

## Experiences in Postsecondary Education that May Lead to Cultural Intelligence: Exploring and Proposing Practices

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Cultural intelligence is among the top essential learning outcomes for college graduates. Despite the emphasis on internationalizing higher education and the increased culturally focused initiatives across campuses, fewer than seven percent of college-level students meet even basic standards for cultural intelligence by the time they graduate with a bachelor's degree. Research on the postsecondary experiences that lead to cultural intelligence is still rather limited. This paper, through an extensive review of the literature, presents the context of global education in higher education, discusses cultural intelligence and its dimensions, and presents recommendations on ways to infuse culturally intelligent practices inside and outside of postsecondary classrooms.

The global context today is characterized by rising diversity where cross-cultural exchanges have become common. Engaging in cross-cultural interactions is no longer restricted to those who travel abroad or live in big urban centers characterized by great diversity. Diversity is everywhere, and individuals from multiple countries, cultures, and languages are present in most social and professional contexts. This multicultural context forces us to reflect on the competencies one needs to engage in successful cross-cultural interactions. According to Maznevski (2008), the success of those cross-cultural interactions depends on each person's level of cultural intelligence (CQ).

Having a global mindset to function effectively in a global context is a skill considered essential to all professionals today (Dyne, Ang, & Livermore, 2009; McCrea & Yin, 2012; Yoshimura, 2012) that serves as the competitive advantage (Egan & Bendick, 2008) for the global professional. The question then is, how do we help ourselves and others become culturally intelligent? As an educator, I often wonder about the types of pedagogies and experiences I must bring into my postsecondary classrooms to promote deeper understanding of cultural differences, to better prepare my students for the cultural challenges in their future career, and to help them become culturally intelligent. The literature on the specific experiences that lead to cultural intelligence in postsecondary education is limited (Crowne, 2008; McCrea & Yin, 2012); hence, the purpose of this paper is to inform faculty, through an extensive review of the literature, as to what research has identified as the key elements of cultural intelligence and the types of experiences that may affect college students' global mindset and cultural intelligence. This article starts with a review of how global education has been infused in the higher education curriculum. It then explores cultural intelligence, its meaning and dimensions, and presents current practices toward cultural intelligence. Finally, the paper provides recommendations for additional

experiences that may lead to cultural intelligence in postsecondary classrooms and recommendations for future research on CQ.

### Framework Selection

Combinations of the descriptors "cultural intelligence," "higher education," "postsecondary classes," "globalization," "21<sup>st</sup> century skills," "global economy," and "culturally intelligent" classroom practices were used to identify relevant works that described experiences that may lead to cultural intelligence inside and outside postsecondary classrooms. The framework adopted to organize the material from 55 publications is the concept of CQ and its four dimensions (Ang et al., 2007), and this framework is used to explore instructional experiences, ranging from the classroom to a more comprehensive and campus-wide perspective, that can enhance the cultural intelligence of college students.

### Global Education in the Postsecondary Curriculum

Intercultural knowledge and competence are among the essential learning outcomes for college graduates (National Leadership Council for Liberal Education and America's Promise [NLICLEAP], 2007), and cultural intelligence is regarded as one of the essential skills professionals need to compete globally in the 21<sup>st</sup> century (Montgomery, 2011). As a result, cultural intelligence has attracted increased attention in the literature. However, the literature on CQ in higher education has mainly defined CQ as a needed asset in the global business context (McCrea & Yin, 2012), a skill able to predict "the success of business enterprises today" (Egan & Bendick, 2008, p. 387). Consequently, the emerging empirical research on CQ in the postsecondary context comes predominantly from business schools (Crowne, 2008; Egan & Bendick, 2008; Lovvorn & Chen, 2011; McCrea & Yin, 2012),

which suggests that the concern with CQ is not yet widespread in the higher education community (Montgomery, 2011). As a result, fewer than 7% of college graduates meet even basic standards for cultural intelligence (NLCLEAP, 2007).

