# Designing Online Instruction for Developing Cultural Intelligence (CQ): A Report from a Classroom-Based Workshop

Peter W. Roux Saga University, Kumamoto University, Japan peteroux@cc.saga-u.ac.jp

#### Katsuaki Suzuki

Kumamoto University, Japan ksuzuki@kumamoto-u.ac.jp

Online learning continues to expand globally, increasing demands for educational materials that are sensitive and adaptive to learners from diverse cultural backgrounds. The current project aims to construct a workshop series that incorporates theory and practice from the fields of instructional design (ID) and intercultural learning. As part of an ongoing research initiative, preliminary findings from an initial classroom-based workshop, aimed at exploring the development cultural intelligence (CQ) with a diverse group of learners at a Japanese university are presented here. The focus is to report on the foundation of the initial design which includes a synthesis of cultural learning content with widely used models in the ID field. In addition, results from the application of this design enabled an audience analysis that is presented together with general observations and participant feedback. Findings are discussed with a view to adaptation of procedures and materials for the development of intercultural competence or CQ.

Keywords: Cultural intelligence (CQ), Experiential learning, Japan, Instructional design, Intercultural competence

# Designing Online Instruction for Developing Cultural Intelligence (CQ): A Report from a Classroom-Based Workshop

Online learning is now a global phenomenon. Governments, corporations, education systems and companies worldwide increasingly make use of some form of blended learning to educate, train and develop their members and students – learners who may be spread over several different locations and time-zones, or pursuing education in a foreign setting. This increasing diversity requires a consideration for learning materials and methods that are culturally relevant, adaptive and informed about the potential impact of cultural diversity on the learning process (Clem, 2004).

Since culture is central to the meaning-making process, there is clear incentive for instructional designers to be cognizant of their learners' cultures and how this diversity might manifest in learning pathways (Parrish & Linder-VanBerschot, 2010; Thomas, Mitchell & Joseph, 2002). Instructional designers can successfully employ existent theory to understand learner diversity: a study (Thomas et al., 2002) utilizing the ADDIE model for instance, demonstrated that a sensitive design can safeguard against the injection of cultural bias into the learning process. Nevertheless, the area suffers from a shortage of research (Clem, 2004; Gunawardena, Wilson & Nolla, 2003) and often relies on frameworks from other disciplines (Rogers, Graham & Mayes, 2007). It has even been referred to as 'culturally blind' (Henderson, 2007, pp. 131-2) following a critical investigation of global e-learning practices.

Cultural predispositions influence the way learners perceive, interpret and respond to their educational environment. Since culture incorporates ideas about race, ethnicity, nationality, religion, class, gender, values, traditions, language, lifestyles, as well as workplace and academic cultures, it implies that e-learners and e-teachers belong and participate in more than one culture at any given time in the learning process (Henderson, 2007). As international education expands, students need to navigate an increasingly multicultural reality with the requisite *intercultural skill* – a trend that is not likely to diminish any time soon. In Japan where our investigation is situated, tourism continues to grow, student populations are becoming more diverse and companies increasingly require foreign sojourns from their workforce – trends that partially triggered the current study.

Cultural intelligence (CQ) is a recent theoretical development that has shown promise for investigating and understanding intercultural learning and effectiveness. CQ describes an individual's capability to function effectively

in situations characterized by cultural diversity (Ang, Van Dyne & Tan, 2011). Having CQ means utilizing four complementary capacities embedded in a personal intelligence: metacognitive, cognitive, motivational, and behavioural abilities that interact to help navigate the socio-cultural environment (Ang & Van Dyne, 2011). Although the development of CQ theory has offered useful understandings of this skill set, MacNab, Brislin & Worthley (2012) point out that there are few specific models for teaching people how to understand and develop the capacities implied in raising CQ. Research has suggested that the experiential learning approach to CQ education, training and development are effective (Ng, Van Dyne & Ang, 2009) and that university participants are ideal for this pedagogical method, (MacNab et al., 2012). We introduce the concept of CQ here with a view to later investigations since it shares theoretical roots with educational theory, the learning sciences and instructional design (ID).

