

## **Gains in Written Communication Among Learning Habits Students: A Report on an Initial Assessment Exercise**

The following pages provide a brief overview of an assessment exercise focusing on a small set of essays competed by selected Learning Habits students at two points in their college careers: during their first semester at CSUN and during the first semester of their Junior years. The students provided the paired essays examined as examples of argumentative or thesis driven essays that they had submitted for a grade in one of the classes they took during the semester in question.<sup>1</sup> After a brief description of the Learning Habits Project, and the place of the student writing samples in the more comprehensive data collection process, this brief report describes the assessment procedures relied on and examines the scoring results from several different points of view.

### **The Learning Habits Project**

The Learning Habits Project is designed to track, over a four-to-six-year period, several groups of newly enrolled students likely to succeed at the university in the hope of gaining insight into their characteristics and practices. That is, we seek to find out about their learning habits. The Project is an integral part of the university's ongoing efforts to assess the success of its varied academic and co-curricular programs in fostering student learning.

Since the Project was launched in Fall 2007, we have gathered responses to 10-12 end-of-term surveys from approximately 225 students who entered CSUN as freshman in Fall 2007 or Fall 2008. Each of these electronic surveys poses several open-ended questions to which students respond. We have also conducted in-depth face-to-face interviews with most of these participants during their first and third years of college and asked them to provide essay assignments that they completed during each of these time periods. In addition, we have completed first-year interviews with another 415 incoming freshmen who entered CSUN in Fall 2010 or Fall 2011, along with junior-year interviews for the Fall 2010 cohort.

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<sup>1</sup> In addition to the writing samples, most students submitted the prompts or assignments that they received from their instructors prior to preparing their essays.

Like their predecessors, these more recent entrants have completed end-of-term surveys on a regular basis and submitted writing samples.

Primary responsibility for the end-of-term surveys rests with the Office of Institutional Research, which also compiles background information on the student participants. Most face-to-face interviews, which are tape recorded, are conducted by the group of faculty and staff involved in an ongoing Learning Habits Seminar that meets regularly during the Fall and Spring semesters.

### **Assessing Student Writing**

The essays under study here were selected from the larger set submitted by the Learning Habits freshmen who entered CSUN in Fall 2007 or Fall 2008. The 12 paired essays examined in this preliminary exercise were chosen for assessment because they represented good examples of argumentative thesis-driven essays. Although most of the freshman writing samples submitted by Learning Habits students meet this criterion, many of the junior essays do not. Thus, the selection of a small number of clearly appropriate examples of the latter proved essential. Another strength of the current exercise is the ability to rely on pairs of essays written by the same students at comparable points in their college careers. Having access to such paired essays is relatively rare and has the benefit of allowing one to control for a great deal of the variation that is unavoidable in the more typical cross-sectional approach to the assessment of student learning.

Work on the current assessment exercise commenced early in Summer 2013, when a four-person group of writing experts began the process of developing a scoring rubric to guide evaluation of the essays in question.<sup>2</sup> The document that eventually evolved has six dimensions, each of which is evaluated independently:

- The context and purpose for writing and critical thinking
- Organization and cohesion

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<sup>2</sup> The group was guided by Irene Clark, the Director of Composition in CSUN's English Department, and included three other instructors in the Program: Amanda Harrison, Andrea Hernandez, and Ronit Sarig

- Content development and coherence
- Genre and disciplinary conventions
- Appropriate reliance on sources and evidence
- Control of syntax and mechanics

Four summary descriptions of student expertise serve to assess each of the dimensions: Less than Adequate, Satisfactory, Competent, and Superior. These scores could be further refined with the addition of pluses and minuses (e.g., Competent + or Satisfactory -).

In the weeks following the initial development of the rubric, its dimensions were further refined during e-mail exchanges and another face-to-face meeting. This second meeting also served as a norming session in which the four assessors compared their understanding of various dimensions with the aid of selected writing samples. The final version of the rubric appears in the appendix to this report. On July 23<sup>rd</sup>, the group assembled for a day-long session during which each of the 12 essay pairs were evaluated by all members of the assessment panel. Subsequently, their initial qualitative scores were translated into numerical equivalents (see the left-hand column of Table 1). The six summary tables attached to this report, and discussed below, provide an overview of both the qualitative and numerical scores.

### **Results of the Assessment Exercise**

Table 1 simply presents coding frequencies for each of the assessors and dimensions considered. Thus, for example, the first section of the table indicates that Coder A assigned six Competent ratings in assessing the Context and Purpose dimension of the 24 essays under study, while she assigned only two Superior scores for the same dimension. Taken together, however, the four coders assigned 13 Competent scores in assessing this first dimension and 12 Superior scores. The counts in Table 1 indicate that, overall, Competent and Superior ratings were most frequently assigned to three dimensions: Context and Purpose, Sources and Evidence, and Syntax and Mechanics. Such ratings were somewhat less frequently assigned to the other three dimensions (55% - 60% of the ratings were of this type compared to 64%-66% for the three dimensions named).

The last section of Table 2 summarizes the frequency with which various scores were assigned by individual assessors across all dimensions combined. The other three sections of the table use percentages to summarize the relative frequency with which various scores were assigned. The overall percentage distribution on the second page of Table 2 indicates that the Less-than-Adequate category was relatively infrequently employed by all but one of the individual assessors. The first two sections of Table 2 summarize the relative frequency with which various scores were assigned to the Freshman and Junior essays. These two distributions show that Competent scores were significantly more frequently assigned to the Junior essays than to the Freshman essays by all but one of the assessors (41% overall vs. 29%). As a result, the majority of the Junior essays received at least one Competent or Superior rating compared to a bare majority of the Freshman essays (71% vs. 52%).