Diversity learning and internationalization have become top priorities in the higher education curriculum (Dezure, Lattuca, Huggett, Smith, & Conrad, 2014). Courses that emphasize global education are commonly part of the foundational courses in the postsecondary curriculum (McCrea & Yin, 2012). Exposure to cultural, social, political, linguistic, economic, and other diversities is intentionally crafted into the requirements of general education curricula, and students must meet the global education criteria for successful completion of their undergraduate degrees. In addition to courses, US colleges and universities have devised a variety of initiatives to promote intercultural communication and understanding. However, there is a scarcity of research on the impact of such experiences on participants' attitudes and behaviors and on their ability to interact effectively with individuals different from themselves (MacNab, 2012; Ng, Van Dyne, & Ang, 2012).

Institutions of higher education also highlight their commitment to global education by drawing attention to their study abroad programs or international internship experiences. A significant body of literature validates the benefits of international immersion experiences on participants' cultural awareness, sensitivity, understanding, and personal development (Black & Duhon, 2006; Gullekson & Tucker, 2013) and their limitations (Simonelli, 2000; Sherriff et al., 2012). The reality is that researchers such as Crowne (2008), Ng et al. (2012), and Tay, Westman, and Chia (2008) have maintained that these experiences alone do not translate into a global education agenda.

### **Understanding Cultural Intelligence and Its Dimensions**

CQ refers to "*an individual's capability to function effectively across cultures*" (Dyne et al., 2009, p. 2). Assessing an individual's capability to be successful in cross-cultural encounters requires consideration of multiple dimensions so that effectiveness across cultures can be examined.

Dyne et al. (2009) developed a CQ model that incorporates four dimensions necessary to assess an individual's ability to function successfully across cultures: cognitive intelligence, metacognitive intelligence, motivational intelligence, and behavioral intelligence. That is, cultural intelligence involves "the head (cognitive), heart (motivation) and body (body language)" (Egan & Bendick, 2008, p. 391). It is believed that the more individuals develop these types

of intelligences, the more culturally intelligent they become (Crowne, 2008; Dyne et al., 2009; Earley, Ang, & Tan, 2006; Yoshimura, 2002). A deeper understanding of the dimensions of CQ allows faculty to consider explicitly the types of classroom experiences that enhance each dimension of CQ, as well as the development or modifications of academic programs to ensure students have developed sufficient levels of CQ and the global mindset needed by the time they graduate from their postsecondary program and enter the professional world.

Cognitive CQ involves learning about the norms, practices, and values of different cultures and how those compare to the norms, practices, and value system of other cultures. (Crowne, 2008; Dyne et al., 2009; Maznevski, 2008; McCrea & Yin, 2012). To perceive cultural differences and understand how they work, individuals need to consciously attend to cultural differences, an approach referred to as mindfulness (Egan & Bendick, 2008; Thomas, 2006). Mindfulness requires more than knowledge about cultural differences; it requires an individual's interest in, and attention to, how cultures compare and differ.

Metacognitive CQ involves awareness, planning, and monitoring (Crowne, 2008; McCrea & Yin, 2012). It refers to an individual's ability to "plan an appropriate strategy, accurately interpret what's going on in a cross-cultural situation, and check to see if [one's] expectations are accurate" (Dyne et al., 2009, p. 7). To develop this type of intelligence, individuals need to prepare ahead for the cross-cultural encounter so they can anticipate how to approach the situation (McCrea & Yin, 2012). Constant monitoring of the planned strategy during the interactive exchange is a necessary element for high metacognitive CQ (Dyne et al., 2009).

Motivational CQ refers to an individual's interest and desire to learn about other cultures (Ang et al., 2007) so that successful interethnic encounters can happen (Earley et al., 2006). High motivation will cause persons to pursue opportunities for cross-cultural encounters and exchanges. Perceived success in encounters will trigger greater motivation that will, in turn, lead persons to pursue future opportunities for cross-cultural encounters (McCrea & Yin, 2012). When encounters are perceived as not as successful, high motivational CQ will help a person transform that experience (Lovvorn & Chen, 2011) and channel it to a worthwhile learning experience able to impact that individual's global mindset (Earley, 2002).

