Culturally Responsive Online Learning Design

Donna DesBiens
ddesbien@gmail.com

Gail Morong
gmorong@tru.ca

March 2015

Learning at Intercultural Intersections
http://www.tru.ca/intercultural.html
Focus

Literature review to develop design guidelines for successful intercultural learning online

Guiding questions:
• What are key outcomes and indicators?
• What pedagogies may best support it?
• What design components may be critical?
We did a broad environmental scan of the related research literature, including refereed journal articles, books, conference presentations, newsletters and blogosphere commentary with these guiding questions in mind. In this presentation, we focus on key research findings on supporting pedagogies and design recommendations.

But first we’d like to share a good description of interculturalization / internationalization outcomes we found in a recent issue of University Affairs magazine. Beyond economic motives, most Canadian university initiatives aim to develop ““global citizens with attributes such as openness to and understanding of other worldviews, empathy for people with different backgrounds and experience to one’s own, the capacity to value diversity, and respect for Indigenous peoples and knowledge.”

To date, about 42% of Cdn universities are defining intercultural learning outcomes relevant to their local contexts (AUCC, 2014). Thompson Rivers University (TRU) is in that group.
Culture is the sum total of all learned behaviour, passed down the generations... “and it exerts a profound influence on our behaviour, attitudes, how we solve problems, how we interact with each other as social beings, the values we carry with us, and the spiritual beliefs we hold.”

Smith & Ayers, 2006
There are many different definitions of culture across the disciplines. Three particular definitions resonate for us.

First, the anthropological view of culture as an evolving socially constructed reality based on shared values, ideas, concepts, and rules of behaviour (Hudelson, 2004).

We are all cultural beings. Culture is an integral part of our experiences in all life contexts and is reflected in how we see the world and our relationships with others.
Culture – Pluralist View

There is as much diversity within cultural groups as there is between them, and cultures evolve over time.

Ess & Sudweeks, 2005; Toll, 1999

Quality education must include lessons of pluralism – i.e. respectful dialogue about differences and negotiation of a balance of interests in curriculum, pedagogy, and technological fluencies.

Bali & Sharma, 2014; Ghosh & Abdi, 2013
Second, it’s important to recognize the many diversities within cultures, ever evolving over time. There’s no such thing as monolithic national or ethnic cultures.

For example, Canada is an uber-diverse nation and BC is its most uber-diverse province. Canada’s people include over 200 ethnicities and home languages. Roughly 20% of the population identify either as francophone, allophone, foreign born, visible minority, or second-generation Canadian, and about 4% as Aboriginal (StatCan, 2011). BC is home to over 200 distinct First Nations communities; 30% of the population is foreign born, and 25% identify as visible minorities (BC Newsroom, 2014).

This diversity is reflected in the student population, along with increasing numbers of international students. Because most Canadians do their post-secondary education in Canada, ‘internationalization at home’ is a major strategy to develop intercultural competence; and in this, online learning is seen as a key support (AUCC, 2014).

Of interest, TRU’s aim to develop “mutual trust, respect and integrity of relationships” among its diverse Aboriginal, local, regional and international communities reflects a pluralist view of cultures and interests (Academic Plan, 2011).

In learning design, we need to develop new ways to respond to new cultural realities.
Online Learning Culture

• A social and cultural phenomenon in its own right
  Goodfellow & Hewling, 2005

• Idiocultures – unique, small group realities constructed on ‘a system of shared knowledge, beliefs, behaviours, customs and experiences’ that emerge in the transient, fluid Internet context
  Gunawardena, 2014
Third, with the rise of Internet communities in social media, informal learning networks, and tech applications in formal education, online learning spaces are new public ‘third places’ that generate distinct cultures of their own.

Recent research shows that new ‘hybrid’ identities / cultures are being negotiated in online learning contexts – cultures that go beyond the plural cultural frames of reference that students bring (Ess & Sudweeks, 2005; Hewling 2005; Hewling & Goodfellow, 2005; Goodfellow, 2008).