In Table 3, and those that follow, the qualitative assessments have been converted to their numerical equivalents. In the case of Table 3, these equivalents are shown by essay, assessor, and dimension. The totals highlighted in red deviate substantially from those assigned to the same essay by the three other assessors and are, therefore, excluded from the summary information shown in Table 5b and 6b.<sup>3</sup> Table 4 indicates that the outliers identified in red occur more frequently among the Junior essays than among the Freshman essays. This divergence is likely to reflect the greater diversity of the latter. Although the divergent summary scores represent a relatively small proportion of the 48 evaluations provided by the four assessors, they involve more than half of the 12 Junior essays evaluated. This may be a sign that a more extensive norming discussion is necessary before further Junior essays in particular are assessed.

Tables 5a and 5b display average scores for each of the six dimensions by assessor and overall, with the divergent scores excluded from Table 5b. In both tables, separate averages are shown for the Freshman and Junior essays. Differences between the various averages appear at the bottom of the table.

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<sup>3</sup> In some cases, two of the assessors assigned scores that diverged significantly from those of the other two. In these cases, eliminating one or more didn't make sense and all were retained.

They suggest that the quality of students' writing improved modestly during their first two years in college, with moderate gains spread fairly evenly across all six dimensions. Elimination of the divergent scores increases the overall average scores slightly and shows a slightly larger gain during the two-year period. The shifts in average scores between Table 5a and 5b are insignificant, however.

Thus far, the assessments provided by most assessors have been treated as separate observations, with each accorded equal weight, even though the underlying documents being assessed are the same. The scores shown in Table 6a and 6b eliminate this underlying duplication and rely on a more conventional approach to assessment of student learning. That is, the dimension-specific scores assigned to individual essays have been averaged to provide a single summary score for each essay and dimension.<sup>4</sup> As was done for Table 5, the individual divergent assessment scores have been ignored in calculating the essay-specific averages shown in Table 6b. Finally, both versions of Table 6 display overall averages for the Freshman and Junior essays considered collectively.

At this broader level, modest longitudinal gains are again evident in both tables and across all dimensions. At the individual level, however, 4-5 essay pairs show a decline in written skills between the Freshman and Junior years. The remainder, however, which constitute the majority, show gains, some of which are quite substantial. There are also some differences in gains by essay dimension, with the Sources and Evidence dimension showing a somewhat greater longitudinal gain than do the other dimensions considered. In short, no matter how one approaches the small data set considered here, evidence of long-term gains in written communication emerges.

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<sup>4</sup> Conventionally, assessment exercises involve having two people assess a single writing sample, with a third reading required when the first two differ significantly. Once two similar score sets are in hand, they are averaged, with the average retained for the final data analysis.

**Table 1. Codes Assigned to Individual Learning Habits Essays by Coder and Category**

| Topic and Code   | Coder A | Coder B | Coder C | Coder D | Total |
|--|---------|---------|---------|---------|-------|
| <b>Context and Purpose for Writing and Critical Thinking</b> |         |         |         |         |       |
| Less than adequate minus (0.8)                               |         |         |         |         |       |
| Less than adequate (1.0)                                     | 5       |         |         |         | 5     |
| Less than adequate plus (1.2)                                | 1       | 2       | 2       | 2       | 7     |
| Satisfactory minus (1.8)                                     | 2       | 2       | 2       | 3       | 9     |
| Satisfactory (2.0)   | 2       | 1       | 2       | 1       | 6     |
| Satisfactory plus (2.2)                                      | 1       |         | 5       |         | 6     |
| Competent minus (2.8)  | 2       | 4       | 4       |         | 10    |
| Competent (3.0)  | 6       | 2       | 3       | 2       | 13    |
| Competent plus (3.2)   | 3       | 4       | 1       | 7       | 15    |
| Superior minus (3.8)   |         | 1       |         | 3       | 4     |
| Superior (4.0)   | 2       | 4       | 2       | 4       | 12    |
| Superior plus (4.2)  |         | 4       | 3       | 2       | 9     |
| Number of essays   | 24      | 24      | 24      | 24      | 96    |
| <b>Organization and Cohesion</b>                             |         |         |         |         |       |
| Less than adequate minus (0.8)                               | 1       |         |         |         | 1     |
| Less than adequate (1.0)                                     | 1       |         |         | 2       | 3     |
| Less than adequate plus (1.2)                                | 2       | 1       |         |         | 3     |
| Satisfactory minus (1.8)                                     | 4       | 3       | 2       | 3       | 12    |
| Satisfactory (2.0)   |         | 5       | 2       | 1       | 8     |
| Satisfactory plus (2.2)                                      | 2       | 1       | 7       | 3       | 13    |
| Competent minus (2.8)  | 2       | 1       | 2       | 1       | 6     |
| Competent (3.0)  | 3       | 2       | 5       | 4       | 14    |
| Competent plus (3.2)   | 4       | 3       | 1       | 4       | 12    |
| Superior minus (3.8)   | 3       | 4       | 1       |         | 8     |
| Superior (4.0)   | 2       | 1       | 2       | 4       | 9     |
| Superior plus (4.2)  |         | 3       | 2       | 2       | 7     |
| Number of essays   | 24      | 24      | 24      | 24      | 96    |
| <b>Content Development and Coherence</b>                     |         |         |         |         |       |
| Less than adequate minus (0.8)                               | 2       |         |         | 1       | 3     |
| Less than adequate (1.0)                                     | 1       | 1       |         | 1       | 3     |
| Less than adequate plus (1.2)                                | 1       |         |         | 2       | 3     |
| Satisfactory minus (1.8)                                     | 2       | 5       | 2       | 1       | 10    |
| Satisfactory (2.0)   | 4       | 3       | 5       |         | 12    |
| Satisfactory plus (2.2)                                      | 2       | 1       | 3       | 2       | 8     |
| Competent minus (2.8)  | 2       | 3       | 7       | 2       | 14    |
| Competent (3.0)  | 4       | 2       | 2       | 1       | 9     |
| Competent plus (3.2)   | 4       | 2       |         | 5       | 11    |
| Superior minus (3.8)   |         | 2       | 1       | 6       | 9     |
| Superior (4.0)   | 2       | 1       | 1       | 2       | 6     |
| Superior plus (4.2)  |         | 4       | 3       | 1       | 8     |
| Number of essays   | 24      | 24      | 24      | 24      | 96    |