Behavioral CQ is an individual's ability to recognize what constitutes appropriate behaviors in a cultural situation and to adapt his/her verbal and nonverbal behaviors so that interactions with people from other cultures and languages can succeed (Ang et al., 2007; Lovvorn & Chen, 2011; McCrea & Yin,

2012). The ability to act appropriately in a different cultural context (Thomas, 2006), to adjust to different cultural situations (Crowne, 2008), and to engage in effective interactions with individuals from different cultures (Dyne et al., 2009; Peterson, 2004) are critical elements in an individual's capability to engage in successful interethnic exchanges (Yoshimura, 2002).

Cultural intelligence has been associated with emotional intelligence (EQ) in the literature (Dyne et al., 2009; Maznevski, 2008). EQ is defined as an individual's "ability to lead and interact with effective emotional sensibilities" (Dyne et al., 2009, p. 2). EQ then allows individuals to regulate their emotions and that of others' so that decisions can be made on the appropriate behaviors for a given interactive exchange (Gullekson & Tucker, 2013). CQ actually represents a step beyond EQ (Peterson, 2004).

### **Postsecondary Experiences That Have Been Demonstrated to Enhance Specific Domains of CQ**

#### **Cognitive CQ**

Developing cognitive CQ constitutes the first step toward developing a global mindset (MacNab, 2012; Thomas, 2006). Pedagogies that increase student self-awareness, that increase awareness and knowledge of behaviors and practices in different cultures, and that allow for comparisons of self and of individuals who represent diverse cultures stimulate cognitive CQ (McCrea & Yin, 2012). Cultural awareness and knowledge can be raised through classroom discussions and instructional materials related to the particular discipline that portray the beliefs, values, and norms of different cultural groups and how those help differentiate one group from another.

#### **Metacognitive CQ**

Postsecondary classroom experiences that target metacognitive CQ are those engaging students in face-to-face cross-cultural interactions (McCrea & Yin, 2012) and stimulating reflection about what one expected from the encounter and the actual result of the encounter. In other words, these are experiences that lead students to question their cultural assumptions and stereotypes toward other groups (MacNab, 2012). It is through face-to-face, interactive encounters that individuals develop stronger self-awareness and reasoning skills (Lovvorn & Chen, 2011) and the ability to be flexible and modify behaviors in response to a changing situation (Crowne, 2008; Thomas, 2006). For example, place-based education (William & Nagy, 2012) involves incorporating the local community, its history, culture, and people into the classroom content. Through local guest speakers, field trips, and lessons

around local topics, college students can learn about the local heritage, history, and cultures and can then reflect on their own cultural identity in light of the community's culture and place themselves in that community. Infusion of place-based education in multiple courses within a single program will allow for broader coverage of regions and cultures and more in-depth investigation of variability of behaviors and practices in different communities and in different parts of the world.

Additional examples of experiences that lead to metacognitive CQ are interviews and tutorial experiences with individuals from different cultures and who speak different languages (McCrea & Yin, 2012). Reflection by students through journals or whole-group discussions after the cross-cultural encounter are essential because they allow students to synthesize the success of their experiences, better comprehend cultural assumptions and preferences, and develop a deeper understanding of cultural norms (McCrea & Yin, 2012).

#### **Motivational CQ**

Motivational CQ can be increased by instructional strategies that include the personal and professional experiences of the instructor, the personal experiences of the students, curricular activities with a focus on the global context, and student involvement in community-based activities (Billings, 2006). Classroom projects involving discipline-specific research with a focus on cultural differences will help broaden college students' understanding of culture, "unteach" biased information, and stimulate reflection on the roots of discrimination, stereotyping, and prejudice (Egan & Bendick, 2008), with the purpose of generating the desire for further investigation into situations involving cultural diversity.