Reporting the first trial, the current paper presents findings of the attempted theoretical synthesis and application of the conceptual framework. We explore in a limited fashion how the methods and means available in the field of ID and the learning sciences can be combined with cultural theory to inform the creation of culturally sensitive and adaptive ways of learning. Four goals operationalize our ideas: (1) to design a workshop for a multicultural audience that draws on a synthesis of ideas from the fields of learning theory, ID&T and cultural theory; (2) to conduct the workshop and gather feedback for audience and data analysis purposes; (3) to consider whether, and how, the relevant theory could be applied to support the development of CQ; and finally, (4) to briefly consider the future design implications and adaptations of these methods and materials for CQ development. Findings are discussed with a view to future iterations and its proposed benefit to intercultural learning.

# **Research Design, Methods and Procedures**

The initial exploratory workshop combined local Japanese university students with several foreign student sojourners. We offered a voluntary, once-off workshop where students were invited for an intercultural learning experience. Research shows that motivation affects whether and to what extent people will direct energy to learn and understand about other cultures (Leung, Ang & Tan, 2014), so our call for voluntary participants was aimed to attract students who had a self-identified motivation for intercultural learning. We further reasoned that combining students from across faculties and programs would draw on a variety of interests and enhance the cultural and learning diversity in our workshop.

We approached lecturers within the General Education Faculty – who typically teach subjects in the humanities, and mostly teach in English – to invite students to the workshop. The same invitation was displayed on the campus terminal's main announcement page. The 90-minute workshop drew a multicultural audience of 47 participants from 5 faculties, ranging from freshman to post-graduates. Groups of 6-8 students were arranged, making sure that each were sufficiently diverse. Sixty-eight percent of participants were Japanese, with other large groups from Thailand and Korea, while a further 3 south-east Asian countries were represented. Only a marginal proportion identified as European and female students constituted the majority (73%). Nine different home languages were reported, and self-report measures indicated that most students had use of a second language; in most cases, English.

#### Workshop Design I: Considerations for a Theoretical Synthesis

To create a basis for intercultural learning, we considered a theoretical approach that could support initial and later explorations and allow for future improvements. Accordingly, we designed a workshop template (Figure 1) to incorporate the ADDIE model (see Molenda, 2003), the ARCS model (Keller, 1997) and the Experiential Learning model (Kolb, 1984). Given that this was a preliminary step, the CQ model and theory was not explicitly incorporated here; mostly to avoid additional complexity at this early stage, but also to first establish an ID foundation to which broad cultural ideas could be attached in an experimental manner as refinements were introduced.

Figure 1 shows the experiential learning model (Kolb, 1984) that informed our design thinking and subsequent methodology. This model has proven success ratings in intercultural training and learning (Joy & Kolb, 2009; Kurpis & Hunter, 2017), and demonstrated effectiveness in CQ training and research (Barnes, Smith & Hernández-Pozas, 2017; MacNab, et al., 2012; Ng, Van Dyne & Ang, 2009). As a pedagogical approach in university courses, the model has shown support for developing intercultural awareness and effectiveness in student populations (Barnes et al., 2017; Fischer, 2011; MacNab et al., 2012). For current purposes, and as figure 1 shows, placing the experiential learning model alongside two ID models (ADDIE & ARCS) allows their individual components to be considered for an associative effect.

Combining models in this way injects the ARCS model's motivational effects of systematic design on learning (Keller,

1997; Keller & Suzuki, 2004), whilst simultaneously keeping track of the broader steps involved in the design process that the ADDIE model advocates. Using the models in conjunction thus helps to sustain an awareness of both the macro- and micro levels of the design process: the ADDIE model broadly acting as an 'organising principle' (Molenda, 2003, p. 36) and the ARCS model ensuring that motivational aspects are incorporated into the learning process. The dynamic nature of the experiential learning model assists with the overall structure of the workshop and sustains an active element in the individual activities embedded within the workshop. Weaving together the elements of the three models thus guided the design process and gave rise to the eight points featured in the *synthesis* section of the framework, forming the workshop's outline.