Table 1 cont'd. -2

| Topic and Code                            | Coder A | Coder B | Coder C | Coder D | Total |
|---|---------|---------|---------|---------|-------|
| <b>Genre and Disciplinary Conventions</b> |         |         |         |         |       |
| Less than adequate minus (0.8)            | 1       |         |         |         | 1     |
| Less than adequate (1.0)                  | 2       |         |         | 1       | 3     |
| Less than adequate plus (1.2)             | 2       | 2       | 1       | 2       | 7     |
| Satisfactory minus (1.8)                  | 4       | 6       | 1       | 1       | 12    |
| Satisfactory (2.0)                        | 2       | 2       | 1       | 1       | 6     |
| Satisfactory plus (2.2)                   | 1       | 1       | 12      |         | 14    |
| Competent minus (2.8)                     | 3       | 1       | 1       | 1       | 6     |
| Competent (3.0)                           | 3       | 4       |         | 3       | 10    |
| Competent plus (3.2)                      | 4       |         | 2       | 5       | 11    |
| Superior minus (3.8)                      | 1       |         | 1       | 5       | 7     |
| Superior (4.0)                            | 1       | 6       | 2       | 2       | 11    |
| Superior plus (4.2)                       |         | 2       | 3       | 3       | 8     |
| Number of essays                          | 24      | 24      | 24      | 24      | 96    |
| <b>Sources and Evidence</b>               |         |         |         |         |       |
| Less than adequate minus (0.8)            | 1       |         |         | 1       | 2     |
| Less than adequate (1.0)                  | 1       | 1       |         | 1       | 3     |
| Less than adequate plus (1.2)             | 2       | 1       |         | 3       | 6     |
| Satisfactory minus (1.8)                  | 1       | 1       | 4       | 1       | 7     |
| Satisfactory (2.0)                        | 5       | 3       | 3       |         | 11    |
| Satisfactory plus (2.2)                   |         |         | 5       |         | 5     |
| Competent minus (2.8)                     | 3       | 2       | 2       | 2       | 9     |
| Competent (3.0)                           | 3       | 7       | 3       |         | 13    |
| Competent plus (3.2)                      | 4       | 1       | 2       | 8       | 15    |
| Superior minus (3.8)                      |         | 1       |         | 2       | 3     |
| Superior (4.0)                            | 4       | 4       | 3       | 3       | 14    |
| Superior plus (4.2)                       |         | 3       | 2       | 3       | 8     |
| Number of essays                          | 24      | 24      | 24      | 24      | 96    |
| <b>Control of Syntax and Mechanics</b>    |         |         |         |         |       |
| Less than adequate minus (0.8)            |         |         |         |         |       |
| Less than adequate (1.0)                  | 2       |         |         |         | 2     |
| Less than adequate plus (1.2)             | 1       |         |         | 1       | 2     |
| Satisfactory minus (1.8)                  | 3       | 1       |         |         | 4     |
| Satisfactory (2.0)                        | 5       | 2       | 4       | 2       | 13    |
| Satisfactory plus (2.2)                   |         | 2       | 9       | 3       | 14    |
| Competent minus (2.8)                     | 2       | 5       | 4       | 2       | 13    |
| Competent (3.0)                           | 3       | 5       | 1       | 3       | 12    |
| Competent plus (3.2)                      | 1       | 1       |         | 4       | 6     |
| Superior minus (3.8)                      | 3       | 2       | 1       | 3       | 9     |
| Superior (4.0)                            | 3       | 4       | 2       | 5       | 14    |
| Superior plus (4.2)                       | 1       | 2       | 3       | 1       | 7     |
| Number of essays                          | 24      | 24      | 24      | 24      | 96    |