To build motivational CQ as well as the other three dimensions of CQ, it is critical that numerous opportunities for global learning, global exploration, and contacts with individuals different from students be intentionally infused throughout an academic program to raise students' awareness of cultural differences, increase their interest in the diversity of cultures, and better prepare them for immersion experiences such as those through international internships or study-abroad experiences (Gupta & Govindarajan, 2002).

#### **Behavioral CQ**

Classroom experiences that promote cultural inquiry can help college students identify whether appropriate behaviors have been selected in cross-cultural instances (Crider, 2007; Thomas, 2006) or whether specific behaviors should be inhibited or modified (Earley & Ang, 2003). Examples of pedagogies that involve cross-cultural inquiry include

classroom staged cross-cultural encounters where students role model and then reflect on and modify their behavior prior to or after a real encounter, analysis of recorded interviews between students and members of a different culture, reflective journals on the appropriateness of verbal and non-verbal behaviors when interacting with individuals from a different cultural background, or any classroom experience that exposes students to a different culture through an interactive exchange and that offers opportunity for reflection and evaluation.

### **Postsecondary Educational Experiences that May Lead to CQ**

There is relatively limited research substantiating which teaching practices enhance CQ; indeed, the report by Dezure et al. (2014) recognized the need to increase postsecondary students' cultural intelligence, but presents no recommendations on how to address that need. This section presents some experiences that, based on our understanding of CQ, may lead to CQ. Experimentation with, and assessment of, these experiences can lead to the establishment of effective strategies for developing CQ.

### **In-Class Learning Experiences**

**Creating a classroom environment that enhances CQ.** Identifying one's self-CQ is the first step toward teaching with cultural intelligence. Faculty must define their own level of cultural knowledge and evaluate their feelings, behaviors, and attitudes during cross-cultural encounters. The Cultural Intelligence Scale (CQS; Ng et al., 2012) is a reliable, self-report instrument faculty can use to test their potential for cross-cultural success. Closer attention to one's own cultural predispositions and values will contribute to a level of sensitivity and mindfulness essential to the development of self-CQ (Goh, 2012; Montuori & Fahim, 2004) and help create a more welcoming and inclusive context for learning (Milner, 2011).

Faculty must also assess the cultural environment of their own classrooms by considering the diversity of student learning styles (Goh, 2012), students' cultural histories, expectations and behaviors, and the experiences students bring to the classroom. Consideration of these variables will lead to instructional practices that are more culturally sensitive.

It is imperative that faculty create an academic context where students are given voice and are encouraged to participate more fully (Lave & Wenger, 1991; Milner, 2011), apply culturally sensitive modes of communication and gestures, and display a positive attitude toward diversity. It is through modeling such behaviors that faculty members are likely to inspire in

their students the types of behaviors necessary for the development of intercultural competence and cultural intelligence (Goh, 2012). "Teachers with high CQ learn how to adapt their teaching, assessment, and feedback strategies when working with students from various cultural backgrounds" (Livermore, 2011, p. 10).

**Providing practice with CQ-enhancing behaviors through strategic assignments.** Instructional assignments that address the CQ dimensions include local travel to areas where a language other than English is spoken, the use of culturally focused cases and contexts within the specific discipline that stimulate in-depth thinking, perspective-taking, comparison, and appreciation of other cultures, and the inclusion of expected professional behaviors as part of the course requirements.

Professional behaviors highlight expectations students should meet toward developing healthy interactions with individuals in the group. For healthy interactions to emerge, students need to be attentive to the quality and appropriateness of their oral and written communicative approach, including e-mail messages, so they are not perceived as impolite or inappropriate. To be culturally intelligent, interactions also depend on students' ability to work collaboratively and cooperatively; to respond to and adapt to changing situations; to respect individuals' values and opinions; to exercise mature judgment, poise, fairness, and self-control.

