

360⁰ approach to assessing cross-cultural intelligence: use of film

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ABSTRACT

Increasing globalization of the world economy has placed disruptive demands on management education. No longer is it sufficient for B-schools to focus only on developing the traditional, disciplined-based knowledge, abilities, and skills of graduates. For today's global economy, B-schools must also assure that graduates acquire what is commonly referred to as *cultural intelligence*, possessing the attitude and skills to work productively and profitably across a wide range of cultural boundaries. Consequently, B-schools are enhancing their curricula—an important part of which involves developing methods to assess the impact of curricular enhancements on students' cultural intelligence.

This exploratory research note reports the efforts of the School of Business & Industry to develop an innovative method to assess the effect of its curriculum on MBA students' cultural intelligence—referred to in this study as *cross-cultural intelligence* (CCI). The movie *Crash* is used to measure CCI at two progressive levels: 1) *basic cross-cultural understanding* (i.e., understanding of cross-cultural concepts) and 2) *advanced cross-cultural understanding* (i.e., ability to explain why cross-cultural misunderstandings or conflicts occur).

Using student input, an assessment instrument was developed, including the rubric, to assess students' CCI. Then, the assessment results were used to evaluate students' CCI. As a final reflective exercise, participating students evaluated the assessment instrument, process, and their CCI performance to identify areas for improvement. The assessment results show that students performed well in understanding the causes of cross-cultural problems whereas their performance involving basic understanding (i.e., *foundational knowledge*) of cross-cultural concepts did not fare as well.

Keywords: cross-cultural understanding, cultural intelligence, learning assessment, management education

INTRODUCTION

In 2006, export trade of goods and services accounted for 30.8 percent of the world's gross domestic product (GDP), more than double the 13.5 percent that trade contributed in 1970. The United States, home of the world's largest national economy, experienced a similarly dramatic escalation: its export trade reached 11.5 percent of GDP in 2006, substantially above the 1970 level of 6.0 percent (UNCTAD, 2009). The increased "openness" and globalization of the world economy underlying such hyper-growth in trade has placed disruptive demands on management education. No longer is it sufficient for B-schools to focus only on developing the traditional, disciplined-based knowledge, abilities, and skills of graduates. For today's global economy, B-schools must also assure that graduates acquire what is commonly referred to as *cultural intelligence* (CQ; also referred to as *cultural quotient*) (Earle and Mosakowski, 2004)—the attitudes and values of Gardner's "Respectful Mind" (Gardner, 2007). This requires that B-schools move students beyond the milquetoast thinking of political correctness (or stereotypes and overtly generalized caricatures of "other" cultures left over from "colonial anthropology") to where they embrace the very humanness of differences among peoples, to where they can work productively and profitably across a wide range of cultural boundaries. This is a particularly troublesome challenge for the US whose students have been shown to be less informed about world cultures, politics, history, and geography than their peers in other advanced and emerging countries (National Geographic, 2002). To meet this challenge, B-schools, especially those in the US, are beginning to enhance their curricula—an important part of which involves exposing students to *cultures* (as learning modules embedded in a series of business courses or as a stand-alone course) and developing methods to assess the impact of curricular enhancements on students' cultural competence.

This exploratory research note is a progress report on the efforts of one B-school, the School of Business & Industry (SBI) at Florida A&M University, efforts that began 20 years ago with the introduction of *World Cultures for Business* as a required course in the MBA curriculum. Since then, the course has evolved to reflect changing business trends and cultural landscapes across the world, but its core mission has remained intact: to provide MBA graduates with a good grounding in cross-cultural concepts and processes. At present, the school is chiefly concerned with developing an innovative method to assess the effect of *World Cultures for Business* on MBA students' cultural intelligence—or what is dubbed *cross-cultural intelligence* (CCI) in this paper.