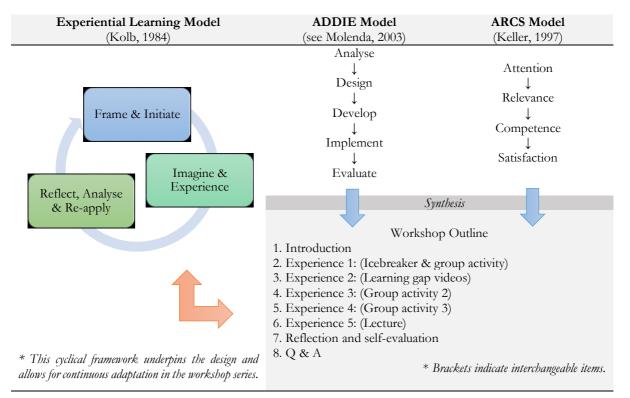


Figure 1. Constructing a workshop framework

A synthesis between the compatible ideas from the three mentioned models supported workshop learning content. Table 1 details the workshop elements in line with the steps specified by each of the ID models. To incorporate broad cultural aspects and ideas that would support intercultural skill/CQ development, learning materials featuring topical content (in this case, racism in apartheid South Africa) were explicitly created for experience-centred, classroom based learning targeted at our audience. The learning contents (steps 1 - 7) are viewed as interchangeable and fluid, in keeping with the vision that it should accommodate alternative topics to support intercultural learning for future workshops. The resultant framework thus constitutes a foundation for future refinement, re-application and development.

Table 1

	ADDIE Model		ARCS Model	<b>WORKSHOP CONTENT</b> Should I care about RACE? Reflections on Apartheid South Africa	Ti me	Experiential Learning Model
	Setting, Description & Tasks		Descriptors	Detail of learning contents		Description
C	<b>Analyze</b> learning ontents & audience	Align goals & learning contents	Attention	1 Outline of learning contents	10	Frame and Initiate

<b>Design</b> how it is to be learnt	Mixed methods		2	Experience 1: Ice breaker Draw a cultural symbol –discussion & self- reflection	10	
<b>Develop</b> learning materials	Provided: Videos Hand-outs	Relevance	3	Experience 2: Learning-gap videos & self-assessment – discussion	20	
<b>Implement</b> in a real- world	Facilitate workshop	Confidence	4	Experience 3: 'Group Areas Act' – discussion	5	Imagine and Experience
context			5	Experience 4: The politics of opportunity' – discussion	10	
			6	Experience 5: Lecture	20	
<b>Evaluate</b> adequacy of learning	Evaluation of learning contents	Satisfaction	7	Self-evaluation and workshop evaluation Q ざ A	10	Reflect, analyze and re-apply

**Theoretical synthesis.** Conceptually, the steps of the ADDIE, ARCS and experiential learning models overlap or link in certain ways that assist the designer in connecting topical content (intercultural learning) with steps in the learning process. This understanding formed the bedrock of our synthesis. To illustrate using the ADDIE model, the *design* $\rightarrow$  *develop* $\rightarrow$  *implement* -sequence ties comfortably with the *competency building* component of the ARCS model if a link is provided through relevant learning content. A learning sequence can thus be constructed as follows:

designing, developing and implementing (following ADDIE)  $\rightarrow$  a culturally informative learning moment (experiential learning) can directly impact  $\rightarrow$  cognition and behaviour (in CQ terminology) to  $\rightarrow$  effect competency building (using ARCS terminology), thus supporting  $\rightarrow$  the development of intercultural effectiveness, or cultural intelligence (CQ).

Following this approach consistently, we fused intercultural learning contents with the ID models and theory, resulting in the workshop as outlined above. The experiential learning model informed the basic organisation of the workshop by anchoring corresponding steps in each of the relevant models.

#### Workshop design II: Methods and tools, goals and rationale

Building cultural competence is necessary for developing intercultural skill and research has shown that the acquisition of such capacities need to be intentionally developed through effective learning experiences (Berardo & Deardorff, 2012). At university level, this can be achieved through a combination of lectures, behavioural training and experiential approaches (Fischer, 2011; MacNab et al., 2012). Following completion of the basic framework, we gave more detailed attention to the workshop elements, the various activities and the rationale for their inclusion. To support and guide the actual implementation of these activities a set of paper-based materials were designed for student use. These were collected post-workshop to assist in audience analysis and digitized for research purposes using Google forms. We focus on the self-rating scales, group-based experiential learning activities (1-5) and final evaluation here.