**Fostering culturally intelligent communicative exchanges in the classroom.** Learning is a process that depends on the social and cultural contexts of all individuals involved in the process (Ramis & Krastina, 2010). As such, knowledge of each cultural community represented in the learning context is essential, if the goal is effective exchanges between teachers and students and among students (Lave & Wenger, 1991). Faculty are in a unique position to promote culturally intelligent communicative exchanges with and among students (Jaschik, 2009). Their frequent interactions with students give them first-hand opportunities to assess the quality of the communicative exchanges in the educational context and to examine the campus climate. Goh (2012) emphasized that "to be a key globalization player, teachers must teach with cultural intelligence" (p. 396). Faculty need to emphasize culturally intelligent communicative skills where the participation of all is encouraged so that students can exercise their ability to work together and use different communicative approaches and perspectives for a common goal (Ramis & Krastina, 2010). For example, the addition of a pause-predict-ponder strategy in an online instructional design is effective in leading students "to engage in productive cultural reflection, and . . . enhancing multiple measures of cultural learning" (Ogan, Alevan, & Jone, 2009, p. 285).

Culturally intelligent activities, such as the one described above, not only help develop the four dimensions of CQ, but also give individuals the intercultural communicative skills they need to function effectively in contexts characterized by cross-cultural encounters.

Although the literature on the kinds of communicative exchanges that may lead to CQ is still limited, a few studies attempt to answer this question. Milner (2011) showcases the mindset and the communicative classroom practices that contributed to creating a culturally sensitive learning experience for students. His research highlights three recurrent themes regarding the instructor's mindset in promoting cultural intelligence in the classroom: building and sustaining meaningful and authentic relationships with students, recognizing distinct identities among students, and making the classroom a "communal affair" (Milner, 2011, p. 76) that emphasizes collaboration and responsibility among all in that educational context. Among the communicative classroom practices observed, Milner (2011) highlighted the teacher's concern to build and sustain relationships with students by taking interest in student's individual needs, addressing tensions, and creating accommodations when needed. Milner (2011) defined the instructor's role in the study as the "other father" (p. 82) and pointed out that approaches that resemble parental roles are effective in contexts characterized by cultural diversity.

Making culturally intelligent communicative skills "the central axis of learning" (Ramis & Krastina, 2010, p. 245) in postsecondary education helps students develop advanced ability to problem solve, acquire higher solidarity, become more intellectually developed, and exhibit greater ability for intercultural communication and understanding.

**Enhancing cultural judgment and decision-making.** Enhancing college students' ability to evaluate cross-cultural situations and engage in decision-making is a powerful strategy for developing cognitive and metacognitive CQ (Ang et al., 2007). By providing students with cross-cultural scenarios (Cushner & Brislin, 1996), such as those in which students are given a hypothetical situation where they make a rule constraining individual's behaviors by majority decision (Kinoshita, 2006) and explain their rationale, faculty stimulate students' cultural judgment and prediction, and observe students' decision-making skills (Ang et al., 2007; Crider, 2007). In addition, experiences that require students to modify and adapt their behaviors and decision-making skills to meet the changing demands of the environment are particularly relevant in improving motivational and behavioral CQ.

The study conducted by Pulakos, Arad, Donovan, and Plamondon (2000) on adaptive performance

maintains that individuals today must function effectively in different cultural contexts and with individuals whose values and orientations are distinct. In their study, Pulakos et al. (2000) developed a taxonomy of adaptive job performance and used it to analyze critical incidents in 21 different jobs to understand, predict, and train adaptive behavior. The results suggest that, to train college students to adapt, requires that they be continuously exposed to situations in their academic classes that reproduce the ones they are likely to encounter in their future jobs. For example, students, throughout their criminology program, would be exposed to a variety of scenarios focusing on cultural criminology to explore the behaviors and dynamics of various criminal subcultures. By considering the networks and connections among individual criminals and criminal events, students will be better able to devise and adapt strategies for crime control and "investigate criminal and deviant subcultures as sites of criminalization, criminal activity, and legal control" (Ferrell, 1999, p. 397). Such job-relevant adaptation scenarios stimulate college students' cultural judgment and decision-making and make them increasingly adaptable and tolerant of the differences and uncertainties that characterize their professional and global contexts.

