

ASSESSING STUDENT LEARNING IN INTERCULTURAL COMMUNICATION: IMPLEMENTATION OF THREE CLASSROOM ASSESSMENT TECHNIQUES

DR. DANIEL H. MANSSON
Penn State Hazleton
Communication Arts & Sciences

The purpose of higher education is to prepare students to be productive and successful members of society (Huba & Freed, 2000). However, an alarming number of graduates do not possess the skills (i.e., reading writing, and mathematical) required by their employers (Spellings Commission, 2006). Consequently, educators have become increasingly concerned with enhancing student learning in the college classroom. As such, the purpose of this study was to assess students' learning in a junior-level Intercultural Communication course using three classroom assessment techniques (CATs): The Minute Paper, Misconceptions/Perception Check, and The Muddiest Point. Collectively, these CATs provided direct evidence of student learning and enabled the instructor to identify what the students found the most important, least clear, and their misconceptions. The data were further used to identify potential strategies of improving student learning this course. Thus, the use of CATs enable instructors to identify areas of improvement to ensure that student learning occurs and that the students are prepared for their future academic and/or professional lives.

Higher education is currently experiencing a paradigm shift from teacher-centered instruction to learner-centered instruction. The teacher-centered paradigm is characterized by traditional lecture-style teaching in which students are passive auditory learners (Huba & Freed, 2000). In this paradigm, a lack of student learning is attributed to students' inabilities or lack of motivation rather than the instructor's teaching style (Suskie, 2004). While the lecture approach to teaching is not ineffective (Terenzini & Pascarella, 1994), research indicates that the learner-centered paradigm yields enhanced student learning (Huba & Freed, 2000). The learner-centered paradigm is characterized by the awareness that students also may be kinesthetic and visual learners and that student involvement enhances learning. Instructors in this paradigm also believe that if students' learning is

insufficient, it is, at least in part, due to the instructor's teaching style. Thus, learner-centered instructors frequently assess students' learning to enhance teaching and ultimately students' learning.

Assessment

Assessment is the process of identifying specific and measurable goals, collecting and analyzing evidence that indicate the extent to which the goals have been met, and identifying and implementing changes to enhance achievement of the desired goals (Suskie, 2004). Thus, the first step in the assessment process is to identify desired goals and objectives (Huba & Freed, 2000; Suskie, 2004). Therefore, prior to assessing students' learning, instructors should identify the desired student learning outcomes (i.e., the goals of the course). By completing The Teaching

Goals Inventory (TGI), instructors are able to identify specific goals of a particular course. These goals are then used to identify appropriate methods of assessing those teaching goals (Angelo & Cross, 1993). For the purpose of this project, the TGI was completed in reference to a junior-level Intercultural Communication course. The results of the TGI indicated that the primary goals of the course are to enhance students' discipline-specific knowledge and skills ($M = 4.65$), develop higher-order thinking skills ($M = 4.38$), enhance liberal arts and academic values ($M = 3.80$), improve basic academic success skills ($M = 3.56$), personal development ($M = 2.67$), and work and career preparation ($M = 2.25$). Moreover, the TGI enables instructors to identify essential student learning outcomes. For the course in Intercultural Communication, the essential student learning outcomes are to (a) learn terms and facts of this subject, (b) learn concepts and theories in this subject, (c) prepare for graduate study, (d) learn techniques and methods used to gain new knowledge in the subject, and (e) learn to evaluate methods and materials in this subject (Angelo & Cross, 1993). Considering the results of the TGI, this report includes brief descriptions and results of three different Classroom Assessment Techniques that were implemented in a junior-level Intercultural Communication course at a large mid-Atlantic university.