**Table 2. Summary of Codes Assigned to Individual Learning Habits Essays by Coder and Essay Level**

| Level and Code                  | Coder A       | Coder B       | Coder C       | Coder D       | Total          |
|---------------------------------|---------------|---------------|---------------|---------------|----------------|
| <b>Freshman Essays</b>          |               |               |               |               |                |
| Less than Adequate              | 27.8          | 5.6           | 1.4           | 20.8          | 13.9           |
| <i>Minus (0.8)</i>              | 6.9           | 0.0           | 0.0           | 2.8           | 2.4            |
| <i>Less than adequate (1.0)</i> | 11.1          | 1.4           | 0.0           | 6.9           | 4.9            |
| <i>Plus (1.2)</i>               | 9.7           | 4.2           | 1.4           | 11.1          | 6.6            |
| Satisfactory                    | 30.6          | 36.1          | 55.6          | 15.3          | 34.4           |
| <i>Minus (1.8)</i>              | 11.1          | 18.1          | 8.3           | 8.3           | 11.5           |
| <i>Satisfactory (2.0)</i>       | 16.7          | 15.3          | 15.3          | 4.2           | 12.8           |
| <i>Plus (2.2)</i>               | 2.8           | 2.8           | 31.9          | 2.8           | 10.1           |
| Competent                       | 30.6          | 25.0          | 26.4          | 31.9          | 28.5           |
| <i>Minus (2.8)</i>              | 9.7           | 5.6           | 12.5          | 6.9           | 8.7            |
| <i>Competent (3.0)</i>          | 15.3          | 12.5          | 11.1          | 6.9           | 11.5           |
| <i>Plus (3.2)</i>               | 5.6           | 6.9           | 2.8           | 18.1          | 8.3            |
| Superior                        | 11.1          | 33.3          | 16.7          | 31.9          | 23.3           |
| <i>Minus (3.8)</i>              | 2.8           | 9.7           | 1.4           | 9.7           | 5.9            |
| <i>Superior (4.0)</i>           | 6.9           | 16.7          | 6.9           | 12.5          | 10.8           |
| <i>Plus (4.2)</i>               | 1.4           | 6.9           | 8.3           | 9.7           | 6.6            |
| Totals<br>(Number of essays)    | 100.0<br>(72) | 100.0<br>(72) | 100.0<br>(72) | 100.0<br>(72) | 100.0<br>(288) |
| <b>Junior Essays</b>            |               |               |               |               |                |
| Less than Adequate              | 8.3           | 5.6           | 2.8           | 2.8           | 4.9            |
| <i>Minus (0.8)</i>              | 0.0           | 0.0           | 0.0           | 0.0           | 0.0            |
| <i>Less than adequate (1.0)</i> | 5.6           | 1.4           | 0.0           | 0.0           | 1.7            |
| <i>Plus (1.2)</i>               | 2.8           | 4.2           | 2.8           | 2.8           | 3.1            |
| Satisfactory                    | 25.0          | 18.1          | 40.3          | 15.3          | 24.7           |
| <i>Minus (1.8)</i>              | 11.1          | 6.9           | 6.9           | 4.2           | 7.3            |
| <i>Satisfactory (2.0)</i>       | 8.3           | 6.9           | 8.3           | 2.8           | 6.6            |
| <i>Plus (2.2)</i>               | 5.6           | 4.2           | 25.0          | 8.3           | 10.8           |
| Competent                       | 47.2          | 43.1          | 29.2          | 43.1          | 40.6           |
| <i>Minus (2.8)</i>              | 9.7           | 16.7          | 15.3          | 4.2           | 11.5           |
| <i>Competent (3.0)</i>          | 15.3          | 18.1          | 8.3           | 11.1          | 13.2           |
| <i>Plus (3.2)</i>               | 22.2          | 8.3           | 5.6           | 27.8          | 16.0           |
| Superior                        | 19.4          | 33.3          | 27.8          | 38.9          | 29.9           |
| <i>Minus (3.8)</i>              | 6.9           | 4.2           | 4.2           | 16.7          | 8.0            |
| <i>Superior (4.0)</i>           | 12.5          | 11.1          | 9.7           | 15.3          | 12.2           |
| <i>Plus (4.2)</i>               | 0.0           | 18.1          | 13.9          | 6.9           | 9.7            |
| Totals<br>(Number of essays)    | 100.0<br>(72) | 100.0<br>(72) | 100.0<br>(72) | 100.0<br>(72) | 100.0<br>(288) |



Table 2 cont'd.

| Level and Code                  | Coder<br>A | Coder<br>B | Coder<br>C | Coder<br>D | Total |
|---------------------------------|------------|------------|------------|------------|-------|
| <b>All Essays</b>               |            |            |            |            |       |
| <b>Percentages</b>              |            |            |            |            |       |
| Less than Adequate              | 18.1       | 5.6        | 2.1        | 11.8       | 9.4   |
| <i>Minus (0.8)</i>              | 3.5        | 0.0        | 0.0        | 1.4        | 1.2   |
| <i>Less than adequate (1.0)</i> | 8.3        | 1.4        | 0.0        | 3.5        | 3.3   |
| <i>Plus (1.2)</i>               | 6.3        | 4.2        | 2.1        | 6.9        | 4.9   |
| Satisfactory                    | 27.8       | 27.1       | 47.9       | 15.3       | 29.5  |
| <i>Minus (1.8)</i>              | 11.1       | 12.5       | 7.6        | 6.3        | 9.4   |
| <i>Satisfactory (2.0)</i>       | 12.5       | 11.1       | 11.8       | 3.5        | 9.7   |
| <i>Plus (2.2)</i>               | 4.2        | 3.5        | 28.5       | 5.6        | 10.4  |
| Competent                       | 38.9       | 34.0       | 27.8       | 37.5       | 34.5  |
| <i>Minus (2.8)</i>              | 9.7        | 11.1       | 13.9       | 5.6        | 10.1  |
| <i>Competent (3.0)</i>          | 15.3       | 15.3       | 9.7        | 9.0        | 12.3  |
| <i>Plus (3.2)</i>               | 13.9       | 7.6        | 4.2        | 22.9       | 12.2  |
| Superior                        | 15.3       | 33.3       | 22.2       | 35.4       | 26.6  |
| <i>Minus (3.8)</i>              | 4.9        | 6.9        | 2.8        | 13.2       | 6.9   |
| <i>Superior (4.0)</i>           | 9.7        | 13.9       | 8.3        | 13.9       | 11.5  |
| <i>Plus (4.2)</i>               | 0.7        | 12.5       | 11.1       | 8.3        | 8.2   |
| Totals                          | 100.0      | 100.0      | 100.0      | 100.0      | 100.0 |
| <b>Numbers</b>                  |            |            |            |            |       |
| Less than Adequate              | 26         | 8          | 3          | 17         | 54    |
| <i>Minus (0.8)</i>              | 5          | 0          | 0          | 2          | 7     |
| <i>Less than adequate (1.0)</i> | 12         | 2          | 0          | 5          | 19    |
| <i>Plus (1.2)</i>               | 9          | 6          | 3          | 10         | 28    |
| Satisfactory                    | 40         | 39         | 69         | 22         | 170   |
| <i>Minus (1.8)</i>              | 16         | 18         | 11         | 9          | 54    |
| <i>Satisfactory (2.0)</i>       | 18         | 16         | 17         | 5          | 56    |
| <i>Plus (2.2)</i>               | 6          | 5          | 41         | 8          | 60    |
| Competent                       | 56         | 49         | 40         | 54         | 199   |
| <i>Minus (2.8)</i>              | 14         | 16         | 20         | 8          | 58    |
| <i>Competent (3.0)</i>          | 22         | 22         | 14         | 13         | 71    |
| <i>Plus (3.2)</i>               | 20         | 11         | 6          | 33         | 70    |
| Superior                        | 22         | 48         | 32         | 51         | 153   |
| <i>Minus (3.8)</i>              | 7          | 10         | 4          | 19         | 40    |
| <i>Superior (4.0)</i>           | 14         | 20         | 12         | 20         | 66    |
| <i>Plus (4.2)</i>               | 1          | 18         | 16         | 12         | 47    |
| Totals                          | 144        | 144        | 144        | 144        | 576   |