Gunawardena qualifies online learning cultures as idiocultures, because of the unique, shifting nature of Internet communities. Sometimes learners do only one course with a particular group. Sometimes they do several courses with a program cohort, in which some drop out and others join midstream. This view is endorsed by online learning culture proponent Goodfellow (2008).
Online Learning in Action
A wide variety of online learning options have evolved over the past 20 years, e.g. fully online independent, self-directed courses, cohort based programs and MOOCs; and numerous forms of blended online and face-to-face learning.

Technology supported learning enables much more interaction with people in other regions of the world than we had in the past. Besides that, relating to learning and each other through computer screens by itself is a big cultural shift for all participants.

These changes call for new ways of understanding and communicating across differences and learning to relate in a relatively new medium.

**Image Credits**
(Clockwise L to R)

- Creative Commons Student with by Courtcourtwest is licensed under [CC-BY-SA-4.0](https://creativecommons.org/licenses/by-sa/4.0/)
- Creative Commons Girl Blogging is licensed under [CCo 1.0](https://creativecommons.org/licenses/by-sa/4.0/)
- Creative Commons Student using Laptop by techsrc2371 is licensed under [CC-BY-2.0](https://creativecommons.org/licenses/by-sa/2.0/)
- Creative Commons Yplp pax by Samar Saeed Akhtar is licensed under [CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/)
- Creative Commons PVUSD student using GoogleApps by Jeff Billings is licensed under [CC-BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/)
2 Main Research Paradigms

- **Social Equity**
  Focus on ethnocultural influences; i.e. cultures students **bring** to online learning

- **Online Learning Cultures**
  Focus on how learners ‘negotiate a new landscape’ i.e. culture **all participants create** in online learning
Two main research paradigms surfaced in our literature review.

The ‘traditional’ social equity paradigm explores effects of dominant culture educational practices on culturally diverse students, mainly via research on interpersonal communication dynamics. The aim is to develop more culturally responsive pedagogies, learning resources, activities and assessments etc. Gunawardena (2003, 2014) is likely the best-known proponent, but many others have done valuable research within this paradigm too.

The more recent online learning cultures paradigm explores how institutional practices regulate emerging cultures in VLEs, by research on design, pedagogies, tech and flexible learning pathways etc. (Goodfellow & Hewling, 2005). The aim is to manage ‘increasingly unpredictable configurations of participants’ via research on emerging identities, value systems and communications, in context of both contemporary and inherited cultural relations systems (Goodfellow, 2008).
Cultural Influence on Values
We chose this image to show how people often think about culture in day-to-day life.

It’s also a great illustration of value convergence and divergence points in different cultural contexts. Maybe it also reflects the influence of global Internet culture.
New Learning Landscape

Creative Commons Web 2.0 Communication by Joan M. Mas is licensed under CC BY-NC.2.0
We really are living in a brave new world. Communication, trust and relationship building are very different online than in the physical world (Spencer-Scarr, 2010).

For example, in online learning, we typically set up structured activities like introductory posts using photos and gravatars etc. for students to get acquainted and try to develop trust that will support a sense of learning community.

The personas we ask students to create may be true reflections of who they are – or not. Online, it can be harder to tell who you’re actually talking with than in the physical world. Of course, in the physical world people can put up facades too, but making trust decisions online is usually less familiar territory.

Online, we now have great audio-visual tech, like Skype and Google Hangouts, as well as text and still images. But Web 2.0 tools mediate relational learning in ways we don’t yet fully understand.

In design, we need to recognize that we’re learning a new way of being in a new environment and people need appropriate preparation, especially in intercultural contexts.
Social Equity Paradigm
Key Findings & Recommendations

Consensus on participatory, experiential methods
- Engage students in curricular decisions
- Authentic assessment enables contextual learning transfer
- Experiential learning key to develop empathy and skills

Common expects for debate & collaboration insensitive
- Offer options, e.g. informal forums and negotiation

Dominant cultural bias pervasive in all curriculum aspects
- Variety & flexibility to address multiple diversities
- Critical thinking about embedded assumptions
Constructivism, as expressed in participatory, experiential methods that emphasize learner agency and learning applications in various real world contexts is generally endorsed from culturally diverse viewpoints in Western academia (Battiste, 2002; Campbell & Schwier, 2014; Cuseo, 2012; Gunawardena et al., 2003; Gunawardena, 2014).