Classroom Assessment Techniques

Classroom Assessment Techniques (CATs) are used to assess students' learning of course-related principles and facts (also known as declarative learning; Angelo & Cross, 1993) and to improve teaching (Suskie, 2004). Specifically, CATs utilize student feedback to enhance learning throughout the semester (Huba & Freed, 2000). Thus, the use of CATs is a type of formative assessment, which yields direct evidence of students' learning. Direct evidence refers to tangible and visible

evidence of what students have and/or have not learned (Suskie, 2004). Angelo and Cross as well as Huba and Freed have identified several different types of CATs that can be used to assess students' learning. The three CATs utilized in this study are: The Minute Paper, The Misconception/Perception Check, and the Muddies Point. These three CATs are used to assess students' discipline-specific knowledge and skills (Angelo & Cross, 1993).

The Minute Paper

The Minute Paper requires students to distinguish major points of the lecture from minor details and provides the instructor with descriptive information about how well they have learned what they were taught. The instructor ends the class a few minutes early and asks students to respond to some variation of the question(s): "What was the most important thing you learned in this class?" and/or "What important questions remain unanswered?" (Angelo & Cross, 1993, p. 148). Thus, students not only need to recall and evaluate the importance of the lecture content, they also need to assess their own understanding of the lecture content in order to complete the Minute Paper (Angelo & Cross, 1993).

The Minute Paper CAT was completed ($N = 205$) at the end of the class period during which the perception process was covered. Because the perception process includes several steps, components, and aspects according to the textbook, the students were asked to write about the three components of the perception process (i.e., attributive, expectative, and affective) that collectively summarize the perception process. The students were asked to write one or two sentences describing the most important thing about each component. They were further instructed not to use their books or notes when completing the CAT. As such, this CAT provided information about three teaching goals identified by Angelo and Cross (1993, p. 149).

The results of the Minute Paper were analyzed in two steps. First, each response was evaluated on a correct/incorrect basis (see Table 1) to determine what proportion of the students understood the three concepts. In descending order, students provided answers that indicated understanding of the expectative component ($n = 182$, 89%), the attributive component ($n = 166$, 81%), and the affective component ($n = 160$, 78%) of the perception process. Overall, 83 percent of the responses indicated sufficient understanding of the concepts. Thus, an overwhelming majority of the students appeared to understand the three components of the perception process.

Table 1. Frequency Count and Percentage of Correct and Incorrect Minute Paper Responses.

Perception Component	Correct Responses	Incorrect Responses
1. Attributive	166 (81%)	39 (19%)
2. Expectative	182 (89%)	23 (11%)
3. Affective	160 (78%)	45 (22%)

- “Develop the ability to think holistically, to see the whole as well as the parts”
- “Learn terms and facts of this subject”
- “Learn concepts and theories in this subject”

The second step of the data analysis involved a thematic coding, including a frequency count of students’ responses (see Table 2) to determine what they thought the most important things about each component were and to identify incorrect answers (see Table 3) to improve future teaching of the perception process. For the expectative component, the majority of students indicated that the most important thing was to “develop expectations of other people’s future behavior,” how you think a person will act later” and “what you think will happen next.” The most common incorrect or incomplete responses were that “I and/or other people should act a certain

way,” “how someone comes across to you,” and simply suggesting that the expectative component refers to “appropriate behaviors.”

For the attributive component, the majority of students indicated that the most important thing was that “we assign meaning to our own and other people’s behaviors,” followed by “why something happened,” “used to explain our own and other people’s behavior,” “reasons and/or causes for various behaviors,” and “the why theory.” The most common incorrect or incomplete responses were that “we behave a certain way around people,” followed by “how we perceive others,” and “you assign good and bad attributions.”

For the affective component, the majority of the students indicated that the most important thing was that it “refers to our feelings about others,” followed by “whether you like or dislike someone,” and “if positive expectancies are met, we will like the other person.” The most common incorrect or incomplete responses were that the affective component “refers to assumptions about people and how they will act,” followed by that “we start to like someone,” and “past experiences affect our future behaviors.”

