is when professors explain where the learning is going, the learning objectives, and how the class will get there through various learning activities and assignments. Road mapping brings learning and the learning process into the consciousness of students which assists with understanding. It can also assist faculty to more purposefully reflect on, design, and facilitate effective learning approaches. Further, asking for student feedback informally early on can assist a professor to modify approaches along the way.

An English literature professor experimented with asking students to facilitate sections of class conversation on reading topics. Even though discussion is more constructivist than content oriented, this professor found that giving up control of facilitation was challenging. Inevitably, students facilitated in very different ways from the instructor, who found that even after presumably giving up control of content, giving up control of facilitation was another challenge altogether. However, by doing so, students took more responsibility for their learning, and for the environment and learning of their peers. This professor also began to learn new techniques from the many ways students facilitated, over time incorporating many of these techniques into her own teaching.

<b>Teaching Techniques within Cultural Frameworks: <i>Role of the Teacher</i></b>	
<b>Individuated Techniques</b>	<b>Integrated Techniques</b>
Connect subject matter to future profession or career realities, practices, expectations	Connect subject matter to needs, realities, challenges, or opportunities in local or student's community, tribe, family
Offer learning outcomes, course objectives, assignments as assessment of learning outcomes, and grading rubric in syllabus	Share roadmapping for students regularly to share where learning is going and how we will get there
Request student evaluations at the end of the course and sometimes also at midpoint. Incorporate into future courses	Request student suggestions, ideas, feedback regularly. Incorporate into current course.
Require students to process specific theories or concepts chosen by the professor	Ask students to choose what theories and insights to process and apply in assignments and exams

Teacher as expert keeper and disseminator of knowledge	Teacher as co-learner, transparently sharing their shifting and evolving thinking with students
Teacher constructs learning objectives	Students co-construct learning objectives

## Student Interactions

<b>Student Interactions</b>		
<i>Individuated</i>		<i>Integrated</i>
Others' perspectives are optional for learning. Primarily rely on verbal messages; individuals are paramount, predominantly verbal in both written and oral communications		Others' perspectives are important to learning. High use of nonverbals, collective as paramount and multiple streams of communication

A geology professor encourages revisions on assignments and exams with consultation among students. He provides a grade and feedback to students that they can either accept or revise and resubmit within a week. When asked, this professor discusses his dedication to student learning rather than student evaluation, explaining that his whole perspective changed when he realized that his earlier teaching was not really focused on ensuring learning among students. He explains, "I realized that I was focused more on evaluation and testing and that if I really wanted to facilitate complex student learning, I needed to find ways to have them help each other, and allow me to assist them too. The competitive, timed, pressure oriented nature of exams and quizzes was more about testing than about learning and those are completely different things. It actually got in the way of learning. So I began to think about how I could have students help each other, how I could relieve the pressure of assignments, quizzes, and exams, and how I could make everything more about learning. Encouraging students to assist each other through revision is one of the most effective ways I've found.

Even with something as sacrosanct as tests, faculty may find ways to balance cultural norms. When learning is at the center of thinking, teaching design, and course facilitation, professors provide activities for learners who need individual processing time and for those who need collective processing time. We also facilitate ways for students to assist each other to learn.

Individuals from integrated cultures are often raised in environments where learning includes a great deal of collective interaction for comparison and contrast. One student in our studies described,

*It helps me to hear others' interpretations and sense making and I constantly compare this to my own. This helps me to clarify my own thinking as I compare it to other ideas. Over time, I become really sure of what I think or believe and I'm able to explain how this differs and how it is similar to someone else's interpretation.*

- Puerto Rican undergraduate biology student

Individuated learners on the other hand are usually raised in environments where learning includes a great deal of individual study. An English American philosophy professor described,

*It was all about individual, often isolated study for me growing up, both at home and in school. It is to the point that I have trouble thinking when I'm around others so I still isolate myself when I need to really learn something. It has been tough for me to go beyond this to design learning experiences for those who benefit from more interactive processes. Yet when I face my own discomfort to apply a wider variety of techniques across individual and shared processes I observe students truly learning.*

Different cultures are normed around more internal or external processing and this influences how learning takes place in early educational and familial environments. Internal processors (introverts) who describe themselves as needing time to think before discussing seem to favor reflection and prep time whether in online or face-to-face courses before discussions. External processors (extroverts) who “need to chat to figure out what I think” are likely to favor live class sessions where immediate input, feedback, and interaction enhance their thinking. Faculty can balance both needs by sometimes offering time for reflection before discussion and sometimes offering time for discussion immediately.