However, the body of research shows that not all constructivist methods translate well across diverse cultural contexts. Many studies show that the expectation for critical debate can be a learning barrier, especially for students using non-native languages, in online learning environments low on non-verbal social cues. Collaboration expectations also can be a source of conflict, as students from different cultural backgrounds define collaboration in different ways.

Indications are that providing informal as well as formal discussion forums, and alternative communication modes, like negotiation, to stimulate critical thinking are helpful methods. Audio and video technologies can be used to add social context cues in online communications.

For learning design, variety and flexibility in resources, methods, activities etc. is part of the answer. Taking off our cultural blinders to generate new ways to support critical thinking and group work is more challenging.
Social Equity Paradigm
Key Findings & Recommendations

Intentional groups enable direct experience of differences
• Provide guidance, moderation and time supports
• Consider cooperation vs. collaboration

Feelings, attitudes & behaviours vital, as well as cognition
• Design ways to develop and assess affective learning
• Address ethics in relational learning

Perceptions of social presence & tech are culturally mediated
• Engagement methods, tech info & levels of online privacy
• Affect and high vs. low context communication matter
The research shows that **experiential learning** is necessary to develop empathy, appreciation and adaptation strategies for different cultural norms, and that effective intercultural learning requires support, such as **intentional groups** and **moderation** (Cuseo, 2012; Toll, 1999).

Learning from the research, in design we should also consider scaffolding group work more carefully. What is the ‘right’ timing? When is collaboration necessary – vs. automatic?

It is no surprise that **relational learning** is seen as critical to intercultural learning. As our invited speakers Darla Deardorff and Michelle Pidgeon put it, intercultural learning is about relationship of self to other and community interconnectedness. This means we need to develop ways to address affective learning and ethics in our learning designs.

In online design, relational learning has another level of complexity because people need to communicate through digital personas. Current research suggests that developing **social presence** may be an avenue to support trust building, conflict negotiation and help-seeking in online learning environments (Gunawardena, 2014).
Online Learning Culture Paradigm
Key Findings & Recommendations

Many learners have multiple cultural identities
• Recognize diversities within cultural groups

All learners are negotiating a new cultural landscape
• Provide guidance, moderation, and time supports
• Explore successful learning on informal Web2.0, incl. role of affect

Negotiation is mediated by implicit expects and practices
• Make expectations explicit; invite dialogue
• Examine impacts of design, tech, flexibility levels etc.

Cultural biases permeate pedagogies
• Reflect on design / rationales – reappraise why collaboration
• Explore local repurposing possibilities of global learning products
Let’s think about the points being made here. We live in a mobile world. A new cultural landscape is evolving daily on and offline. It’s important to recognize diversities and the newness of online culture to provide supports on a human level, as well as in curriculum design.

There’s convergence in findings and recommendations between the two paradigms, although the online learning culture stream is generally is more tech focused. Both recommend more critical thinking about practices, holistic approaches, open dialogue, and ‘other’ contexts.

Let’s look at Web 2.0 for a moment. In online learning, tech issues like bandwidth, connectivity, software versions, access, and data plan costs are concerns. Privacy is another major issue. So is the one-way flow of ‘Western’ education culture.

Tech issues confound ‘experts’ as well as students. Crichton and Naseem (2011), reporting on an international faculty collaboration, noted an emerging power concern in the fact that whoever had the best bandwidth became the de facto leader. This team found that asynchronous tools like gmail, Google Docs, bookmarking and discussion forums were used more than the university supported tools like ElluminateLive to overcome various access and time zone issues.
Online participation is a cultural narrative that shapes both the ideology and practices of community that construct participants’ identities as learners.

Goodfellow & Hewling, 2005

Online collaboration is any sharing “from participation on a discussion board to working in small groups.”