**Self-rating scales** were devised to raise intercultural awareness and knowledge, broadly investigate learning styles and preferences, and to assist the audience analysis (Table 3). We generated questions 1-4 to raise student awareness and probe their learning preferences/styles, remaining cognizant of culture's complex interaction with learning styles (Joy & Kolb, 2009). Our intention was to get a sense of what students had in mind at the outset and to obtain a sense of any shifts or changes in these cognitions upon completion. Questions 6-10 aimed to gain insights into students' intercultural orientation, knowledge and interest, including ideas about race and racism. The self-report utilized a 5-point Likert-scale (1 – strongly agree and 5 – strongly disagree). Since cognition is considered an important aspect of cultural intelligence (Ang & Van Dyne, 2008) we reasoned that actively raising student awareness and providing relevant materials would support intercultural learning. The self-reports thus aimed to measure the impact of the workshop elements on participants' intercultural skill/CQ development. Evaluations of similar brief intercultural interventions embedded in university courses have been shown to have some effectiveness in raising intercultural awareness (Fischer, 2011; Kurpis & Hunter, 2017).

To cultivate and measure audience engagement we introduced a learning-gap activity accompanied by a self-rating scale. We reasoned that a game-like activity would be suitable given our experience-centred model and goals for learner engagement. Garris, Ahlers & Driskell (2002) note that certain elements of games, such as sensory stimuli, a personal challenge, control over effort, and sense of mystery can be employed to support learning. Typically, such elements activate curiosity and motivation to participate and continue, creating further interest and task persistence. To explore whether and how these aspects could be utilized in our workshop we introduced two short quizzes (one African-themed, and the other, South African). These were interspersed with topical video content to help raise cultural awareness, impart knowledge (facts, statistics) and provide material for discussion. Aided by group discussion during the workshop, these were aimed specifically at expanding participants' intercultural learning and assist in audience participation and analysis.

**Group-based experiential learning** activities were designed with the goals of learning with cultural 'others' in mind, i.e., activities that require students to think critically, are enhanced by diversity and draws on, or challenges existent skills. Such activities have been shown to have transformative potential (Barnes et al., 2017; MacNab et al., 2012). Five experiences (Table 1, points 2 - 6) were designed to increase participant engagement through topical content that supports intercultural skill development. The activities were staggered as follows: (1) an ice-breaker that had students introduce themselves by presenting a picture of a cultural symbol they valued through a picture they were asked to draw on the spot; (2) a learning-gap activity that combined group discussion with 2 videos about Africa and South Africa to impart knowledge and raise awareness; (3) an activity that introduced the laws of racial discrimination by arbitrarily assigning different levels of power to the groups in the class, which tied with (4) an activity that demonstrated the socio-economic gaps that the laws of apartheid caused in South African society; and finally, (5) a lecture that brought together these preceding activities with historical and factual explanation. Presented as a series of knowledge building blocks, these constituted a learning journey based on the initial framework.

**Final evaluations** consisted of a question and answer session with paper-based reflections and feedback. This was an opportunity for participants to take stock of the impact of the session, to re-think their initial opinions and adjust or confirm thoughts and ideas. This vital step also corresponds with the final dimension of each of the models employed here. Both the ADDIE and ARCS models advocate an evaluative component to help participants, teachers and researchers assess and reflect upon the outcomes of learning or participation (Keller, 2000; Molenda, 2003). Since motivation in learning fluctuates depending on degrees of stimulation and interest, which in turn affects persistence (Keller, 2000), the ARCS model's cognizance of satisfaction as a constructive end to the intercultural learning process is a crucial consideration. Likewise, experiential approaches are ideal for CQ development since the reflective component it advocates holds the potential for linking the gap between thought and action (MacNab et al., 2012), thereby completing the loop of a learning/training intervention. The main elements in our design thinking and subsequent methods and approach are summarized table 2 below.

