Analysis of Interpersonal Communication Papers: Concept Comprehension and Application

Papers from spring 2014 COM 200 classes were used to assess student comprehension and application abilities. Three sections of COM 200 had been taught in spring 2014, one by Instructor 3, one by Instructor 1 (online), and one by Instructor 2. Below is a summary of an analysis of the papers from these three sections of COM 200 for their demonstration of student conceptual comprehension and ability to apply class concepts.

Consistent with campus-wide assessment efforts at the University of Hawai‘i at Hilo, the rating scale used in this analysis included four discrete categories: Beginning, Emerging, Competent, and Advanced.

A given paper was rated as being Advanced not only if the student writing showed understanding of the concept being discussed, but also if the student could provide written evidence of applying the concept accurately to the situation(s) being analyzed by the student. Both comprehension and application were necessary for a given paper to merit a rating of Advanced. Otherwise a paper would be rated as Competent, Emerging, or Beginning, depending upon the rater’s assessment of the student’s degree of conceptual understanding as reflected in the written document itself.

Assessment Evaluations of Instructor 3’s Class Papers

Ratings were independently made by Instructor 1 and Instructor 2 at the conclusion of the spring 2014 semester. There was a total N of 17 papers in Instructor 3’s COM 200 (Interpersonal Communication) group.

Instructor 1 perceived 65% (all percentages rounded) of the 17 papers in the Instructor 3 group to be at the Advanced level of achievement, 29% at the level of Competence, 0% at the Emerging level, and 6% at the Beginning level.

Instructor 2 perceived 24% of the 17 papers in the Instructor 3 group to be at the Advanced level of achievement, 71% at the level of at least Competence, 6% at the Emerging level, and 0% at the Beginning level.

The first discovery is that Instructor 1 and Instructor 2 rated these papers differently from one another within the top two categories of Advanced and Competent, in that Instructor 1 perceived two and a half times more papers to be within the Advanced category than did Instructor 2.

There was no material difference within the remaining two categories, Emerging and Beginning, where both raters perceived 6% of the papers as being located.

Overall percentage of exact agreement was 35.29%. This is a low inter-rater level of exact agreement.

The implication of the above is that further work in the future with the four-level category system employed would be appropriate to more mutually and precisely establish exactly what is to distinguish the Advanced paper from the Competent paper.
This was both raters’ first use of this rating system on student papers, and the ninety-minute planning and practice session that was held prior to the current ratings being made was not sufficient to establish a common baseline. This is a largely resolvable issue requiring future collaborative rating practice sessions to achieve greater inter-rater alignment.

Nevertheless, the overall encouraging finding is that 88% of the rated papers were seen by both raters to be either Competent or Advanced. While it is true that exact agreement was low, there was substantial inter-rater agreement that close to 90% of the papers reached at least the level of Competence, and perhaps the Advanced level of achievement. 18% of the papers were seen as Advanced by both raters, and 0% of the papers were viewed as less than Competent by both raters.

The attainment of 88% Competence-and-beyond by the students in this writing sample is a positive sign that these students are producing papers that are acceptable-and-above in reflecting their understanding and application of key course concepts or principles.

Due to a misunderstanding of the coding process, Instructor 3 in the fall of 2014 also independently re-read this group of papers from their spring COM 200 class, and rated them. Instructor 3 saw 82% of these papers to be Advanced which was in the vicinity of the ratings independently made by Instructor 1, who had perceived 65% of the papers in the Instructor 3 sample to be Advanced,.

Again, ratings at this level stipulate not only that the student understands the concept at hand and can articulate that comprehension, but also that the student can actually apply the concept appropriately in their paper.

Instructor 3 perceived the remaining three of seventeen papers in this group to be at the level of Competence. She saw 0% of the papers as falling within the Emerging or Beginning categories, while Instructor 1 and Instructor 2 had each placed 6% (one paper) in one of the bottom two categories in this four-category system.

Across both independent raters (Instructor 1 and Instructor 2), then, and in the view of the course instructor as well, 88% or more of these seventeen papers were at least Competent. Instructor 1 and Instructor 3 respectively perceived 65% and 82% of the papers to be Advanced in understanding and application.

These percentages provide written evidence that something productive is happening for students in this COM 200 course.

**Assessment Evaluations of Instructor 2's Class Papers**

Papers from Instructor 2’s spring 2014 Interpersonal Communication (COM 200) course were also analyzed by Instructor 1 and 3 independently reading and rating a total of eighteen papers.

Instructor 1 perceived 67% of the papers in the Instructor 2 group to be at the Advanced level, 22% to be at the level of Competence, 11% to be Emerging, and 0% at the Beginning level. A total of 89% of the papers, then, were seen by Instructor 1 to be at least Competent, and more likely Advanced (by a ratio of 3:1).
Instructor 3 perceived 89% of the papers in the Instructor 2 group to be Advanced, and the remaining 11% to be Competent.

For 61% of the papers both raters, Instructor 1 and Instructor 3, simultaneously assigned a score of 4, i.e., Advanced. So while the independent figures were 67% and 89% Advanced, a total of 28% of the time one rater assigned a paper to the Advanced category (usually Instructor 3), while the other rater (typically Instructor 1) would perceive the paper to be Competent.

For a total of 89% papers, then, one or both raters perceived a given paper to be at least Competent, and more likely Advanced.

There were no cases (0%) where both raters perceived a paper to fall only within the Competent, Emerging or Beginning categories. In 11% of the total cases (N=2) one of the two raters would see a paper to be in one of the two lower categories, while the other rater placed that paper in one of the upper two categories.

Overall exact agreement between these two raters was 61%, which is in the moderate range.

**Assessment Values of Instructors 1’s Class Papers**

While two raters had intended to assess a set of twenty papers from Instructor 1’s spring 2014 COM 200 class, one rater misunderstood the coding process, resulting in ratings being made by only one rater for this group of papers.

Instructor 2 rated 35% of the papers in this group of twenty as Advanced, 55% as Competent, and 10% as Emerging.

**Summary of Learnings**

(1) Shared Understanding of coding process and further practice rating sessions are needed if we are to achieve a consistently high exact percentage of rater agreement.

(2) Few papers from the three sections of COM 200 in the spring of 2014 were seen to be merely Beginning or Emerging, never more than 11% across both judges combined.

(3) If we look at raters’ individual ratings, we have peer ratings of 35%, 35%, 65%, 67%, and 89% of the papers being assessed as Advanced, with the bulk of the remaining papers being assessed as Competent.

(4) It would seem that many students are indeed able to understand and effectively apply interpersonal communication concepts to incidents and contexts of their choosing, and the vast majority of the others are able to provide evidence of at least having a fundamental grasp of those concepts.

(5) Future assessments should select assignments of comparable weight and value and rate a small sample of papers until high inter-reliability is reached (adding practice/discussion sessions as needed).