Palloff & Pratt, 2005
Example: In a UK – Australia inter-university study Goodfellow & Hewling (2005) found large differences in online participation patterns in culturally diverse, online EdTech graduate classes. Rather than looking at participant cultural origins to explain the differences, they chose to explore institutional differences in the rhetoric around participation. Although participation was explicitly valued by both universities, at one, it was presented as a compulsory social responsibility, and at the other, as an optional learning support.

They propose the common constructivist expectation that everyone benefits from collaboration reflects cultural bias, and further, that participation is often mistakenly equated with collaboration.

Participation is often required as part of assessment and grades. Let’s think about what this may mean:

• Does this engage students in learning or does it dictate learner identities and cultures?
• How does compulsory participation / collaboration fit with other constructivist aims of learner agency and flexibility in knowledge sharing and creation?
C-Words

Key Skills

Create
Build Consensus

Analyze
Coordinate

Informal Chat to Critical Discourse

Communication

Cooperation

Collaboration
We tend to use these ‘C-Words’ interchangeably, and as if they are synonymous with constructivism.

We need to think more critically about language, intended learning outcomes and align designs accordingly.

If we consider these ‘C-Words’ in terms of Bloom’s Cognitive Taxonomy, we can see that collaboration is a lot harder and more time demanding than cooperation, and both require more time and effort than simple communication.
C-Word Metaphors

- Hola, ¿Qué tal?
- Bien, y tú?
Communication spans interactions from informal chat to critical debate.

Cooperation involves divvying up tasks, sharing resources and playing position to support each other, like a sports team. Individual products usually carry at least equal weight as group products in assessment, so individuals can also achieve independently.

Collaboration involves greater interdependency, joint decision-making and ‘getting in tune’ to create something together, like a musical group. People usually need to know each other well to collaborate well; finding consensus takes much time and effort than coordinating related tasks. Often group products carry the most weight in assessment, so the stakes and stressors are higher.

**Image Credits** (Clockwise L to R)

Creative Commons Canada women’s soccer team medal ceremony 2012 Olympics by Joel Solomon is licensed under [CC BY2.0](https://creativecommons.org/licenses/by/2.0/)

Creative Commons Remember Shakti by Sven.petersen is licensed under [CC BY-SA-3.0](https://creativecommons.org/licenses/by-sa/3.0/)

Creative Commons Dibujo by Envose is licensed under [CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/)
Online Design Models

We need light, nimble models for increasingly unpredictable global online learning environments.

- Collaborative learning
- Experiential learning
- Agile / flexible design
- Creative LMS designs
- ADDIE principles

Bates, 2015
Bates says there is no one ‘best’ design model; choice depends on context. But some models are better for online learning environments in the context of increasing diversities in a complex global knowledge economy.

He reviews several models in his open text on Teaching in a Digital Age. The five we have listed here represent models in use or in development in many Canadian post-secondaries.

A few comments in light of the research:
• The collaborative learning model needs some rethinking.
• Creativity in LMS designs is constrained by institutional practices, as well as tech limits.
• Agile/flexible design is pretty new for many people.
‘Agile’ 21st C Design Examples

c-MOOC
• **Aggregate**: Resources, activity & assessment options etc.
• **Remix**: Synthesize learning and diverse views
• **Adapt**: Repurpose, create, interpret and translate materials
• **Feed forward**: Critical thinking, feedback and learning process

*Downes, 2013 on CCK-08*

OERu
• Flexible pathways, open networks and repurposing open content

UBC’s ETEC 522
• Student involvement in course design and creating the learning environment

*Bates, 2015*
Downes is describing the 4 major design activities he and George Siemens used the Connectivism & Connective Knowledge (CCK 08) MOOC. The gist is to provide flexible choices and encourage learners to engage in all the learning processes described.

The Open Educational Resources University (OERu) is an international collaboration dedicated to creating free, flexible pathways for learners worldwide that are eligible for formal academic credit. You can find detailed information about OERu at: [http://wikieducator.org/](http://wikieducator.org/) While you’re there, check out the Art Appreciation and Psychology courses, which Gail worked on.