#### Table 2

	Workshop elements	Goals & Rationale
0	Framework	→ To create a theoretical foundation using ID and cultural theory to support intercultural skill / CQ development
0	Self-rating scales (pre-/post workshop)	<ul> <li>→ To raise intercultural awareness</li> <li>→ To investigate and reflect on learning style &amp; preferences</li> <li>→ To assist in audience analysis</li> </ul>
0	Group-based experiential learning activities	<ul> <li>→ To enhance workshop engagement</li> <li>→ To increase communication between participants</li> <li>→ To support learning through doing</li> <li>→ To support intercultural learning</li> </ul>
0	Final evaluation	<ul> <li>→ To assess the workshop experience</li> <li>→ To assist in audience analysis</li> </ul>

Methods and rationale behind workshop elements

## **Results and Discussion**

Given our goal of exploring intercultural learning through the application of ID theory, the first result to consider is the effectiveness of the workshop in terms of intercultural skill gains by analysing participant self-evaluation, levels of engagement with learning content and final feedback. Secondly, certain results are highlighted for the purposes of audience analysis. Finally, consideration is given to the relative success of the workshop design features in relation to intercultural competence development.

#### Workshop impact and effectiveness

Comparative results (pre-/post workshop) of participants' self-rating scales are presented in figure 2. These display the type of shifts evident in participant preference during the workshop. The multiple values delineated in each bar (indicated by colour/percentage) allows for the stated preference in response to each question to be identified as a grouping, thus making it possible to see the shifts in audience cognition. Current limitations do not permit a full discussion of the questions but a few are highlighted to demonstrate effectiveness of learning content.

The first four questions aimed at gaining a sense of the learning styles and preferences of the participants. Joy and Kolb (2009) found significant cultural influences in learning styles, particularly for undergraduates. Their study showed that cultural influences relate to differences in respect of their reliance on concrete experiences versus abstract concepts in the way learning occurs, a useful finding for the experiential nature of our design. Perhaps most striking is the very mixed picture of preferences that the self-reflection surveys on learning styles delivered (Figure 2). This is also evident in the shifting pattern (depicted by the coloured bars) they exhibited in the self-reported measures pre-and post-workshop. This is not an unexpected result given the multicultural, multi-national audience and the inherent differentials in learning backgrounds. It is understood here as a strong indicator that *variety and difference* are key themes in the results, as is the *fluidity* and shifts in the expression of learner styles/preferences. We interpret the shifts in cognition during the session as positive, although we cannot extrapolate with any accuracy at this early stage. It is expected that these will likely remain important features of the future audience profile and is therefore incorporated in our design thinking.

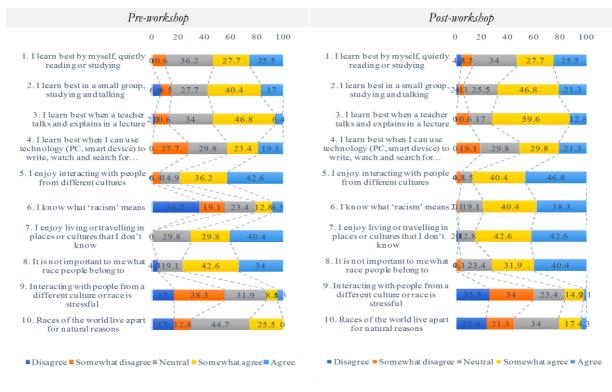


Figure 2. Participant self-reflection results from the workshop

Another observation here is that there was a clear shift away from a generally 'neutral' (grey) position towards a more positive 'agree' (blue) position when pre-/post-workshop results are compared. Since a neutral position can be associated with lower levels of engagement, this shift could indicate activated audience engagement. It might also

indicate that participants *reconsidered* their learning styles/preferences, thus raising their learning awareness. This is a cautious contention and we aim to validate this with future iterations. Joy & Kolb (2009) points to the many predictor variables and different levels of analysis that are required in this overlap between cultural- and educational systems.

Participant preferences regarding the use of different forms of technology in learning (results from question 4) are interesting to highlight, given that aside from projected videos used during the learning gap activity, the only other technology in use were smartphones that students used for translation. Given the linguistic diversity in attendance, it was an observable feature that students switched between multiple languages and used smartphone dictionaries or the internet to communicate. The types of media, applications and tools used for communication were unfortunately not noted down, but will be attended to in subsequent investigations. Learning preferences here also shifted markedly in favour of a more positive association with a technologically-enhanced way of learning. This could indicate that learners re-evaluated their previously held notions and is taken here as another sign of learning engagement – even if indirectly.