**Promoting personal growth and cross-cultural adjustment.** Individuals are often oblivious to their own cultural predispositions until they are confronted with unfamiliar situations or with people different from themselves (Adler, 1975). Becoming culturally intelligent then requires the type of personal growth that results from experiences that ultimately challenge the individuals' beliefs, attitudes and cultural knowledge (Montuori & Fahim, 2004). According to Hall (1959), to be truly challenged, individuals need to be exposed to experiences that cause them to feel shocked due to "contrast and difference" (as cited in Montuori & Fahim, 2004, p. 245), although there are studies that maintain that cultural activities that challenge and confuse students can be problematic (Simonelli, 2000; Sherriff et al., 2012).

A university curricular framework that intentionally infuses educational instances that lead to cultural confusion or disorientation can offer a context for personal growth and cross-cultural adjustment (Montuori & Fahim, 2004). For example, an instructor could arrange for a portion of the class to be conducted in a language unfamiliar to the students and then engage them in discussion about the feelings triggered by the experience. By introducing confusion and cultural disorientation, conditions are created for the development of metacognitive, motivational and behavioral CQ which will, in turn, better prepare students for full immersion in an international experience because of the greater cross-cultural

interactional and psychological adjustment (Ang et al., 2007; Beyene, 2007) students will have gained from those puzzling experiences.

### Out-of-Class Learning Experiences

**Community engagement experiences.** Community engagement activities can provide opportunities for interactive, first-hand encounters and help promote all four dimensions of CQ, especially behavioral CQ. Community engagement activities are those that are part of the academic curriculum aimed at engaging students in the community (Zapata, 2011). There are multiple ways through which community engagement experiences can happen, as long as service is provided to the members of the community through direct contact. Direct contact with individuals from diverse groups will allow for cultural exposure and, consequently, greater cultural understanding.

Out-of-the-classroom activities help increase awareness of differences in interests, values, and views; promote verbal and social gains; reduce prejudice; and increase personal acceptance (Kuh, 1995; Tutt & McCarthy, 2006). Community engagement activities have become one of the most effective ways of promoting cultural understanding and competence in college students (Zapata 2011). However, such activities tend to be more effective when they are tied to course objectives (Sedlak, Doheny, Panthofer, & Anaya, 2004). An example might be connecting the objectives of several environmental science courses to the development of a sustainability plan for a local impoverished area in the community.

**International internships and study abroad programs.** Experiences that immerse students in another culture are the ones most likely to develop an individual's CQ (Crowne, 2008; Gullekson & Tucker, 2013; Lovvorn & Chen, 2011). In the past decade, many studies have been conducted on the value, effectiveness, and impact of international internships and study abroad programs on students' cultural awareness and cultural intelligence (Gullekson & Tucker, 2013). Studies by Black and Duhon (2006), Anderson, Lawton, Rexeisen, and Hubbard (2006) and others leave no doubt that international immersion experiences are powerful in enhancing students' CQ as well as promoting overall intercultural growth. Furthermore, the longer individuals interact with the local population and participate in their everyday life while abroad, the higher the levels of CQ these individuals will acquire (Crawford-Mathis, 2010; Crowne, 2007; MacNab, 2012). Therefore, they should be part of a student's academic program whenever possible.

However, studies on the impact of international work experience on CQ (Crowne, 2008; Shannon &

Begley, 2008; Tay et al., 2008) have shown that these immersion experiences predicted mainly cognitive (Crowne, 2008; Tay et al., 2008), metacognitive and behavioral CQ (Crowne, 2008), but not all four intelligences simultaneously (Ng et al., 2012). There is limited research on which experiences lead to the development of all CQ dimensions in an international internship or study abroad context.

