

# **Cultural and Social Frameworks of Instructional Design**

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## **ABSTRACT**

This paper reports a review of cultural and social frameworks of instructional design. Due to the internationalization of online learning, consideration of cultural and social differences among students and between providers and recipients has become a greater issue for the program to be successful. As a part of results in a two-year study under Grants-in-Aid for scientific research (22650206) of MEXT, Japan, this paper will report on current trends in instructional design to deal with the cultural and social issues. The paper includes such frameworks as Cultural Dimension of Learning Framework (CDLF) and IAMC (Inclusion, Attitude, Meaning, Competence) Model. It also includes results of several studies of internationally active instructional designers, of a university with predominantly international students, and of technology assisted culturally responsive teaching. Issues to be considered in designing multi-cultural provision of education are discussed.

**Keyword:** *instructional design, framework, cultural and social adaption, design principles*

## **INTRODUCTION**

This paper reports a review of cultural and social frameworks of instructional design (ID). Due to the internationalization of online learning, consideration of cultural and social differences among students and between providers and recipients has become a greater issue for the program to be successful. For the students, the same is true; with greater opportunities for accessing educational provisions, which was not possible unless you went abroad to study. There are more occasions to encounter culturally and socially diverse ways of instruction, in the form of Open Educational Resources, online learning programs, as well as wider strategies that were made available by technological advancement and were advocated by new perspectives in designing learning environment. Even within a country of traditionally homogeneous people, there has been advocated the generation gaps (e.g., digital immigrants vs. digital natives, Prensky, 2006), due to rapid change in technology environment, which may affect having two different sub-cultures between those who provide education and those who receive it. Trends in ID to put emphasis in learner centric ways to accommodate learners' diversity has been another reason why we need to know more about the differences, to plan for accommodation and selection of proper strategies in instruction.

Thus the purpose of this paper was to describe current trends in ID to deal with the cultural and social issues. It was conducted as a part of a two-year study under Grants-in-Aid for scientific research (22650206) of MEXT, Japan, to try to find out how we go about designing and delivering instruction with cultural and social awareness.

## METHODS

To try to locate trends of cultural and social consideration in ID, online searches were conducted with related words, including culture, diversity, multi-culture, learner differences, within the fields of ID and technology and distance education. Once a relevant article was located, references were examined to see if there was anything worth tracking down. While this searching process is still underway, major findings are to be reported in this paper, with an emphasis on frameworks or models, rather than individual empirical studies.

## RESULTS

There were many papers searched on the Web in relation to the theme. For example, a search in descriptors on ERIC (<http://www.eric.ed.gov/>) with a keyword "culture" found 1959 results. Searching EdITLib by AACE (<http://www.editlib.org/>), with a keyword "culture," found 251 papers matched within AACE journals, and 2739 papers matched within AACE conference papers. As an interim report for this paper, the following findings are introduced and discussed.

### Cultural Dimension of Learning Framework (CDLF)

Cultural Dimension of Learning Framework (CDLF) proposed by Parrish & Linder-VanBerschoot (2010) is a set of eight cultural parameters regarding social relationships, epistemological beliefs, and temporal perceptions that are most likely to impact instructional situations (See, **Table 1**). They argue that as willingness to teach and learn across cultures grows, due to simpler and cheaper telecommunications, “instructional providers, including instructors and instructional designers, especially those working in online environments and struggling to maintain sufficient presence and student engagement, should develop skills to deliver culturally sensitive and culturally adaptive instruction (Parrish & Linder-VanBerschoot, 2010, paragraph 4).”

**Table 1.** Cultural Dimension of Learning Framework (CDLF)

Area	Cultural Dimension	Key Questions
Social Relationship	Equality and authority	How equity handled? How is status demonstrated and respect given? What interactions are appropriate for those of unequal status?
	Individualism and collectivism	Which prevails, the interests of the individual or the interest of the group? To what degree are interpersonal relationship valued?
	Nurture and challenge	Which is the more important set of goals, cooperation and security, or recognition and advancement? Which achieves better learning outcomes, supportive acts or challenging acts?
Epistemological Beliefs	Stability seeking and uncertainty acceptance	How is uncertainty dealt with? IS it avoided or accepted? Is structure assumed more important than flexibility? What is the status of knowledge-established or in a process of development?
	Logic argumentation and being reasonable	How are arguments developed? Which is more important, logical consistency or practical outcomes? How is disagreement managed?
	Causality & complex systems /Analysis & holism	How is causality assigned typically? Is it assigned to a single, most likely source, or is it assigned to the broader context?
Temporal Perceptions	Clock time and event time	Do people conform to an external measure of time, or do they allow the event at hand to unfold on its own time? Which are more important, deadlines or relationships?
	Linear time and cyclical time	Do people see time as a path and see goals as necessary destinations, or do they see time as a pattern of interlocking cycles into which they step in and out over the course of a life?