**Table 3. Codes Assigned to Individual Learning Habits Essays by Category, Essay, and Coder**

| Essay ID | Coder          | Context & Purpose | Organization & Cohesion | Content Develop. | Genre & Discipline | Sources & Evidence | Syntax & Mechanics | Total * |
|----------|----------------|-------------------|-------------------------|------------------|--------------------|--------------------|--------------------|---------|
| 23       | A              | 4.0               | 3.8                     | 3.2              | 3.8                | 4.0                | 4.2                | 23.0    |
|          | B              | 4.0               | 3.8                     | 3.2              | 4.0                | 4.0                | 4.2                | 23.2    |
|          | C              | 4.0               | 4.2                     | 3.8              | 4.2                | 4.0                | 4.2                | 24.4    |
|          | D              | 4.0               | 3.0                     | 3.2              | 3.2                | 3.8                | 4.0                | 21.2    |
|          | <i>Average</i> | 4.0               | 3.7                     | 3.4              | 3.8                | 4.0                | 4.2                | 23.0    |
| 26       | A              | 3.0               | 3.2                     | 3.0              | 3.2                | 3.0                | 2.0                | 17.4    |
|          | B              | 4.2               | 3.8                     | 4.2              | 4.0                | 3.8                | 4.0                | 24.0    |
|          | C              | 2.2               | 2.2                     | 2.0              | 2.2                | 2.2                | 2.2                | 13.0    |
|          | D              | 4.0               | 4.0                     | 4.2              | 4.2                | 4.2                | 4.2                | 24.8    |
|          | <i>Average</i> | 3.4               | 3.3                     | 3.4              | 3.4                | 3.3                | 3.1                | 19.8    |
| 27       | A              | 1.2               | 1.2                     | 2.0              | 2.0                | 2.0                | 2.0                | 10.4    |
|          | B              | 3.2               | 3.2                     | 3.0              | 3.0                | 3.0                | 3.0                | 18.4    |
|          | C              | 3.0               | 3.0                     | 2.8              | 2.2                | 2.0                | 2.2                | 15.2    |
|          | D              | 3.2               | 2.0                     | 2.8              | 3.0                | 1.8                | 2.2                | 15.0    |
|          | <i>Average</i> | 2.7               | 2.4                     | 2.7              | 2.6                | 2.2                | 2.4                | 14.8    |
| 28       | A              | 1.0               | 0.8                     | 1.0              | 0.8                | 1.0                | 1.2                | 5.8     |
|          | B              | 2.0               | 1.8                     | 2.0              | 1.8                | 3.0                | 3.0                | 13.6    |
|          | C              | 3.2               | 3.0                     | 3.0              | 3.2                | 2.0                | 2.8                | 17.2    |
|          | D              | 1.8               | 1.8                     | 1.0              | 1.2                | 1.2                | 2.0                | 9.0     |
|          | <i>Average</i> | 2.0               | 1.9                     | 1.8              | 1.8                | 1.8                | 2.3                | 11.4    |
| 29       | A              | 1.8               | 2.8                     | 2.0              | 1.8                | 1.2                | 1.8                | 11.4    |
|          | B              | 3.8               | 1.8                     | 1.8              | 1.8                | 2.0                | 2.8                | 14.0    |
|          | C              | 2.8               | 2.2                     | 2.8              | 2.2                | 2.0                | 2.0                | 14.0    |
|          | D              | 3.0               | 3.2                     | 2.2              | 3.0                | 3.2                | 2.8                | 17.4    |
|          | <i>Average</i> | 2.9               | 2.5                     | 2.2              | 2.2                | 2.1                | 2.4                | 14.2    |
| 30       | A              | 1.0               | 1.2                     | 0.8              | 1.2                | 2.0                | 2.0                | 8.2     |
|          | B              | 1.2               | 1.8                     | 1.8              | 1.2                | 1.2                | 2.0                | 9.2     |
|          | C              | 2.0               | 2.2                     | 3.0              | 2.2                | 3.0                | 2.8                | 15.2    |
|          | D              | 1.8               | 1.0                     | 1.8              | 1.2                | 1.0                | 2.0                | 8.8     |
|          | <i>Average</i> | 1.5               | 1.6                     | 1.9              | 1.5                | 1.8                | 2.2                | 10.4    |
| 31       | A              | 1.0               | 1.0                     | 0.8              | 1.0                | 0.8                | 1.8                | 6.4     |
|          | B              | 1.8               | 2.0                     | 1.8              | 1.8                | 1.0                | 2.0                | 10.4    |
|          | C              | 1.8               | 2.0                     | 2.0              | 1.8                | 2.2                | 2.0                | 11.8    |
|          | D              | 1.2               | 1.0                     | 0.8              | 1.0                | 0.8                | 1.2                | 6.0     |
|          | <i>Average</i> | 1.5               | 1.5                     | 1.4              | 1.4                | 1.2                | 1.8                | 8.7     |
| 32       | A              | 2.2               | 1.8                     | 2.8              | 1.8                | 2.0                | 3.0                | 13.6    |
|          | B              | 3.2               | 3.0                     | 2.0              | 3.0                | 2.8                | 2.2                | 16.2    |
|          | C              | 1.8               | 2.2                     | 2.0              | 2.2                | 1.8                | 2.2                | 12.2    |
|          | D              | 3.2               | 2.8                     | 3.2              | 3.2                | 3.2                | 2.8                | 18.4    |
|          | <i>Average</i> | 2.6               | 2.5                     | 2.5              | 2.6                | 2.5                | 2.6                | 15.1    |
| 33       | A              | 2.8               | 3.0                     | 3.0              | 2.8                | 2.8                | 2.0                | 16.4    |
|          | B              | 4.0               | 4.2                     | 4.2              | 4.0                | 4.0                | 4.0                | 24.4    |
|          | C              | 4.2               | 4.0                     | 4.2              | 4.2                | 4.0                | 4.0                | 24.6    |
|          | D              | 4.0               | 4.0                     | 3.8              | 3.8                | 3.2                | 3.2                | 22.0    |
|          | <i>Average</i> | 3.8               | 3.8                     | 3.8              | 3.7                | 3.5                | 3.3                | 21.9    |