According to Gullekson and Tucker (2013), emotional intelligence is a predictor of students' intercultural growth in study abroad programs, suggesting that "higher levels of emotional intelligence were associated with greater reductions in ethnocentrism and intercultural communication apprehension, as well as greater increases in international awareness" (p. 173). Therefore, infusing instructional strategies that increase EQ throughout students' academic experience should allow them to experience greater cultural adjustment and greater development of all dimensions of CQ during international immersion experiences (Gullekson & Tucker, 2013).

### Recommendations for Teaching Toward Cultural Intelligence

Although it is important to recognize that both in-class and outside-of-class initiatives with a cross-cultural focus are increasing in postsecondary settings, consideration of the quantity and quality of those initiatives is imperative in determining the extent to which college students are developing all four dimensions of CQ (Ng et al., 2012; West, 2012). The existing literature on experiences that lead to CQ suggests that single cross-cultural experiences (Crowne, 2008; Lopes-Murphy, 2013; Lovvorn & Chen, 2011) or experiences not tied directly to course goals (West, 2012) do not lead to higher levels of cultural intelligence. College students benefit from a variety of cross-cultural experiences that are purposefully infused throughout their academic studies to allow for ongoing and gradual development of CQ. The more college students engage in CQ-focused activities, the greater their cultural understanding and future engagement in cross-cultural experiences will be (Crowne, 2008). Nevertheless, the quality of those cross-cultural experiences is a determining factor in stimulating future engagement. Poorly organized experiences or experiences disconnected from the goals of a student's academic career may lead to unsuccessful cross-cultural experiences or may inhibit future engagement in such activities (Earley & Ang, 2003). While the definition of a "quality program" varies among researchers, the experiences below have shown to be effective in promoting and emphasizing the dimensions of CQ in postsecondary classrooms.

To develop college students' CQ, there must be consensus among faculty that initiatives toward CQ must go beyond sporadic cross-cultural events on campus or identified courses in foundational studies or in the humanities. It is critical that the CQ philosophical framework be emphasized across campus (Ng et al., 2012; Goh, 2012; West, 2012), adopted by all disciplines, and infused in all teaching contexts (Ramis & Krastina, 2010; West, 2012) so that students develop the skills to function effectively in a global community (Lovvorn & Chen, 2011). Initiatives to increase the global education focus in higher education need to be everyone's responsibility—general education and major. All college students then should engage in a wider range of experiences that focus on a variety of global perspectives and that are intentionally embedded throughout their academic experience (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006) so that higher levels of CQ are attained.

Teaching toward CQ should be intentional (Egan & Bendick, 2008). Classroom experiences that emphasize the CQ dimensions must be intentionally infused in course syllabi and tightly connected to the program objectives and/or course goals (Karnyshev & Kostin, 2010) to give students meaningful and transformative learning outcomes essential to their future career. In addition, academic experiences directed toward CQ should be continuous and increasingly challenging (Gullekson & Tucker, 2013) to allow for incremental growth, reflection, and adjustment in behavior to ensure that effective and successful cross-cultural interactions emerge.

Teaching toward CQ should not be discipline-specific (Karnyshev & Kostin, 2010; West, 2012). Ideally, CQ should be a skill emphasized in all postsecondary classes regardless of the discipline (e.g., STEM, humanities, social sciences, applied sciences) or professional needs even in disciplines that may normally be thought of as not addressing issues of culture and CQ. For example, in an engineering program, students can be given a problem to solve in both their own context and in another country where engineers have fewer resources. Not only will students learn about the other culture, but they will also learn how to adapt their approach to a different context.

The rise of diversity worldwide calls for a global mindset by all. Therefore, faculty should emphasize culturally sensitive and inclusionary practices in their teaching and expose students to a variety of diversities and contexts that are related to the discipline. These in-class instructional practices will help ensure that outside-of-classroom experiences, such as community-outreach activities, international internships, or study-abroad programs, will lead students to greater development of metacognitive, motivational, and behavioral CQ (Terenzini, Pascarella, Blimling, 1996)

and greater likelihood for successful cross-cultural experiences.