Note: A partial list taken from Table 1 of Parrish & Linder-VanBerschoot (2010).

The eight cultural dimensions are not to be treated as dichotomous, but as a continuum from one end to the other. However, the original table in Parrish & Linder-VanBerschoot (2010) shows how differently each end of a dimension can appear in instructional settings. For example, along the first dimension of equality and authority, teachers are treated as unchallenged authority at one end, whereas they are treated as equals to be engaged and even challenged on the other end. Teachers are the primary communicator and solely responsible for what happened in instruction at one end, while at the other end, dialogue and discussion are considered to be critical, and students also take responsibility for learning activities.

It is noteworthy that they point out that the provider should be aware of their own cultural bias, by examining their assumptions against the eight cultural dimensions in the CDLF model. It is not only to make their instruction more receptive by wider audience, but not to kill the recipients' culture by imposing "right" way of thinking and behaving. On the other hand, since education is inherently social process and one of the roles of educators is to teach culture, educational providers can no longer take a neutral position in developing their courses and materials. They argue that one of the challenges of multicultural education providers is to not only "become aware of one's own cultural preferences for what they are and not assuming they represent the 'right' way to think," but also to "accept the dual responsibility of educators to acculturate and respect individual student cultural backgrounds (both from paragraph 22)."

## **IAMC Model**

Ginsberg & Wlodkowski (2009) have proposed the IAMC (Inclusion, Attitude, Meaning, Competence) Model to accommodate diverse student populations in colleges and universities in US. For classrooms with many ethnicities and linguistic groups, first-generation college students, recent immigrants, and working adult learners, culturally responsive teaching is needed. The IAMC Model has been created "that (1) respects diversity, (2) engages the motivation of a broad range of students, (3) creates a safe, inclusive and respectful learning environment, (4) derives teaching practices from across disciplines and cultures, and (5) promotes equitable learning (Ginsberg & Wlodkowski, 2009, p. ix)."

It seems to be one of the representatives of the direction, apart from ideology that "everybody should become an American," where the melting pot notion applies, by saying "If you live in US, you are expected to behave like an American." Now, it is aimed that the classroom should respect diversity among students, and accommodates the differences by adopting instructional strategies applicable to wider diversities of the students. To start thinking unspoken norms that has been dominated in the US classrooms, Ginsberg & Wlodkowski (2009) argued that we must realize prevailing norms being in operation in rhetorical, cultural, and political aspects, as shown in **Table 2**.

In addition to the prevailing norms, they listed at least one alternative view to each and every norm listed, which may be reflected as the diversity within the classroom. For example, for the Achievement and Success norm, an alternative may be that "(p)ersonal generosity is the highest human value; conspicuous consumption represents greed and self-interest; "rags to riches" is rooted in cultural mythology that overlooks social, political, and economic forces that favor certain groups over others (p. 14)."

**Table 3** shows the IAMC motivational framework for designing culturally responsive teaching. The book contains many ideas and strategies for each factor that can be used in college teaching; Chapter 2 for establishing inclusion, Chapter 3 for developing attitude, Chapter 4 for enhancing meaning, and Chapter 5 for engendering competence.

## **Findings of Other Studies**

Rogers, Graham & Mayes (2007) has conducted a study to interview 12 internationally experienced ID professionals to examine what they encountered in adapting and delivering Western-origin materials in other cultures. They found that the 12 interviewees had been aware of cultural differences in general four areas: (1) general cultural and social expectations, regarding roles and relationships of genders, rules, legality, time, and humor, (2) teaching and learning expectations, including teacher-student relationships, issue of saving-losing faces, types of learning activities, assessment styles, and writing styles, (3) differences in the use of language and symbols, which may be interpreted differently across cultures,