While the results of the Minute Paper CAT largely indicate that the students understood the three components of the perception process, the results also indicate that some students confused the three components or associated incorrect definitions and examples with the three components of the perception process. Specifically, future lectures covering the perception process should include a clear definition of the affective component and clearly distinguish affective from “affect” as some students suggested that the affective component “affects” their assumptions about others’ and their own behaviors. This misunderstanding may be due to the fact that the instructor suggested that “our expectations of other people’s behaviors affect our feelings toward those individuals.” To further improve teaching of this unit, it may

Table 2. Thematic Coding and Frequency Count of Correct Minute Paper Responses.

Perception Component	Frequency
Attributive	
1. We assign meaning to our own and other people’s behaviors	61
2. Why something happens	55
3. Used to explain our own and others’ behaviors	32
4. Reasons and/or causes for various behaviors	11
5. The “why” theory	7
Expectative	
1. We develop expectations of other people’s future behaviors	103
2. How you think a person will act later	32
3. What you think will happen next	25
4. To predict future behaviors	22
Affective	
1. Refers to your feelings about others	104
2. Whether you like or dislike someone	22
3. If positive expectancies are met, we will like the other person	15
4. If expectancies are negative or negatively violated we will dislike others	12
5. Largely dependent on first impressions	7

be appropriate to provide additional examples in which students have to identify their attributions, expectancies, and feelings about a person based on his or her behaviors. For instance, a video clip that shows a person holding the door open for a stranger may be appropriate. The students would first be asked to indicate “why” they think the person held the door open the stranger (i.e., the attributive component). Next, the students could be asked to identify how they think this person will act in other situations (i.e., the expectative component). Finally, the students could be asked to identify if they like/dislike the person who held the door open for a stranger (i.e., the affective component).

Misconception/Perception Check

The Misconception/Perception Check (M/PC) CAT was utilized twice during the semester. The M/PC CAT is intended to identify students’ misconceptions and perceptions about the course content and the degree of certainty of those perceptions and misconceptions. It is

vital to identify students’ misconceptions and perception because they may hinder student learning in the course. For instance, if a student believes “A” is actually “B,” the student will incorrectly believe that all concepts related to “A” are related to “B,” which leads to additional misconceptions (Angelo & Cross, 1993). Thus, it is appropriate for instructors to explore students’ misconceptions and perceptions about course concepts and topics that provide the foundation for a chapter or unit prior to teaching that chapter or unit. To that end, the first M/PC CAT (see Appendix A for statements and results) was completed (*N* = 194) after the lecture that conceptualized connotations, denotations, indexing, pragmatics, and semantics. These five concepts are referenced throughout the Verbal Communication chapter and are used to explain why and how people use language differently across cultures.

The second M/PC CAT (see Appendix B for statements and results) was completed (*N* = 219) after the lecture that conceptualized

Table 3. Thematic Coding and Frequency Count of Incorrect Minute Paper Responses.

Perception Component	Frequency
Attributive	
1. We behave a certain way around people	10
2. How we perceive others	8
3. You assign good and bad attributions	8
4. When you do badly on a test, you blame others	8
5. How you think and feel about others	5
Expectative	
1. I and/or other people should act a certain way	9
2. How someone comes across to you	7
3. Appropriate behaviors	4
4. How you perceive the expectative component	3
Affective	
1. Assumptions about people / how they will act	13
2. We start to like someone	11
3. Past experiences affect our future behaviors	10
4. How you behave affects others	8
5. We think someone will be shy and/or unfriendly in the future	3

different learning styles (i.e., auditory, kinesthetic, and visual), field independent cognitive style, and field dependent cognitive style along with basic information about different learning styles. Again, these concepts are referenced throughout the Culture and Education chapter and are used to explain students' and teachers' communicative behaviors across cultures. In both M/PC CATs, students responded to each statement using a 5-point scale ranging from *I am absolutely certain this is true* to *I am absolutely certain this is false*. Collectively, the two M/PC CATs provided information about three teaching goals identified by Angelo and Cross (1993, p. 132).