ASSESSMENT APPROACH AND INSTRUMENT

SBI's need to develop and assess the cross-cultural intelligence (CCI) of students is driven primarily by the demand of the globalized marketplace for cross-culturally competent managers and, secondarily, by the Assurance of Learning Standards of AACSB International, which require B-schools to prepare students for careers in the "global context" (AACSB International, 2009). Responding to this need, the school selected as one of its MBA-level student learning goals "multicultural and diversity understanding." Two specific objectives (or expected learning outcomes) were established to act as the twin pillars for assessing achievement of this goal:

- Students' understanding of multicultural/diversity *concepts*,
- Students' understanding of causes of multicultural/diversity *problems*.

As part of its assessment plan, the school's Learning Assurance Committee (LAC) decided to assess the "multicultural and diversity understanding" learning goal in *World Cultures for Business* (WCB), a required graduate course in the MBA curriculum. The professor of the course was charged with conducting the assessment during the spring of 2009. As the first step, the professor reviewed the design and content of WCB to assure that the course contained the "significant learning" experiences (Fink, 2003) necessary to develop students' understanding of cross-cultural concepts and problems. Following that, the professor turned to developing an assessment process and instrument to measure the outcomes of the students' learning experiences in WCB. This task was approached collaboratively, involving consultations with SBI colleagues, the LAC, and, most importantly, the students enrolled in the WCB course. The salient features and outcomes of this collaboration are described below.

Student involvement in designing the assessment instrument

- The 15 students enrolled in WCB were divided into five groups. Each group, consisting of three students, was asked to:
 - Identify four cross-cultural concepts (based on class readings, other assignments, and discussions) that they thought would be key in their cross-cultural dealings.
 - Carefully review 2-3 different forms of exercises – case analyses, articles, movies, or other similar exercises – that would be equipped to capture their understanding of: 1) the selected concepts and 2) the root causes of cross-cultural problems (i.e., their understanding of the two learning objectives previously noted).
 - Recommend the exercise most suitable for the assessment purpose, with a clearly stated rationale for selecting the exercise.
- The assessment exercises recommended by the student included articles and movies, but not case analyses.

Development of the assessment instrument

- Based on the many suggestions received, the professor:
 - Selected for assessment in WCB four of the key concepts used to analyze and understand cross-cultural encounters and interactions: *Cultural Perception* (CP), *Cultural Communication* (CC), *Cultural Identity* (CI), and *Cultural Relations* (CR).
 - Selected the assessment exercise, in which students analyzed the occurrence and significance of the four cross-cultural concepts in various scenes of *Crash*, a relatively new and popular movie that features various cross-cultural conflict scenarios, all involving several nationalities or ethnic groups, including immigrants.
 - Developed the assessment instrument and rubric presented in Figure 1.
- The students were given a chance to review the assessment instrument and to suggest possible revisions prior to performing the assessment task.
- Once the instrument was finalized, the professor provided the students detailed guidelines for performing the CCI learning assessment. Specifically, the students in the assessment pool were required to first watch *Crash* (even if they had previously

seen it), focusing on the two learning objectives and associated concepts, and then to fill out each box of the assessment instrument (Figure 1).

360° evaluation of the assessment process and instrument

- After students completed the assessment exercise with *Crash*, they were asked to provide their written self-evaluations. In particular, they evaluated the assessment instrument, process, exercise, offering suggestions for improvement, and reflected on their own performance in assessing the four dimensions of each learning objective.

Figure 1. Assessment Instrument and Rubric

MBA Learning Goal: Multicultural and Diversity Understanding

Assessment Exercise: Movie *CRASH*

CHOOSE A SEPARATE SCENE FOR EACH CULTURAL CONCEPT/PROBLEM

Cultural Concepts/Problems	<i>Learning Objectives</i>	
	1. Identify scenes to match multicultural/diversity concepts. <ul style="list-style-type: none"> • <i>Scoring Scale: 1-3</i> • <i>Meet Expectations: 2</i> • <i>Exceed Expectations: 3</i> 	2. Explain the multicultural/diversity problem depicted in each scene. <ul style="list-style-type: none"> • <i>Scoring Scale: 1-3</i> • <i>Meet Expectations: 2</i> • <i>Exceed Expectations: 3</i>
	Understanding Multicultural/Diversity CONCEPTS <i>Match a specific scene in the movie (Crash) with the concept in the first column of the corresponding row by briefly illustrating how the scene depicts or defines the concept.</i>	Understanding Causes of Multicultural/Diversity PROBLEMS <i>Describe the cultural problem/conflict depicted in the scene (i.e., what caused the problem or why it happened).</i>
Cultural <u>Perception</u> (e.g., stereotypes, cultural impressions/images, etc.)		
Cultural <u>Communication</u> (e.g., language, body language/silent language, signs/symbols, etc.)		
Cultural <u>Identity</u> / Sociodemographic Groups (e.g., race, ethnicity, gender, nationality, religion, social class, ideology, etc.)		
Cultural <u>Relations/Power Distance</u> (e.g., how people relate in cross-cultural contexts; how power/authority is projected, etc.)		
TOTAL		