For more information on other agile characteristics of UBC’s ETEC 522 course, see Bates’ review in his [http://opentextbc.ca/teachinginadigitalage/](http://opentextbc.ca/teachinginadigitalage/) The course description is available at: [http://met.ubc.ca/etec-522/](http://met.ubc.ca/etec-522/)
Design Recommendations

Flexible learning

• Invite learners to create ed pathways based on prior knowledge and experience, interests and learning needs  
  Downes, 2006; Porter, 2011

• Give choices in schedule, resources, activities, assmts, etc.  
  Goodfellow & Hewling, 2005; Gunawardena, 2014

• Engage learners in curricular decisions, moderating and creating learning environments  
  Evans & Haughey, 2014
Flexible learning is a central recommendation that flows through the body of educational research related to both online and intercultural learning contexts.

There’s a lot of conversation in curriculum design communities about flexible learning, but the principles sometimes get lost in the mix of proprietary institutional practices, pedagogical biases and human change dynamics etc.
Design Recommendations

Context

Effective design must address orienting (before), instructional (during) and transfer (after) learning contexts

Tessmer & Richey, 1997

Modify courses for local cultural content, pedagogical context, technology and quality assurance

Pannekoek, 2012

OER Reusability Paradox – Open licensing is key

Wiley, 2013
Relevance of learning to participant contexts is another key theme in the research.

The first two points are fairly self-explanatory. However, we’ll mention that there’s more to Tessmer & Richey’s systemic context model. The 3 time contexts noted all involve learner, environment and organization factors, which in turn each involve physical, social, instructional and spatial factors. So, effective design calls for some serious thinking.

The third point may be less obvious, so here’s a little background on Wiley’s Paradox: The less context Open Educational Resources (OERs) have, the easier they are to reuse. But the less context, the less pedagogical effectiveness. For example, it may be easy to share the science on how to genetically modify a seed. However, without context around the intended purposes and effects of the science, people cannot make informed decisions about appropriate local uses.

Wiley proposes that open licensing of OERs to allow repurposing for local contexts is one solution to the paradox. Dalziels, Conole and others propose more open sharing of information about design rationales and applications for OERs to support potential re-use decisions.
Quality in Online Design

“Teaching methods that successfully help learners develop the knowledge and skills they will require in a digital age.”

Bates, 2015

Learning outcomes are a Western standard quality measure.

• How do different cultures interpret and measure quality?
• Do we need plural quality standards?

Latchem, 2014
We like Bates’ definition of quality in online design. Its simplicity opens up space for plural approaches.

In Western education, government and various other organization contexts, outcomes have become a standard quality measure. The idea is that they make qualifications more transparent for students, educators, qualifying boards, and employers.

We think Latchem asks good questions about how applicable this measure is across diverse cultural contexts. We don’t know answers to these questions but have noticed some interesting views emerging in the literature. We’re interested to hear your thoughts and ideas in response to these questions.
Cultural Criteria in Design Rubrics

Canadian Recommended E-Learning Guidelines (CanREGs)
• Flexible applications for diverse contexts
• Responsive to learner diversity in LOs, content, methods, assmt & credentials
• Learning technologies responsive to diverse learner needs & contexts

Alberta eLearning Rubric
• Freedom from cultural bias; plain language
• Universal Design principles
• Variety in methods and flexible pathways
• Learner contributions to resources

Quality Matters
• Materials present a variety of perspectives
• Accessible technologies
We examined how three commonly used design rubrics address cultural aspects of learning. The bold font indicates explicit criteria. The other bullets indicate criteria that can be extended to interculturalize curriculum.

**CanREGS** is recognized as the most student centred rubric (Latchem, 2014) and provides the most explicit criteria to address learner and context diversity.

The **Alberta eLearning Rubric** addresses cultural bias and language issues. It also promotes Universal Design (e.g. multi-modal learning; tech accessibility), variety, flexibility and learner input into curriculum, which research indicates are important in design for intercultural learning.