**Table 3. Codes Assigned to Individual Learning Habits Essays by Category, Essay, and Coder**

| Essay ID | Coder          | Context & Purpose | Organization & Cohesion | Content Develop. | Genre & Discipline | Sources & Evidence | Syntax & Mechanics | Total * |
|----------|----------------|-------------------|-------------------------|------------------|--------------------|--------------------|--------------------|---------|
| 34       | A              | 3.0               | 3.0                     | 4.0              | 3.2                | 4.0                | 4.0                | 21.2    |
|          | B              | 2.8               | 2.0                     | 2.2              | 2.0                | 3.0                | 2.8                | 14.8    |
|          | C              | 2.8               | 2.2                     | 2.8              | 2.2                | 2.2                | 2.2                | 14.4    |
|          | D              | 3.2               | 3.2                     | 3.8              | 3.8                | 4.2                | 4.0                | 22.2    |
|          | <i>Average</i> | 3.0               | 2.6                     | 3.2              | 2.8                | 3.4                | 3.3                | 18.2    |
| 35       | A              | 1.0               | 1.8                     | 2.0              | 1.8                | 1.2                | 2.0                | 9.8     |
|          | B              | 1.8               | 2.0                     | 1.8              | 1.8                | 2.0                | 3.2                | 12.6    |
|          | C              | 1.2               | 2.0                     | 1.8              | 2.2                | 1.8                | 2.8                | 11.8    |
|          | D              | 1.2               | 1.8                     | 1.2              | 2.8                | 1.2                | 3.0                | 11.2    |
|          | <i>Average</i> | 1.3               | 1.9                     | 1.7              | 2.2                | 1.6                | 2.8                | 11.4    |
| 36       | A              | 3.0               | 2.2                     | 3.0              | 2.8                | 3.0                | 2.8                | 16.8    |
|          | B              | 4.0               | 3.8                     | 3.8              | 4.0                | 4.0                | 3.8                | 23.4    |
|          | C              | 2.2               | 3.0                     | 2.8              | 2.2                | 3.0                | 2.2                | 15.4    |
|          | D              | 4.2               | 4.0                     | 3.8              | 4.2                | 4.0                | 3.8                | 24.0    |
|          | <i>Average</i> | 3.4               | 3.3                     | 3.4              | 3.3                | 3.5                | 3.2                | 19.9    |
| 73       | A              | 4.0               | 3.8                     | 4.0              | 4.0                | 4.0                | 3.8                | 23.6    |
|          | B              | 4.2               | 3.8                     | 4.0              | 4.0                | 4.0                | 4.0                | 24.0    |
|          | C              | 4.2               | 4.0                     | 4.2              | 4.0                | 4.2                | 4.2                | 24.8    |
|          | D              | 3.8               | 4.2                     | 3.8              | 4.0                | 4.2                | 4.0                | 24.0    |
|          | <i>Average</i> | 4.1               | 4.0                     | 4.0              | 4.0                | 4.1                | 4.0                | 24.1    |
| 76       | A              | 2.0               | 1.8                     | 2.2              | 2.2                | 2.0                | 2.8                | 13.0    |
|          | B              | 3.2               | 3.2                     | 3.0              | 3.0                | 3.2                | 3.0                | 18.6    |
|          | C              | 2.0               | 1.8                     | 2.0              | 2.2                | 2.8                | 2.2                | 13.0    |
|          | D              | 3.8               | 3.2                     | 4.0              | 3.2                | 3.2                | 4.0                | 21.4    |
|          | <i>Average</i> | 2.8               | 2.5                     | 2.8              | 2.7                | 2.8                | 3.0                | 16.5    |
| 77       | A              | 3.2               | 4.0                     | 3.2              | 3.2                | 3.2                | 4.0                | 20.8    |
|          | B              | 4.2               | 4.2                     | 4.2              | 4.2                | 4.2                | 4.0                | 25.0    |
|          | C              | 2.8               | 3.0                     | 2.2              | 2.2                | 2.8                | 2.8                | 15.8    |
|          | D              | 3.2               | 3.2                     | 3.2              | 3.8                | 3.2                | 3.8                | 20.4    |
|          | <i>Average</i> | 3.4               | 3.6                     | 3.2              | 3.4                | 3.4                | 3.7                | 20.5    |
| 78       | A              | 2.0               | 3.0                     | 1.8              | 2.0                | 2.0                | 3.2                | 14.0    |
|          | B              | 3.0               | 3.0                     | 2.8              | 2.8                | 2.8                | 1.8                | 16.2    |
|          | C              | 2.8               | 2.2                     | 2.8              | 2.2                | 2.2                | 2.2                | 14.4    |
|          | D              | 3.0               | 2.2                     | 2.8              | 3.0                | 2.8                | 3.0                | 16.8    |
|          | <i>Average</i> | 2.7               | 2.6                     | 2.6              | 2.5                | 2.5                | 2.6                | 15.4    |
| 79       | A              | 1.8               | 2.2                     | 2.0              | 1.2                | 2.8                | 1.8                | 11.8    |
|          | B              | 2.8               | 2.2                     | 1.8              | 1.8                | 3.0                | 2.8                | 14.4    |
|          | C              | 1.2               | 1.8                     | 1.8              | 1.2                | 1.8                | 2.2                | 10.0    |
|          | D              | 4.0               | 3.0                     | 3.8              | 3.2                | 4.0                | 3.2                | 21.2    |
|          | <i>Average</i> | 2.5               | 2.3                     | 2.4              | 1.9                | 2.9                | 2.5                | 14.4    |
| 80       | A              | 3.2               | 3.8                     | 3.2              | 3.0                | 3.0                | 3.8                | 20.0    |
|          | B              | 1.2               | 1.2                     | 1.0              | 1.2                | 1.8                | 2.2                | 8.6     |
|          | C              | 4.0               | 3.8                     | 4.0              | 4.0                | 4.2                | 4.0                | 24.0    |
|          | D              | 3.2               | 2.2                     | 3.0              | 3.2                | 3.2                | 3.0                | 17.8    |
|          | <i>Average</i> | 2.9               | 2.8                     | 2.8              | 2.9                | 3.1                | 3.3                | 17.6    |