Scoring Scale

- 1 = demonstrates lack of cross-cultural awareness (No response or erroneous response, e.g., selected scene does not reflect the concept)
- 2 = demonstrates cross-cultural understanding (Correct/complete response, e.g., selected scene matches the concept and offers some clarification)
- 3 = demonstrates cross-cultural competency (Insightful and creative response, e.g., elaboration of the scene in conjunction with the matching scene)

ASSESSMENT RESULTS AND DISCUSSION

In Spring 2009, a total of 15 graduate students were enrolled in WCB. Fourteen of the 15 students completed the assessment exercise, at the end of the semester. All of the students were African Americans in their early 20s; eight (57%) were female.

The assessment exercise, which involved the students watching the movie *Crash* and filling out each box of the assessment instrument (Figure 1), generated direct measures of student learning outcomes for the four dimensions (*Cultural Perception*, *Cultural Communication*, *Cultural Identity*, and *Cultural Relations*) of the School's two cross-cultural learning objectives: understanding cross-cultural concepts and understanding the causes of cross-cultural problems. A team of two faculty members scored the students' responses to the learning assessment exercise.

RESULTS

In total, as Table 1 shows, the students, involved in the CCI assessment, cited 18 different scenes from *Crash*, ranging from a low of six scenes cited to illustrate *Cultural Perception* (CP) to a high of eight scenes for *Cultural Communication* (CC) and *Cultural Identity* (CI). Four of the 18 scenes were selected by five or more students: Gun Exchange (Persian American man purchasing handgun from white store owner), Tattooed Locks (Hispanic male locksmith replacing locks in home of a white couple), Policed Black Driving (black American couple pulled over and harassed by white police officers), and Misunderstood Door (Hispanic male locksmith repairing rear door of shop owned by Persian American). And two of those four showed strong consensus among the students, in that Policed Black Driving was uniquely associated with *Cultural Relations* (CR) and Misunderstood Door was uniquely associated with *Cultural Communications* (CC). (See the movie to review the full, theatrical details of the scenes selected by students.)

Table 1. *Crash* Scenes Selected by Students to Illustrate Cross-Cultural Concepts

Scene in <i>Crash</i> ¹	Running Time		# of Times Cited for Cross-Cultural Concept			
	START	END	CP	CC	CI	CR
Brake Lights	2:50	4:40		1		
Gun Exchange	6:00	7.45	5	1	1	1
Street Fear	7:47	10:00	1	3	1	
Tattooed Locks	11:55	14.21	5	1	3	
Name Surprise	15:25	16.12	1	1		
Policed Black Driving	16:24	22:34				7
The Discussion	23:16	25:06			3	1
Fairy Protective Cloak	25:10	30:10		1		
Car Flatulence	33:10	35:01			1	2
Misunderstood Door	35:15	36:48		5		
Sexy Ethnicity	38:12	39:50			2	
Confusing Dishes	43:21	43:54				1
Speaking Black	44:49	46:24				1
Unqualified Help	46:25	49:05	1			
Vandalized Identity	49:08	50:06			2	
The Choice	1:06:13	1:12:10				1
Say It Again	1:13:14	1:14:24			1	
Riding Irony	1:26:33	1:30:34	1	1		

¹The listed scene descriptors for *Crash* are mnemonic labels selected by the authors. And the start and end times are the running-time values reported by Windows Media Player10 for the *Crash* DVD.