**Table 2.** Prevailing Rhetorical, Cultural, and Political Norms in US Classrooms

Norms	Description
Achievement and Success	People emphasize rags to riches in stories.
Activities and Work	People see this country as a land of busy people who stress disciplined, productive activities as a worthy end in itself.
Humanitarian Mores	People spontaneously come to the aid of others and hold traditional sympathy for the underdog.
Moral orientation	People judge life events and situations in terms of right and wrong.
Efficiency and practicality	People emphasize the practical value of getting things done.
Progress	People hold the optimistic view that things will get better.
Material comfort	People emphasize the good life. Conspicuous consumption is sanctioned.
Freedom	People believe in freedom with an intensity others might reserve for religion.
Individual personality	People believe that every individual should be independent, responsible, and self-respecting: the group should not take precedent over the individual.
Science and Secular rationality	People have esteem for the sciences as a means of asserting mastery over the environment.
Nationalism-patriotism	People believe in a strong sense of loyalty to that which is deemed "American."
Democracy	People believe that every person should have a voice in the political destiny of their country.
Racism and related group superiority	People believe that racism represents a value conflict in the culture of the United States because it emphasizes differential evaluation of racial, religious, and ethnic groups. They argue for a color-blind ideology based on the assumption that social and economic advantage in contemporary life is the consequence of merit and hard work.

Note: From Ginsberg & Wlodkowski, 2009, p. 14-17 (converted from text).

**Table 3.** The IAMC Framework (Ginsberg & Wlodkowski, 2009)

Motivational Goal	Factors	How does this learning experience:	Teaching Practice of the first two-hour session on Introduction to Research course
Establishing <b>Inclusion</b>	Respect and Connectedness	contribute to developing as a community of learners who feel respected by and connected to one another and to the teacher?	Randomly assigns small groups in which learners exchange concerns, experiences, and expectations they have about research
Developing Positive <b>Attitudes</b>	Volition and Personal Relevance	offer meaningful choices and promote personal relevance to contribute to a positive attitude?	Asks learners to choose something they could immediately research among themselves
Enhancing <b>Meaning</b>	Challenge and Engagement	engage students in challenging learning that has social merit?	Assigns research partners who will develop a set of questions to ask volunteers that will make a prediction about them
Engendering <b>Competence</b>	Authenticity and Effectiveness	create students' understanding that they are becoming more effective in authentic learning they value?	After predictions have been verified, asks learners to create their own statements about what they learned regarding research from this process

Note: Adapted from Resource D: motivational framework lesson plan, Ginsberg & Wlodkowski, 2009, p. 386, combined with the description on p. 37.

and (4) technological infrastructure and familiarity, which may become a barrier and an exclusion. The barriers they found were: (1) Focus on content development, not on learning experience design, with one-size-fits-all method of delivery; (2) Lack of evaluation (both needs assessment and formative evaluation) in real-world practice, due to the lack of budget and time; (3) Organizational structure and the role of instructional designers, who may be designing materials without seeing a learner. They argue that we must separate deeper ID principles from particular application in various settings; otherwise, we may misinterpret the principles do not apply cross-culturally because ID was born and so grounded in Western culture.

Barton, Novotny & Sargent (2011) points out the importance of “bicultural efficacy,” in their study of multicultural staff and a cohort of predominantly international students in an Australian university. Bicultural efficacy stands for a sociological concept of “an individual ability to develop and maintain interpersonal relations within two groups without surrendering his or her cultural identity (p. 250).” They pointed out that international students of Asian origin have been major drivers of demand for international education globally, who were regarded, in the past, to “come with learning experiences that favor rote learning, teacher-centered and dependent approach, which are now considered inappropriate in western education system and culture (p. 257, under cultural deficiency approach).” It has been argued that “learners from Confucian cultures are not simply passive or rote learners, but are active and strive to achieve a deep understanding of the course content (p. 257, under cultural proficiency approach).” Nonetheless, the learners who study under different cultural orientation need to become high in “bicultural efficacy,” in order to succeed without losing their own heritages. This may be applicable in any combinations of cultures, not only Western-Asian differences, but also between two Asian cultures, or between generations within a culture (that of teacher and students, for example), or between face-to-face classroom culture and that of distance education.