**Table 3. Codes Assigned to Individual Learning Habits Essays by Category, Essay, and Coder**

| Essay ID        | Coder          | Context & Purpose | Organization & Cohesion | Content Develop. | Genre & Discipline | Sources & Evidence | Syntax & Mechanics | Total * |
|-----------------|----------------|-------------------|-------------------------|------------------|--------------------|--------------------|--------------------|---------|
| 81              | A              | 2.8               | 2.8                     | 1.8              | 1.8                | 2.8                | 1.0                | 13.0    |
|                 | B              | 3.2               | 3.2                     | 3.2              | 3.0                | 3.0                | 2.8                | 18.4    |
|                 | C              | 2.2               | 2.2                     | 2.2              | 2.2                | 3.0                | 2.0                | 13.8    |
|                 | D              | 2.0               | 2.2                     | 2.2              | 2.0                | 3.2                | 2.2                | 13.8    |
|                 | <i>Average</i> | 2.6               | 2.6                     | 2.4              | 2.3                | 3.0                | 2.0                | 14.8    |
| 82              | A              | 3.0               | 3.2                     | 3.0              | 3.0                | 3.2                | 3.0                | 18.4    |
|                 | B              | 4.2               | 4.2                     | 4.2              | 4.2                | 4.2                | 4.2                | 25.2    |
|                 | C              | 4.2               | 4.2                     | 4.2              | 4.2                | 4.0                | 4.2                | 25.0    |
|                 | D              | 3.8               | 3.0                     | 3.2              | 3.8                | 2.8                | 3.2                | 19.8    |
|                 | <i>Average</i> | 3.8               | 3.7                     | 3.7              | 3.8                | 3.6                | 3.7                | 22.1    |
| 83              | A              | 1.0               | 1.8                     | 1.2              | 1.0                | 1.8                | 1.0                | 7.8     |
|                 | B              | 4.0               | 4.0                     | 3.8              | 4.0                | 4.2                | 3.8                | 23.8    |
|                 | C              | 3.0               | 3.0                     | 2.8              | 3.8                | 3.2                | 3.0                | 18.8    |
|                 | D              | 3.2               | 4.0                     | 3.8              | 3.8                | 3.2                | 3.2                | 21.2    |
|                 | <i>Average</i> | 2.8               | 3.2                     | 2.9              | 3.2                | 3.1                | 2.8                | 17.9    |
| 84              | A              | 3.0               | 3.2                     | 2.8              | 3.0                | 3.2                | 3.8                | 19.0    |
|                 | B              | 2.8               | 2.0                     | 2.8              | 2.0                | 2.0                | 3.0                | 14.6    |
|                 | C              | 2.2               | 2.8                     | 2.2              | 2.8                | 2.2                | 2.0                | 14.2    |
|                 | D              | 3.2               | 3.0                     | 3.2              | 4.0                | 3.8                | 3.8                | 21.0    |
|                 | <i>Average</i> | 2.8               | 2.8                     | 2.8              | 3.0                | 2.8                | 3.2                | 17.2    |
| 85              | A              | 3.0               | 4.0                     | 2.2              | 3.2                | 4.0                | 4.0                | 20.4    |
|                 | B              | 2.8               | 2.0                     | 2.8              | 1.8                | 3.0                | 3.0                | 15.4    |
|                 | C              | 2.2               | 2.8                     | 2.0              | 2.0                | 1.8                | 2.2                | 13.0    |
|                 | D              | 1.8               | 1.8                     | 1.2              | 1.8                | 1.2                | 2.2                | 10.0    |
|                 | <i>Average</i> | 2.5               | 2.7                     | 2.1              | 2.2                | 2.5                | 2.9                | 14.7    |
| 86              | A              | 3.2               | 3.2                     | 3.2              | 2.8                | 3.2                | 3.0                | 18.6    |
|                 | B              | 3.0               | 2.8                     | 2.0              | 2.2                | 3.0                | 2.8                | 15.8    |
|                 | C              | 3.0               | 3.2                     | 2.8              | 3.2                | 3.2                | 3.8                | 19.2    |
|                 | D              | 4.2               | 4.2                     | 4.0              | 4.2                | 4.0                | 4.0                | 24.6    |
|                 | <i>Average</i> | 3.4               | 3.4                     | 3.0              | 3.1                | 3.4                | 3.4                | 19.6    |
| Overall Average | 2.8            | 2.8               | 2.7                     | 2.7              | 2.8                | 2.9                | 16.8               |         |
|                 |                | Competent -       | Competent -             | Competent -      | Competent -        | Competent -        | Competent -        |         |

\* The scores in red diverge significantly from the others in their set (i.e., by 5 or more points).