- "Develop the ability to distinguish between facts and opinions"
- "Learn terms and facts of this subject"
- "Learn concepts and theories in this subject"

The two M/PC CATs were analyzed separately. The results of the first M/PC CAT indi-

cate that an overwhelming majority (79.4%) of the students were able to distinguish between connotations and denotations, and pragmatics and semantics. However, fewer (54.6%) of the students indicated they understood how indexing is used in verbal communication. In fact, 39.2 percent of the students indicated misconceptions of this concept. Thus, future lectures on this chapter should devote more attention to explaining indexing. Again, a more precise definition that "indexing is a way of distinguishing between people" may help students understand this concept. Moreover, a brief activity in which the students are asked to categorize their friends may be appropriate after defining indexing as the students likely have different friends for different activities and thus distinguish between or among their friends. Further, the instructor could ask the students to distinguish between older and younger instructors. Again, this requires students to identify differences among (i.e., indexing) people.

The results of the second M/PC CAT indicate that an overwhelming majority (81.7%) of the students were able to distinguish between field independent and field dependent cognitive styles and had accurate perception of the different learning styles. However, only 74 percent of the students indicated that none of the learning style is better than the others. This is surprising as the lecture included several examples related to the students' own learning styles that emphasized that students learn differently, and that none of the learning style is superior to the other learning styles. One example used was to refer back to a previous activity completed in the course. The students were asked to raise their hands if they believed they had developed a better understanding of the concepts after completing the activity. Next, students were asked to raise their hands if they believed that they did not develop a better understanding of the concepts after completing the activity. Thus, it was explained that some students appeared to understand the concepts well by being passive auditory learners whereas other students' learning was enhanced by the activity (i.e., kinesthetic).

Although the students largely indicated accurate perceptions of the claims included in the second M/PC CAT, the results indicate that more than 20 percent of the students had no idea if some learning styles are better than others, and roughly 16 percent of the students inaccurately believed that some learning styles are better than others. To emphasize that none of the learning styles is superior to the others and that learning styles merely suggest a person's personal preference toward learning, the instructor could potentially ask the students to indicate how they learn different concepts and behaviors. For instance, students could respond to the questions: "if you were to start playing golf, how would you prefer to learn how to play?" "If you were asked to learn a new language, how would you prefer to learn that language?" "If you had to learn a new format for writing papers in college, how would

you prefer to learn that format?" Because these three learning experiences are distinctly different, it is possible that the students would indicate different learning preferences for the three tasks. By acknowledging that their learning styles may differ depending on the task or subject matter, the students may, in fact, conclude that none of the learning styles is superior to the others, that a person's learning style simply refers to his/her learning preference, and that learning styles may vary depending on subjects and tasks.

Muddiest Point

The Muddies Point CAT is an easy and effective method of determining what the students perceived as least clear (i.e., muddiest) about a particular class, discussion, movie, or other course-related materials or activities. Students are simply asked to respond to a variation of the question: "What was the muddiest point during today's class?" Thus, the Muddies Point CAT is time-efficient and requires limited student effort while simultaneously proving clear information about what students did not understand during that particular class period (Angelo & Cross, 1993).

The Muddies Point CAT was completed ($N = 220$) at the end of the class period during which the Family and Friends chapter was covered. This chapter was selected because it includes several new terms and concepts (e.g., compartmentalization, face saving, intergenerational) and several comparisons of family life and friendships across cultures that may be overwhelming to students. Students were given verbal instructions to identify the muddiest point during this particular class period. They were further told that their answers could be simply a concept, a term, or a topic area. As such, this CAT provided information about three teaching goals identified by Angelo and Cross (1993, p. 154).

- "Learn terms and facts of this subject"
- "Learn concepts and theories in this subject"

- “Develop appropriate study skills, strategies, and habits”

The results of the Muddiest Point CAT are positive, yet rather diverse. While many students ($n = 59$) indicated that “nothing was confusion, unclear, or muddy,” the remainder of the responses were relatively evenly distributed. The muddiest points were developing time ($n = 27$), responsibilities of friends ($n = 21$), families across cultures ($n = 17$), compartmentalization ($n = 14$), collectivistic families ($n = 12$), duration of relationships ($n = 12$), marriage ($n = 12$), face saving ($n = 11$), selection of friends ($n = 11$), individualistic families ($n = 8$), friendships ($n = 5$), number of friends ($n = 5$), intergenerational families ($n = 3$), and self-disclosure ($n = 3$).