Native American students from many tribes often prefer more time for internal processing and being invited individually into conversations by the professor or interacting with one another in small groups or pairs. This is often because of the commonality of this kind of learning and interrelating processes in the upbringing of Indigenous Peoples. Storytelling or discussing things in connection with personal experiences was described by many Native American students in our studies as more possible in web-based courses because of time available prior to discussions and the prevalence of written asynchronous discussion formats.

*I can always count on time to reflect with other students over written discussions in my online courses. This is time I benefit from to reflect, read, reread, discuss with others, even sleep and dream. I did have one professor in a face-to-face class who often gave us time to reflect or draw or jot down notes before discussions, sometimes in pairs or small groups and sometimes on our own. She would often give us a thought question at the end of class that we would start with the next class. This was great and really in line with my kind of learning.*

Storytelling is an important way of making sense of learning in many cultures. In African American communities, families, neighborhoods, and churches often serve as common story sharing entities through song, rhythm, and narrative. In many Hispanic families, everyone is encouraged to tell stories from the youngest to the oldest. For Native American students, childhood learning is often in the form of storytelling especially by elders. Among Northern European students, storytelling also plays an important role, though in current contexts may be more focused on entertaining than on learning life lessons. Yet many students find that when they can connect something to their own lives, they learn more deeply and complexly.

## **Teaching across Integrated and Individuated Worldviews**

### ***Student Interactions***

Providing a balance of individual and collective learning experiences is beneficial to learners across the spectrum of integrated to individuated learners. Designing individual and collective time for reflection is a critical aspect of learning for some. Internal processors benefit from even as little as 30 seconds of time to collect their thoughts, jot down a note or two, or draw their conception of something prior to having to enter a discussion with peers or offer insights to the professor and the class as a whole. External processors benefit most from being able to turn to a peer and discuss something before having to share thoughts with the professor or the whole class. There are many activities that assist those with varying perspectives on the role of student interactions.

Promoting student interactions between peers and with the professor is helped by creation of in class activities such as discussions of course materials; question and answer periods; pair, trio, and whole class problem solving of case studies; shared lab work; quizzes with whole or partial collective processing; academic games; interactive video and media; and sharing and then processing student insights or problem solving on the board.

Discussion can be as simple as posing a question and asking students to discuss it in pairs, then inviting a few *brave volunteers* to share insights from their discussions. It can also be very complex where instructors use a Socratic method to probe and pose increasingly detailed questions as students respond. This offers a guiding influence to lead students toward increasingly complex sense making or figuring things out. Or discussion can be a sophisticated step-by-step interaction among students to collectively figure out a complex task or apply theory. Inviting specific students to share their thoughts, (even encouraging half-formed thoughts) is helpful to all students and also common in some cultures where learners wait respectfully to offer input only when a teacher invites them individually.

On the other hand, when dialogue is structured in simple, individual, rote ways, discussions stay on the surface and often have a competitive edge to see “who says the right answer first.” In our work with faculty, many acknowledge that it is almost always the same

three or four students who volunteer. Yet when professors offer deeper critical thinking questions, expectations to interact and comment, and support this through positive facilitation and class norms that motivate students in these directions, such as turn taking or grading rubrics for discussion, conversations deepen and increase in learning value. Instructors make a difference in student learning experiences through the quality of student interaction.

*I used to assume that it was the smart or engaged students who volunteered when I asked a question in class. Now I understand that it can be any number of reasons including self-promotion, a need to talk, or a real interest in the topic. What has been important for me to learn is that the other students also have much to offer and it is my job to invite them into discussion through turn taking, inviting and other means. I am a bit embarrassed to say that by doing this I have found great intelligence in students I previously thought were not very smart or didn't care. I was blinded by not only my own assumptions but by my teaching practices.*

*Norwegian American physics professor*

Partially or fully collectively graded projects, assignments, presentations, and even quizzes or exams are also highly beneficial to learning and to promoting key interrelational skills necessary in most professions. The challenge involved in collective work serves to enhance synthesis skills as learners are prompted naturally by others' input to incorporate multiple ideas, perspectives, and insights into the whole. Individually graded projects, assignments, presentations, and quizzes or exams develop other skills such as the ability to struggle with complex issues through one's own independent insights and interpretations.