Observations here highlight the enormous potential of technology to support and *enable* intercultural communication (Merryfield, 2003) – an enhancement that we aim to investigate in relation to raising CQ. A key implication then is that linguistic variety and skill could potentially play a decisive role in workshop interaction, influencing patterns of interaction and subsequent intercultural communication, in turn exerting an influence (positive/negative) on the development of CQ. Effective communication strategies are stressed in the CQ model and Leung et al. (2014) acknowledge the need for further investigation in how these underlying processes combine to build intercultural competence.

Comparing the cultural and racial-awareness aspects of the survey (questions 5-10), results show promising signs of knowledge gains (question 6). In addition, participants' estimation of enjoyment arising from cross-cultural experiences (questions 5 & 7) also increased markedly, further supporting the notion of a positive experience during the workshop. The shifts evident in responses to questions related to some negative aspects of intercultural interaction (questions 8 and 9), signifies an active engagement with some of the cultural controversies. Results here show that the slightly more negatively loaded pre-workshop opinion shifted towards a more neutral position, i.e., participants' opinion became less polarized. Finally, given the shift away from neutrality in question 10, participants seem to conclude that there is some form of social organisation imposed through human association on the racial groups of the world, i.e., that our social organisations restrict or enable the movement of racial groupings. This question will need further investigation for clarification.

Achieving audience engagement and participation are key drivers in the transfer of learning and were central aims in our design. The positive results obtained from the learning gap activities (Figure 3) can thus be taken as signifying active learning engagement, supporting earlier findings and giving credence to the inclusion of this type of activity. Presented as an interactive quiz (students compared their respective performance in groups) this activity proved very popular, generating much discussion and interest. The positive gains and affective rewards reported here provide incentives for further investigation and ties positively with Simon's (1995, quoted in Garris et al., 2002, p. 441-2) contention that cognition and motivation should be simultaneously incorporated in ID research.

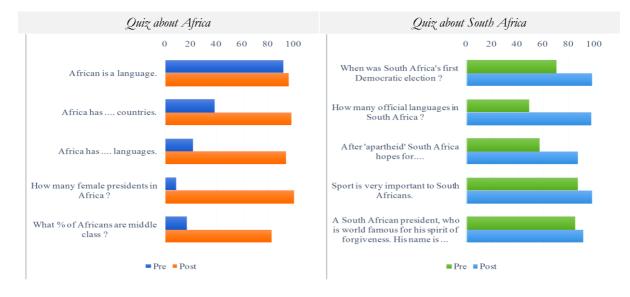
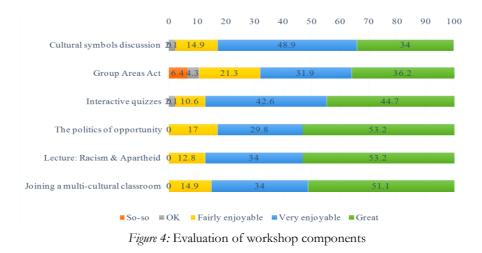


Figure 3. Comparing results from the workshop learning gap activity

Results from the final evaluation (Figure 4) rate the workshop's experiential learning activities and show a highly favourable audience response expressed in the levels of engagement, understanding and overall enjoyment of the contents. Most learners rated these activities as either 'very enjoyable' or 'great'. This is a very positive finding in terms of our framework and goals. Given that experiential approaches have been extensively applied in cross-cultural training and is proposed as appropriate and effective in developing high cultural intelligence (MacNab et al., 2012), we feel optimistic that continuing in this vein would be advantageous. The high ratings for the multi-cultural character of the classroom experience provides further support for future workshop development in the same vein.



In summary, results show marked shifts on the intercultural development measures we introduced; a positive finding considering our initial goals. These relate to shifts in perception, knowledge and opinion – signifying an actively engaged audience with indications that important elements in the intercultural learning process were activated. These findings tie with other studies that explored cultural influences in cognition (Joy & Kolb, 2009; Kurpis & Hunter, 2017).