Teaching toward CQ should emphasize collaborative efforts between faculty with high culture/language knowledge and faculty with high content knowledge (Egan & Bendick, 2008) because designing instruction with cultural intelligence in mind can be challenging. Matching faculty skills and interests will help address that challenge. Partnerships between foreign language faculty and content faculty have been adopted by St. Olaf College, Skidmore College, Trinity University, University of Rhode Island (Davies, Gonzalez, & Kwai, 2013) and have proven to be successful in creating a comprehensive internationalized curriculum that emphasizes the dimensions of CQ. Such collaborative initiatives enrich students' learning experience and allow for access, exploration, analysis, and students' better-articulated responses to the complexities of intercultural exchanges (West, 2012).

Initiatives toward CQ, both in and outside of class, should be assessed continuously so that their impact on students' CQ development can be evaluated (Ng et al., 2012). It is critical that assessment tools be developed to measure the impact of such experiences on students' CQ, growth in CQ over time, and students' ability to function effectively in cross-cultural encounters (Harris, McCauley, & Wright, 2000; MacNab, 2012).

Infusion of culturally intelligent practices in postsecondary education will enable the academic curriculum to become more comprehensively internationalized and culturally intelligent and create the level of learning that will best prepare college students for an intricate global community.

### Recommendations for Future Research

There are numerous opportunities for additional research in CQ at the postsecondary level. Empirical research is needed on the types of postsecondary education experiences that lead to CQ and how the quality and quantity of such experiences affect gains in CQ (Ng et al., 2012).

Few studies have empirically assessed the impact of the global education experiences offered in higher education on students' CQ. Methods that systematically assess students' growth in all four dimensions of CQ over time are needed to understand the impact of culturally focused initiatives on students' CQ so that necessary changes can be identified and made. Also, few studies have developed methods for assessing efforts toward the development of intercultural competence among professionals in the postsecondary arena (Franklin-Craft, 2010) and the extent to which faculty members across campus are teaching with cultural intelligence in mind.

### Conclusions

Infusing cultural intelligence as a model for learning requires explicit support from the college/university and must be treated as a priority (Jaschik, 2009). This level of support entails going beyond diversity statements, targeted classes or sequences of classes on diversity, and sporadic diversity-focused events on campus. CQ must become the norm and be embedded in all initiatives and practices across campus (Ramis & Krastina, 2010).

Another condition for making a CQ teaching model possible in postsecondary classes is awareness on the part of faculty of their own cultural intelligence level. To infuse culturally intelligent practices in the classroom, faculty must assess their own CQ abilities (Goh, 2012) and recognize the value of diversity in their content area. It is through such recognition that faculty will be able to employ culturally intelligent instructional practices that will better prepare their students to be successful in the 21<sup>st</sup> century global context (Jaschik, 2009).

Research (Ang et al., 2007) shows that professionals with higher levels of the four dimensions of CQ (metacognitive, cognitive, motivational, and behavioral) have increased effectiveness in meeting performance expectations at work. This relationship suggests that all dimensions of CQ need to be emphasized in all academic programs and systematically infused in all courses of a given program so that college students develop these intelligences gradually and continuously throughout their program, thereby becoming highly culturally intelligent by the time they earn a college degree. However, there is a dire need for empirical, quantitative research that identifies the classroom experiences in a variety of disciplines that have the most impact on students' development of the four dimensions of CQ. In addition, assessment methods are needed to examine students' growth in these dimensions over time.

Postsecondary classroom experiences must systematically expose students to culturally intelligent teaching practices modeled by their instructors and engage students in experiences that gradually introduce them to, and provide practice with, culturally intelligent behaviors. Such exposure and engagement should be part of the overall education of college students and should not be restricted to any discipline (Lopes-Murphy, 2013).

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