<b>Teaching Techniques within Cultural Frameworks:</b>	
<b><i>Student Interactions</i></b>	
<b>Individuated Techniques</b>	<b>Integrated Techniques</b>
Assign individual assignments, exams, and quizzes	Assign collaborative assignments, quizzes, and exams
Use techniques that are taken in and processed by individual students such as lectures, individual labwork	Use teaching techniques that require students to interact in classes such as discussions, case studies, shared lab work
Teacher does not expect students to support one another; may encourage competition to increase student motivation	Teacher encourages peer/cohort groups to gather outside of class; overtly expresses expectation of active support to one another
Students not expected to interact in or outside of class	What students learn from one another regularly incorporated into class discussion
Students assessed on individual work	Students assessed on quality of their support and feedback to one another

## Sequencing

<i>Sequencing</i>		
<i>Individuated</i>		<i>Integrated</i>
Learning by mastering abstract theory first, followed by testing. Rarely includes application, experience, or doing in real life	↔	Learning by doing, listening to others' experiences, imagining or experiencing first, then drawing out abstract theory

A mathematics professor realizes that she always starts her classes with applications of mathematics using problems and scenarios that students can relate to in their current lives. She notices that some of her students often seem confused and when she talks with them; one explains that he has always learned by solving math equations and is having trouble starting with real life situations and translating that to equations. The professor decides to mix it up by sometimes starting with the equations and theory and at other times starting with every day scenarios. As a consequence, this student and other more individuated students seem to perk up in her classes and enjoy math once again.

Balancing sequencing of learning steps is critical in different ways to learners. Students from families and cultures who teach young learners first by showing or having them try something prior to some form of verbal processing of how it works, often described a marked preference for learning by doing first in our studies.

*My parents hardly talked when they were teaching me something. My Dad would show me how to do something and then gesture for me to try. My Mom often placed my hands in the needed position and then would gently nudge them to assist me as I tried. There are so many words in higher education and we are rarely shown something or helped to do anything. I find this disconcerting and I struggle to adjust. I remind myself of this when I'm working with those I teach.*

- Taos Pueblo undergraduate education major

Students in our studies who were raised in families and cultures who teach young learners first by verbal or written description often display a marked preference for learning first by more abstract means such as reflection, listening, or reading. These are sequentially individuated learners. These individuals often learn difficult theoretical distinctions best by working independently to figure things out and by having to argue for something in which they do not believe (McDermott, Rosenquist, & Van Zee, 1983).

*I disappear into my head a lot. My boyfriend teases me that I stew but really I'm just thinking – about what I'm learning, about what I read yesterday, about what is coming up next in my classes. I like to have lots of time to study something on my own so I can understand.*

Both types of learners benefit from experiencing some of each way of sequencing learning steps. The support of our own natural, comfortable ways of learning combined with the challenge of new ways of learning develops cognitive complexity and ability.

Integrated learners learn best when faculty approach abstract concepts from a place of “doing” first by having students conduct laboratory experiments, explore a case study, listen to an example, or watch a simulation video prior to drawing out theory. Individuated learners benefit from a more common science method of teaching theory and then applying it in the laboratory. A likely use of less contextual, applied and more abstract pedagogical techniques by a largely Northern European American pool of professors may be less culturally congruent for integrated oriented learners who benefit from starting with contextual stories, examples, case studies, lab work, and simulations followed by processing related theory.

## Teaching across Integrated and Individuated Worldviews

### *Sequencing*

Balancing sequencing across integrated and individuated oriented learning needs is mostly a matter of alternating how to focus the beginning of learning processes. Professors can sometimes start by introducing a contextual situation or example to students through the use of story, case study, applied lab work, demonstration, or coaching students to imagine or identify a situation. It is helpful to follow this by asking students to draw out the theory from this situation or example or by demonstrating this for students.