CP Cultural Perception (e.g., stereotypes, cultural impressions/images, etc.)

CC Cultural Communication (e.g., language, body language/ silent language, signs/ symbols, etc.)

CI Cultural Identity/Sociodemographic Groups (e.g., race, ethnicity, gender, nationality, religion, social class, ideology, etc.)

CR Cultural Relations/Power Distance (e.g., how people relate in cross-cultural contexts; how power/authority is projected, etc.)

The level of cross-cultural understanding reflected in the students' scene selections is assessed in Table 2, showing their performance on each of the four conceptual dimensions of understanding for both learning objectives.

Objective 1:

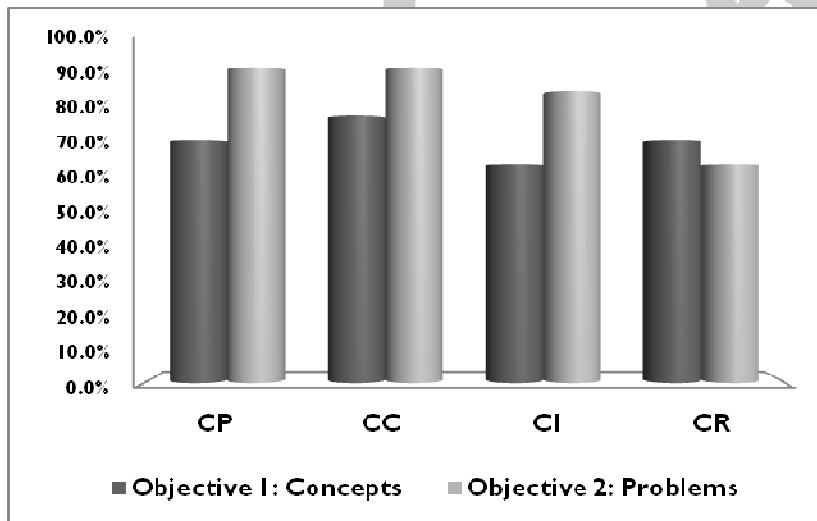
The table shows that 64.3 percent of the 14 students engaged in the assessment met or exceeded learning expectations for Objective 1, with the rest unable to demonstrate adequate *overall* understanding of cross-cultural *concepts*. In terms of individual cultural *concepts*,

students appear to have best understood the *Cultural Communication* (CC) dimension (78.6 percent performed adequately) and least understood the *Cultural Identity* (CI) dimension (only 64.3 percent performed adequately), with the *Cultural Perception* (CP) and *Cultural Relations* (CR) falling in the middle (71.4 percent performed adequately in both).

Table 2. MBA Student Learning Assessment Results, Spring 2009

Student Performance ¹	Learning Goal: Multicultural and Diversity Understanding											
	Objective 1 Understanding Cross-Cultural Concepts						Objective 2 Understanding the Causes of Cross-Cultural Problems					
	CP	CC	CI	CR	Overall		CP	CC	CI	CR	Overall	
					n	%					n	%
Meeting or exceeding expectations	71.4%	78.6%	64.3%	71.4%	9	64.3%	92.9%	92.9%	85.7%	64.3%	12	85.7%
Not meeting expectations	28.6%	21.4%	35.7%	28.6%	5	35.7%	7.1%	7.1%	14.3%	35.7%	2	14.3%
N					14		14					

Meeting or Exceeding Expectations



¹Performance on each learning dimension (CP, CC, CI, CR, see the notes to Table 1) was scored on a 3-point rubric: 1 indicated “not meeting expectations,” 2 indicated “meeting expectations,” and 3 indicated “exceeding expectations.” A minimum overall score of 8 was required to meet expectations for the Learning Objectives.

Objective 2:

Compared to Objective 1, the results for Objective 2 were positive. In particular, the students exhibited good overall understanding of the causes of cross-cultural problems, with slightly more than 85 percent scoring at or above the expected level. The only substantial weakness occurred on the *Cultural Relation* (CR) dimension, where 35.7 percent of the students did not adequately diagnose causes of cross-cultural problems depicted in their chosen movie scenes.