Yang (2011) proposed how to utilize technological solutions to foster culturally responsive teaching in online education. He pointed out four different elements of culture should be taken into consideration, which were (1) ethnic culture, where Confucian teaching emphasizes learning, respect teachers, being modest and critical, for example, (2) local culture, which requires examples and cases from the learners’ settings, (3) academic culture, as values, roles, attitudes, and behavioral patterns of teaching and learning, and (4) disciplinary culture, where mathematics and physics can be considered less culture oriented than history and education, for example. With the goal of learner-centered knowledge sharing and building in mind, he suggested five areas where technology can assist culturally responsive teaching: (1) Involving all students in the construction of knowledge, by asynchronous communication tools, so that the students can share resources, interaction and work collaboratively online, (2) building on students’ personal and cultural strengths, by Blogs and concept maps, to express understandings and to have self-reflection, (3) helping students examine the curriculum from multiple perspective, with role-play games, debates, and virtual field trips, (4) using varied assessment practices that promote learning, with online quiz, survey, e-portfolio, Wikispace, and (5) making the culture of the classroom inclusive of all students, with various technologies for wide range of activities with opportunities and assistance from teacher.

## **DISCUSSION AND CONCLUSION**

Although the above summary of literature review represents only a very small portion of what have been available in the literature of instructional design and technology and distance education, some issues can be identified. Which of the cultural dimensions are critical for consideration and adaptation? How do we adapt instruction to the cultural differences? What can be done to be more culturally sensitive when we design instruction and when we select learning modes or methods? From these questions, it is our hope to eventually derive a set of principles for designing instruction with cultural and social considerations to deal with diversity of stake holders, especially among students and instructors. Toward that goal, this paper has concentrated to locate some useful frameworks, which are described above. While making reference to these frameworks, and trying to locate more, it is our intention to try to come up with a set of design guideline that can be used when designing and delivering learning opportunities for diverse learners.

The notion of learner-centered design is not new in the ID field. From the traditional viewpoint, social and cultural differences can be treated within the audience analysis and contextual analysis in the design process. It may have been just so many options became available that we, as designers, are now better able to accommodate the diversity of learner culture. If we don't have this wide varieties of options for teaching, we may not need to know "small" differences among the learners, because they may only be considered to be environmental elements that are beyond our control. With so many powerful tools and options available, we are now capable of meeting the diverse needs of the learners. For this complex working situation, there is a need of a set of guidelines for the designers of instruction, thus our work continues toward the goal of providing such a set.

So many options for teaching and accommodating the needs of learners, at the same time, means that the learners must be trained to make the best use of what are available. In the past, one person may only be needed to socialize in one small culture. With those options available, it is needed for wider percentage of people to be trained to be functional in multiple cultures, beyond one's own, in order to secure more opportunities for learning and the life in general. The notion of "bicultural efficacy (Barton, Novotny & Sargent, 2011)" may be a new goal of educating next generations so that they may be able to feel comfortable in different and/or changing society and culture. Our goal would be, then, not only to accommodate for cultural diversity to make the learning environment comfortable to the diverse students, but also to provide opportunities for wider students so that they can nurture the understanding, tolerance, and ability to cope with the diverse cultures that are foreign to them in the beginning. The guideline that we will propose must take this "dual responsibility of educators (Parrish & Linder-VanBerschoot, 2010)" into consideration.

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## REFERENCES

- Barton, S. M., Novotny, D. & Sargent, J. (2011) Blending culture into learning: A toolkit developed for academics through learner feedback on culture and trust (Chapter 18). In M., Bhattacharya, N., Mach, & M., Moallem (Eds.), *Emerging technologies in learning: Impact on cognition and culture*. AACE, 241-257. [Available online] <http://www.editlib.org/p/39252>.
- Ginsberg, M. B. & Wlodkowski, R. J. (2009). *Diversity and motivation: Culturally responsive teaching in college* (2nd Ed.). Jossey-Bass.
- Parrish, P., & Linder-VanBerschoot, J. A. (2010). Cultural dimensions of learning: Addressing the challenges of multicultural instruction. *International Review of Research in Open and Distance Learning*, 10 (2), 1-19. [Available online] <http://www.irrodl.org/index.php/irrodl/article/view/809/1497>
- Prensky, M. (2006). *Don't Bother Me Mom--I'm Learning!* Paragon House.
- Rogers, P. C., Graham, C. R., & Mayes, C. T. (2007). Cultural competence and instructional design: Exploration research into the delivery of online instruction cross-culturally. *Educational Technology Research and Development*, 55: 197-217.
- Yang, Y. (2011) Understanding global learners and bridging cultural differences in distance and online education (Chapter 4). In M., Bhattacharya, N., Mach, & M., Moallem (Eds.), *Emerging technologies in learning: Impact on cognition and culture*. AACE, 57-71. [Available online] <http://www.editlib.org/p/39252>.