Because the results of the Muddiest Point CAT were so diverse and relatively evenly distributed, it is difficult to identify specific areas that need to be taught differently. However, because this chapter includes several new terms and concepts, it may be appropriate to provide the students with a worksheet that requires them to fill in the blanks after each part of the lecture. Moreover, a second worksheet in which students have to identify characteristics of (a) friendships, (b) family life, and (c) marriages between individualistic and collectivistic cultures would require the students to develop a clearer understanding of specific differences in friendships, families, and marriages across cultures. By focusing on these areas, students would be required to describe the nature of self-disclosure, duration of friendships, developing time, compartmentalization, responsibilities of friends, and face saving in different cultures; thus, this worksheet may in fact address most, if not all, of the areas the students identified as “muddy.”

Conclusion

The purpose of this report was two-fold. The first purpose was to identify desired teaching goals and essential skills in a junior-level

Intercultural Communication course. The second purpose was to describe, implement, and analyze the results of three Classroom Assessment Techniques (CATs) as a means of improving teaching and students’ learning. The three CATs (i.e., Minute Paper, Misconception/Perception Check, and Muddiest Point) were used as a type of formative assessment that provided direct evidence of students’ learning. Collectively, the results of three CATs indicate that students largely achieved the desired learning goals in the course. However, the results further indicated that the students struggled with some of the course content.

During the class period after each CAT was completed, the instructor debriefed the students by reporting the results of the CAT. Next, the instructor provided a review of the course content that students found “muddy,” misperceived, or were unable to identify as important. Additional examples were also provided along with explanations of how the concepts, behaviors, or characteristics differ across cultures to enhance students’ overall understanding of the course content. Thus, the assessment loop of identifying goals, collecting and analyzing evidence measuring goal-attainment, and identifying and implementing methods of enhancing goal-attainment was completed.

References

- Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Huba, M. E., & Freed, J. E. (2000). *Learning-centered assessment on college campuses: Shifting the focus from teaching to learning*. Boston, MA: Allyn & Bacon.
- Suskie, L. (2004). *Assessing student learning: A common sense guide*. San Francisco, CA: Anker.
- Spellings Commission (2006). *A test of leadership: Changing the future of U.S. higher education*. Retrieved from www.ed.gov/about/bdscomm/list/hied-future/reports/pre-pub-report.pdf
- Terenzini, P. T., & Pascarella, E. T. (1994). Living the myths. *Change*, 26, 28-32.

APPENDIX A

1. Connotations refer to a commonly agreed upon definition of a word, such as the dictionary definition.					
I am absolutely certain this is true (<i>n</i> = 8, 4.1%)	I am pretty sure this is true (<i>n</i> = 24, 12.4%)	I have no idea whether this is true or false (<i>n</i> = 8, 4.1%)	I am pretty sure this is false (<i>n</i> = 38, 19.6%)	*I am absolutely certain this is false (<i>n</i> = 116, 59.8%)	
2. Those who study semantics study the meaning of words					
*I am absolutely certain this is true (<i>n</i> = 138, 69.7%)	I am pretty sure this is true (<i>n</i> = 48, 24.2%)	I have no idea whether this is true or false (<i>n</i> = 1, .5%)	I am pretty sure this is false (<i>n</i> = 2, 1.0%)	I am absolutely certain this is false (<i>n</i> = 4, 2.0%)	
3. Those who study pragmatics study the use of language in everyday life.					
*I am absolutely certain this is true(<i>n</i> = 121, 63.0%)	I am pretty sure this is true(<i>n</i> = 56, 29.2%)	I have no idea whether this is true or false(<i>n</i> = 9, 4.7%)	I am pretty sure this is false (<i>n</i> = 3, 1.6%)	I am absolutely certain this is false (<i>n</i> = 2, 1.0%)	
4. Denotations refer to a commonly agreed upon definition of a word, such as the dictionary definition					
*I am absolutely certain this is true (<i>n</i> = 127, 65.8%)	I am pretty sure this is true (<i>n</i> = 28, 15.1%)	I have no idea whether this is true or false (<i>n</i> = 16, 8.3%)	I am pretty sure this is false (<i>n</i> = 16, 8.3%)	I am absolutely certain this is false (<i>n</i> = 6, 3.1%)	
5. Indexing means that we assign a time and/or date to a specific behavior to avoid abstractions.					
I am absolutely certain this is true (<i>n</i> = 32, 16.5%)	I am pretty sure this is true (<i>n</i> = 44, 22.7%)	I have no idea whether this is true or false (<i>n</i> = 12, 6.2%)	I am pretty sure this is false (<i>n</i> = 27, 13.9%)	*I am absolutely certain this is false (<i>n</i> = 79, 40.7%)	