#### **Audience Analysis**

As advocated by the ADDIE model, our workshop further attempted to gage *who* the participants are and *what* capabilities they have. Rogers, Graham & Mayes (2007, p. 212) note that instructional designers often underestimate the differences between themselves, their learners and the comparative contexts, unintentionally creating gaps between the way the instructional experience is designed and the expectations and capabilities of the learners. These reminders seem crucial in a cross-cultural environment, where differences exist on so many levels. Results from the present investigation are shown below (Table 3) in a summarized form, using an adapted version of a learner analysis found in Stefaniak & Baaki (2013). We rely on biographical data to highlight the audience characteristics and, referencing earlier discussion, include: (a) situational characteristics, (b) learning preferences and circumstances, and (c) motivation and attitude.

#### Table 3

Audience analysis of workshop participants

Gender: Both genders; female majority Age range: 18-23 Education: Undergraduate to postgraduate Ethnicity: Mostly Asian, majority Japanese; 9 nationalities represented. Language: 9 languages recorded; majority Japanese. English the most common 2<sup>nd</sup> language. Specific characteristics: Language flexibility, use of technologies, group, pair and individual work.

Learning preferences & circumstances: Variety of preferences but appears fluid. Multi-cultural environment positively rated.

Motivation and attitude: Responsive and engaged audience. Positive shifts in audience opinions and knowledge of cultural content indicate activated learning.

#### Workshop design features and the integration of ID models with cultural contents

- a) Results indicate that the application of the ARCS and ADDIE models are compatible within a larger framework of the experiential learning. Successfully harnessing the procedural strengths of these models and applying it to cultural learning contents created a foundation to enhance intercultural learning in a multicultural group.
- b) Inclusion of pre-/post-workshop self-rating scales added a vital reflective component to the design. Based on results presented earlier, this workshop element succeeded in terms of raising intercultural awareness, cultural knowledge, assisted in audience analysis and encouraged participants' awareness of their learning styles and preference.
- c) Experiential learning activities proved effective and popular: enhancing workshop engagement, increasing communication and activating learning.
- d) The final reflection and evaluation served its dual purpose effectively as a workshop assessment and audience analysis. We conclude that the initial goals for our framework design was achieved.

# Findings and Recommendations for Future Research

Findings are presented here with a view to adaptation of procedures and materials for the development of intercultural competencies which might also be enhanced by online tools and formats in future iterations of the project.

- 1. Audience learning styles and preferences displayed a mixed picture that warrants further investigation. Future instructional designs should thus accommodate difference in learners and learning backgrounds and remain flexible.
- 2. Smart technology supported linguistic variety and communication strategies during the learning process. Instructional designs should be cognizant of these aspects by incorporating it usefully in the learning framework, giving attention to specifically useful applications and tools.
- 3. Cultural learning contents were successfully integrated with ID theory and experiential activities, suggesting positive gains for intercultural learning and providing support for our synthesized framework. These findings warrant replication and further evaluation for iterative purposes.
- 4. Our results show that experiential learning activities enhance intercultural learning, supporting other findings reported here. These will be expanded and adapted for use in blended learning environments. where they might be enhanced by online components.
- 5. The audience analysis yielded a useful characterization of potential future audiences and we aim to retain this analytic feature for future workshop and training development.

### Conclusion

The expansion of global online learning continues rapidly, increasing the demand for culturally sensitive and adaptive learning materials. As part of a larger project that applies instructional design theory to develop cultural intelligence (CQ), the results of an initial, exploratory workshop with university students, aimed at the construction of a foundational framework was reported here. Findings indicate that the design of the framework was successful at synthesising ID models and theory with desired cultural content to support a workshop for a multi-cultural, multi-linguistic group of learners. An audience analysis recorded a broad variety of learning styles/preferences and noted that linguistic factors, supported by smartphone applications and online access impacted positively on intercultural communication patterns. High levels of audience engagement and positive evaluation indicated activated learning, thus supporting further investigation using the proposed workshop format and modus operandi in this context. Further research work will focus on a reiteration of the framework, re-application and fine-tuning of learning elements for validation, and development of more experience-based learning activities for exploring application and potential use in blended learning environments.