**Quality Matters** doesn’t explicitly address cultural aspects of learning, but include criteria that can be extended. This rubric also has the virtue of offering the most succinct guide to alignment of core course components.

All three rubrics are grounded in constructivist philosophy; all have value to support high quality course design – from a Western perspective. We need feedback from diverse stakeholders to learn how well these guidelines fit other cultural contexts, and if other criteria should be included.
Some Design Gaps

• Explicit intercultural learning outcome(s)
• Plural pedagogies
• Supportive e-moderation
• Multiple perspectives in assessment
• Privacy and security in online contexts
Most, if not all, disciplines call for some **intercultural learning outcomes** in today’s mobile and connected world. The idea is to infuse intercultural learning opportunities in relevant ways.

We need to rethink the current constructivist model, include more holistic perspectives and Universal Design principles, and become more flexible.

Designers must become **connected learners** themselves to consult intelligently on emerging online learning environments (Campbell & Shwier, 2014). **Effective e-moderation** skills and mentoring students in moderation skills are important (Evans & Haughey, 2014).

We have self, peer, group, instructor and authentic **assessment models**. But, we still need to develop ways to assess affective learning. We also need to increase our understanding of ‘other’ ontological, epistemological and value concerns to know if plural quality standards are needed.

To improve **privacy and security**, we need to develop ethical guidelines on technological choices in design. Bates (2015) suggests we consider student legal rights, institutional policies and disciplinary ethics, as well as tech characteristics.
Salmon’s e-Moderation Model

The Five Stage Model by Gilly Salmon is licensed under CC BY-NC-SA 4.0
Gilly Salmon’s online moderation model is recommended by Evans & Haughey (2014), Mackness et al. (2010) and others to support scaffolded technology learning and relationship building processes in a simultaneous way.

Evans and Haughey also suggest sharing moderation responsibilities with students.
Neuman’s Affective Learning Taxonomy

- **Identification**: Names, recognizes
- **Clarification**: Describes, sources
- **Exploration**: Implications, inconsistencies, alternatives
- **Modification**: Alter, modifies, accommodates, or assimilates
- **Characterization**: Identification, affective, cognitive, and behavioral consistency

*K. Neuman Allen & B. Friedman, 2010*

Used with permission.
These authors say the affective domain is likely the most challenging teaching area because it integrates cognition, behaviour and emotions. In the human services, learning in values, ethics and emotions is critical. Wouldn’t values and ethics be relevant learning in at least some aspects of all disciplines?

This taxonomy offers a way to overcome well-known challenges in developing and assessing affective learning. In a nutshell, the model synthesizes concepts from the Bloom, Krathwohl and Simpson cognitive, affective and behavioural taxonomies with values clarification research. However, the authors propose a couple of significant perspective changes.

First, they point out that learning motivation and actual affective learning about feelings, attitudes and values are confounded in the literature, and in Krathwohl’s taxonomy. This model focuses only on actual discipline-relevant affective learning. Motivation and engagement concerns are set aside, as they are generic to all teaching/learning contexts.

Second, they redefined affective learning categories to suggest design strategies that can support scaffolded development and consensus on assessment criteria based on explicit disciplinary values.
Cultural Safety

Experience of respect, inclusion, empowerment
Culturally responsive online design aspires to create cultural safety for all participants. Maori and Canadian Indigenous peoples developed the concept of cultural safety to meet critical needs in their personal life contexts. But, wouldn’t it be great for everyone to experience respect, inclusion and empowerment in their learning experiences?

Steps on the cultural safety continuum:
• Awareness of difference – recognizing one’s own and others’ cultural lenses
• Respect for differences
• Development of intercultural knowledge and skills

Cultural safety includes recognizing diversity within populations, sharing power and creating “an environment of equal engagement between different ways of knowing” (NAHO, 2008, p. 13). The Aboriginal Education Resources Centre at TRU makes Cultural Safety learning pathways freely available.


References


References


References


References


Except where otherwise noted, this work is licensed under [CC BY-4.0](http://creativecommons.org/licenses/by/4.0/)