Note: Correct answers are marked *. Students were asked to circle their answers

APPENDIX B

1. Kinesthetic learners prefer hands-on active learning.			
*I am absolutely certain this is true (<i>n</i> = 163, 74.4%)	I am pretty sure this is true (<i>n</i> = 49, 22.7%)	I have no idea whether this is true or false (<i>n</i> = 5, 2.3%)	I am pretty sure this is false (<i>n</i> = 0, 0%) I am absolutely certain this is false (<i>n</i> = 2, .9%)
2. All learning styles are found within all cultures, but each culture has a dominant style.			
*I am absolutely certain this is true (<i>n</i> = 149, 68.0%)	I am pretty sure this is true (<i>n</i> = 52, 23.7%)	I have no idea whether this is true or false (<i>n</i> = 11, 5.0%)	I am pretty sure this is false (<i>n</i> = 7, 3.1%) I am absolutely certain this is false (<i>n</i> = 0, 0%)
3. Students with a field independent cognitive style look at the whole picture, prefer to work with others, and are relationship oriented.			
I am absolutely certain this is true (<i>n</i> = 22, 10.0%)	I am pretty sure this is true (<i>n</i> = 10, 4.6%)	I have no idea whether this is true or false (<i>n</i> = 8, 3.7%)	I am pretty sure this is false (<i>n</i> = 14, 6.4%) *I am absolutely certain this is false (<i>n</i> = 165, 75.3%)
4. The field dependent cognitive style is prevalent in group-oriented, collectivistic, and high-context cultures.			
*I am absolutely certain this is true (<i>n</i> = 148, 67.6%)	I am pretty sure this is true (<i>n</i> = 36, 16.4%)	I have no idea whether this is true or false (<i>n</i> = 12, 5.5%)	I am pretty sure this is false (<i>n</i> = 11, 5.0%) I am absolutely certain this is false (<i>n</i> = 12, 5.5%)
5. Some learning styles are better than others.			
I am absolutely certain this is true (<i>n</i> = 13, 5.9%)	I am pretty sure this is true (<i>n</i> = 23, 10.5%)	I have no idea whether this is true or false (<i>n</i> = 21, 9.6%)	I am pretty sure this is false (<i>n</i> = 21, 9.6%) *I am absolutely certain this is false (<i>n</i> = 141, 64.4%)
6. Students with a field independent cognitive style are task-oriented and prefer to work alone.			
*I am absolutely certain this is true (<i>n</i> = 167, 76.3%)	I am pretty sure this is true (<i>n</i> = 29, 13.2%)	I have no idea whether this is true or false (<i>n</i> = 13, 5.9%)	I am pretty sure this is false (<i>n</i> = 8, 3.7%) I am absolutely certain this is false (<i>n</i> = 2, .9%)

Note: Correct answers are marked *. Students were asked to circle their answers.