### References

- Ang, S., Van Dyne, L., & Tan, M. L. (2011). Cultural intelligence. *The Cambridge Handbook on Intelligence*. Cambridge, Cambridge University Press.
- Barnes, K. J., Smith, G. E., & Hernández-Pozas, O. (2017). What's Your CQ? A framework to assess and develop individual student cultural intelligence. *Organization Management Journal*, 14(1), 34–44.
- Berardo, K. and Deardorff, D.K. (2012). Building cultural competence: Innovative activities and models. Sterling, Virginia, Stylus Publishing.
- Clem, F. A. (2004). Culture and motivation in online learning environments. Association for Educational Communications and Technology, 183–192.
- Fischer, R. (2011). Cross-cultural training effects on cultural essentialism beliefs and cultural intelligence. *International Journal of Intercultural Relations*, *35*(6), 767–775.
- Garris, R., Ahlers, R. & Driskell, J.E. (2002). Games, motivation and learning: A research and practice model. *Simulation and Gaming*, *33*, 441–467.
- Gunawardena, C.N., Wilson, P.L., & Nolla, A.C. (2003). *Culture and online education*. In M.G. Moore & W.G. Anderson (Eds.), *Handbook of distance education*, 753 775. Mahwah, NJ: Lawrence Erlbaum Associates.
- Henderson, L. (2007). Theorizing a multiple cultures instructional design model for e-learning and e-teaching. In A. Edmundson (Ed.), *Globalized e-learning cultural challenges*, 130–153. Idea Group Inc. (IGI).
- Joy, S., & Kolb, D. A. (2009). Are there cultural differences in learning style? *International Journal of Intercultural Relations*, 33(1), 69–85.
- Keller, J. M. (1997). Motivational design and multimedia: Beyond the novelty effect. *Strategic Human Resource Development Review*, 1(1), 188–203.
- Keller, J.M. (2000). How to integrate learner motivation planning into lesson planning: The ARCS model approach. *VII Semenario, Santiago, Cuba*, 1–13.
- Kolb, D.A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice Hall.
- Kurpis, L. H., & Hunter, J. (2017). Developing students' cultural intelligence through an experiential learning activity. *Journal of Marketing Education*, 39(1), 30–46.
- Leung, K., Ang, S., & Tan, M.L. (2014). Intercultural Competence. *Annual Review of Organizational Psychology and Organizational Behavior* 1, 489–519.
- MacNab, B., Brislin, R., Worthley, R. (2012). Experiential cultural intelligence development: context and individual attributes. *The International Journal of Human Resource Management, 23*(7), 1320–1341.
- Merryfield, M. (2003). Like a veil: Cross-cultural experiential learning online. *Contemporary Issues in Technology and Teacher Education*, 3(2), 146–171.
- Molenda, M. (2003). In search of the elusive ADDIE model. Performance Improvement, 42(5), 34 36.
- Ng, K., Van Dyne, L., & Ang, S. (2009). From experience to experiential learning: CQ as a learning capability for global leadership development. *Academy of Management Learning and Education, 8*(4), 511 519.
- Parrish, P., & Linder-Vanberschot, J. A. (2010). Challenges of multicultural instruction: Addressing the challenges of multicultural instruction. *International Review of Research in Open and Distance learning*, 11(2), 1 19.
- 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(2), 197 – 217.
- Roux, P. W., & Suzuki, K. (2016). Designing instruction for developing Cultural Intelligence (CQ) Online: Preliminary explorations into experiential, intercultural classroom learning. *Proceedings of the 14th International Conference on Media in Education (ICoME) 2016.* Japan Association for Educational Media Study, 422 – 427.
- Stefaniak, J. E., & Baaki, J. (2013). A performance-based development system. Performance Improvement, 52(6), 5-10.
- Simon, H. A. (1995). The information-processing theory of mind. American Psychologist, 50, 507 508.
- Thomas, M., Mitchell, M., & Joseph, R. (2002). The third dimension of ADDIE: A cultural embrace. *TechTrends*, 46(2), 40 45.