At other times professors can start with theory, through perhaps the sequential steps in the theory, offered via a powerpoint or writing on the board. Then, they may gradually apply the theory or have students apply it in lab work, a case study, to imagine a situation where it might apply, or process the theory through a case study. A key to learning is to alternate sequencing of the learning process with students and to include both kinds of processing as often as possible.

<b>Teaching Techniques within Cultural Frameworks:</b>	
<i>Sequencing</i>	
<b>Individuated Techniques</b>	<b>Integrated Techniques</b>
Start with explaining theory to students, may or may not be followed by application or processing by students	Start with an example, story, autobiography, case study, or labwork and then follow up with having students draw out theory
Have students write about or answer test questions about theory	Have students process a case study in assignments or tests including processing of theory
Ask students to describe and explain the components of a theory	Facilitate student’s developing their own case study, example, project, or story to illustrate a theory

Present theory using stages (e.g. 1-5), derivations, chronologies, and graphic organizers	Present theory using stories about the context of the era in which theory was derived, including autobiography of theory authors
Start with writing of theory authors/experts, then extend to application in current era	Start with student experiences, concerns, questions and then pull back to broader context/theory

## Taking it From Here to Enrich Learning over Time

To enrich learning and success across many student cultures we encourage faculty to:

- Balance instructional activities, assignments, and interaction from both individuated and integrated frameworks;
- Assess our own cultural frameworks of teaching and learning using the cultural frameworks model in this chapter (Figure 1.3);
- Systematically observe how our own cultural frameworks play out in current pedagogy, relational dynamics with, and expectations of students and with application to the classroom climate;
- Alternate sequencing of learning activities between integrated and individuated epistemologies so that sometimes we start with one and sometimes with the other;
- Interchange starting with reflection or discussion to promote student interaction and balance the needs of internal and external processors; and
- Develop ways for students to learn from and with other students.

Take some time to brainstorm pedagogies with the guide in Figure 1.7.

## BRAINSTORMING PEDAGOGIES...

Take a moment for some cultural introspection....

Choose one of the eight continua of teaching and learning you've just read about.

Take a piece of paper or pull up a blank document on your computer. Write the name of the cultural continuum you've chosen at the top. Now create two columns and label one Individuated and the other Integrated. If it would be helpful, write in the description of the integrated cultural framework on one side and the individuated cultural framework on the other side from Figure 1.3.

Brainstorm as many pedagogical activities as you can think of for each of the columns.

- How do the two columns compare? Does one have more activities? What does this mean to you? How might this matter to facilitating student learning across cultures?
- What can you do to balance the two? Who can you talk to, learn from, and brainstorm with?

## Our Continued Learning

There is rich opportunity for our own continued growth and development in the area of teaching and learning across cultures, including:

- Developing a deeper understanding of learning processes common to students from specific cultures;
- Crafting ways to interact across cultures in relation to course subjects;
- Exploring and analyzing how our own cultural identity relates to course design, pedagogy, facilitation, and evaluation;
- Learning from and collaborating with faculty who are working to balance cultural continua in their teaching;
- Incorporating facilitation that promotes deeper relationships and sharing among students;
- Learning how varying ways of reflecting and discussing influence overall student success and learning; and
- Gaining insights about how student peer work impacts student overall learning, satisfaction, and success across cultures.
- Seeking ideas, insights and understanding of students over time.

These are all things that can be explored and learned over time when we purposefully experiment with a variety of techniques, pay attention to our own reactions and those of students, and discuss and collaborate with students and colleagues to develop our teaching practice.

## The Journey Forward

Many college students, especially domestic and international students of color reside firmly within an integrated cultural paradigm as they approach learning. It is likely with the Germanic and English origins of higher education and the high prevalence of faculty from cultures based within individuated cultural frameworks, that many domestic and international students of color are experiencing a disconnect between their cultural ways of learning and their learning experiences in college courses. In addition, students from individuated learning origins may well be missing out on the complexity possible in their learning through more integrated cultural pedagogies and dynamics. By learning to balance across individuated and integrated forms of teaching and interaction we can craft learning environments that draw from strengths across cultures to enhance learning and benefit everyone.

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