DISCUSSION

These assessment results were somewhat surprising. Because understanding the causes of cross-cultural problems (Objective 2) generally requires a higher level of cross-cultural knowledge and insight than does understanding cross-cultural concepts, students were expected to perform best on the *concepts* learning objective (Objective 1). Why the opposite occurred cannot be discerned from the data. But the students' evaluations of the assessment process and instrument, while not dispositive, may be instructive, in that it offers a starting point for speculation (or explanation).

To complete the 360⁰ circle of assessment, students were required to provide written evaluations of the assessment exercise, with the aim of identifying improvement areas. Several students reported (in their evaluations) having felt uncertain and unclear about how to complete the assessment task: How to select scenes? How to describe scenes? How much detail to use in describing the scenes selected to capture cross-cultural concepts? Here is a sample of how they expressed it:

"The instructions are confusing..."

"...[T]he directive to 'briefly illustrate how the scene depicts the concept' could cause confusion if the assessment is looking for a more detailed analysis of the relationship between the specific scene and the multicultural concept."

"...[I]t was difficult to illustrate the scenes in order to help an individual who has not seen the movie understand the cultural conflicts present."

...I do not think I went in-depth enough to cover the scene in the kind of detail and relation to the class as the teacher would have liked."

The point is this: If these feelings and experiences had a more disruptive influence on how students performed in Objective 1 (i.e., understanding *cross-cultural concepts*) than on how they performed in Objective 2 (i.e., understanding the causes of *cross-cultural problems*), that would explain the pattern in the results. In one instance, this speculative "if" is supported by a student's explanation of the relative ease of the task of understanding *problems*: "This posed little difficulty to me because this concept allowed me to identify with the cultural conflicts I have seen and experienced in my life..."

The intention here is not to suggest that most students relied on their personal experiences to diagnose the causes of cross-cultural problems revealed in the movie *Crash*. The more plausible suggestion is that the film conveyed enough of the texture of real-life situations that students could draw on their general knowledge about people-to-people relations (across cultural boundaries) to complete the task of assessing *cross-cultural problems*. In contrast, the "realism" of *Crash* may not have been as helpful in identifying the specific cross-cultural concept at play in a movie scene. Moreover, the "realism" may have so emotionally engaged students that their performance in applying basic (*foundational*) knowledge (cf. Fink, 2003) about cross-cultural concepts was biased by what is often called "hot cognitions" (cf. Kunda 1999, and Thagard, 2006). In other words, students may have been driven to choose some scenes because of emotional content (excitement) rather than the cultural concept embedded in or illustrated by the scene.

CONCLUSION

Films appear to be a valuable tool for cross-cultural assessment because of their simulative, interactive, or visual value: Students found the exercise using the movie *Crash* to be engaging and enjoyable. In addition, the assessment results show that students in *World Cultures for Business* performed well on Objective 2 (understanding the causes of cross-cultural problems). However, these exploratory results also suggest that the students' cross-cultural understanding was somewhat fragmented, in that their performance on learning Objective 1, involving *foundational knowledge* about cross-cultural concepts, did not reach the desired or expected level. While caution is warranted in drawing firm conclusions from these results, the innovative film-based process used by SBI to assess MBA students' cross-cultural intelligence deserves further research.

Meanwhile, it is clear that SBI's process and assessment instrument requires further refinement with respect to the instructional guidelines for completing the assessment task, including instructions for selecting and describing specific movie scenes to illustrate cross-cultural concepts. This conclusion is discerned from the students' self-evaluative, post-assessment expressions of confusion and uncertainty about their own assessment performance. Future assessments must take steps to assure that the assessment instrument and process does not constrain or bias students' performance.

Beyond improving the assessment process, the pedagogical approach in *World Cultures for Business* will be tweaked so as to provide students information about the potentially-biasing effects of emotions ("hot cognitions") on cultural judgments and to give them simulated experiences in applying *foundational* cross-cultural knowledge in situations that may be emotionally charged. The aim would be to help MBA students to become skilled in controlling and reliably applying their cross-cultural knowledge and judgments—and to prepare them to perform competently in cross-cultural situations involving business and other interactions that the contemporary global economy demands.

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