**Table 4. Frequency of Serious Divergence in Scores by Coder**

| Topic and Code   | Coder<br>A | Coder<br>B | Coder<br>C | Coder<br>D | Total |
|--|------------|------------|------------|------------|-------|
| <b>Essays Written in Freshman Year</b>   |            |            |            |            |       |
| Divergence in Coding *   | 2          | 0          | 1          | 0          | 3     |
| Consistency in Coding  | 10         | 12         | 11         | 12         | 45    |
| Subtotal   | 12         | 12         | 12         | 12         | 48    |
| <b>Divergences as a percentage of</b><br><i>all summary scores assigned (n=48)</i> |            |            |            |            | 6.3%  |
| <i>all essays coded (n=12)</i>   |            |            |            |            | 25.0% |
| <b>Essays Written in Junior Year</b>   |            |            |            |            |       |
| Divergence in Coding *   | 2          | 2          | 1          | 2          | 7     |
| Consistency in Coding  | 10         | 10         | 11         | 10         | 41    |
| Subtotal   | 12         | 12         | 12         | 12         | 48    |
| <b>Divergences as a percentage of</b><br><i>all summary scores assigned (n=48)</i> |            |            |            |            | 14.6% |
| <i>all essays coded (n=12)</i>   |            |            |            |            | 58.3% |

\* A set of codes was considered divergent, if one person's overall score diverged from the other three by five or more points (the score range used ranged from a low of 4.8 to a high of 25.2). In some cases, there was a divergence between two pairs of the four scores assigned to any given essay. This was not considered a divergence, however, in the above table.

**Table 5a. Average Scores by Coder, Category, and Essay Level**

| Topic and Code   | Coder A | Coder B | Coder C | Coder D | Overall Average |
|--|---------|---------|---------|---------|-----------------|
| <b>All Essays Combined</b>                                 |         |         |         |         |                 |
| Context & Purpose  | 2.4     | 3.1     | 2.7     | 3.1     | 2.8             |
| Organization & Cohesion                                    | 2.6     | 2.9     | 2.8     | 2.8     | 2.8             |
| Content Development & Coherence                            | 2.4     | 2.8     | 2.8     | 2.9     | 2.7             |
| Genre & Disciplinary Conventions                           | 2.4     | 2.8     | 2.7     | 3.1     | 2.7             |
| Sources & Evidence   | 2.6     | 3.0     | 2.7     | 2.9     | 2.8             |
| Control of Syntax & Mechanics                              | 2.7     | 3.1     | 2.8     | 3.1     | 2.9             |
| Total  | 15.0    | 17.7    | 16.5    | 18.0    | 16.8            |
| <b>Freshman Essays</b>                                     |         |         |         |         |                 |
| Context & Purpose  | 2.1     | 3.0     | 2.6     | 2.9     | 2.6             |
| Organization & Cohesion                                    | 2.2     | 2.8     | 2.7     | 2.7     | 2.6             |
| Content Development & Coherence                            | 2.3     | 2.7     | 2.8     | 2.7     | 2.6             |
| Genre & Disciplinary Conventions                           | 2.2     | 2.7     | 2.6     | 2.9     | 2.6             |
| Sources & Evidence   | 2.3     | 2.8     | 2.5     | 2.7     | 2.6             |
| Control of Syntax & Mechanics                              | 2.4     | 3.1     | 2.6     | 2.9     | 2.8             |
| Total  | 13.4    | 17.0    | 15.8    | 16.7    | 15.7            |
| <b>Junior Essays</b>                                       |         |         |         |         |                 |
| Context & Purpose  | 2.7     | 3.2     | 2.8     | 3.3     | 3.0             |
| Organization & Cohesion                                    | 3.1     | 3.0     | 2.9     | 3.0     | 3.0             |
| Content Development & Coherence                            | 2.6     | 3.0     | 2.8     | 3.2     | 2.9             |
| Genre & Disciplinary Conventions                           | 2.5     | 2.9     | 2.8     | 3.3     | 2.9             |
| Sources & Evidence   | 2.9     | 3.2     | 3.0     | 3.2     | 3.1             |
| Control of Syntax & Mechanics                              | 2.9     | 3.1     | 2.9     | 3.3     | 3.1             |
| Total  | 16.7    | 18.3    | 17.2    | 19.3    | 17.9            |
| <b>Difference Scores (Junior Rating - Freshman Rating)</b> |         |         |         |         |                 |
| Context & Purpose  | 0.6     | 0.2     | 0.2     | 0.4     | 0.4             |
| Organization & Cohesion                                    | 0.9     | 0.2     | 0.2     | 0.4     | 0.4             |
| Content Development & Coherence                            | 0.3     | 0.3     | 0.0     | 0.5     | 0.3             |
| Genre & Disciplinary Conventions                           | 0.4     | 0.1     | 0.3     | 0.5     | 0.3             |
| Sources & Evidence   | 0.7     | 0.4     | 0.4     | 0.6     | 0.5             |
| Control of Syntax & Mechanics                              | 0.5     | 0.0     | 0.3     | 0.4     | 0.3             |
| Total  | 3.3     | 1.3     | 1.4     | 2.7     | 2.2             |

**Table 5b. Average Scores by Coder, Category, and Essay Level  
(Discrepant Scores Removed)**

| Topic and Code   | Coder A | Coder B | Coder C | Coder D | Overall Average |
|--|---------|---------|---------|---------|-----------------|
| <b>All Essays Combined</b>                                 |         |         |         |         |                 |
| Context & Purpose  | 2.5     | 3.2     | 2.7     | 3.0     | 2.9             |
| Organization & Cohesion                                    | 2.6     | 2.9     | 2.8     | 2.8     | 2.8             |
| Content Development & Coherence                            | 2.5     | 2.9     | 2.8     | 2.8     | 2.7             |
| Genre & Disciplinary Conventions                           | 2.4     | 2.8     | 2.8     | 3.1     | 2.8             |
| Sources & Evidence   | 2.6     | 3.1     | 2.7     | 2.8     | 2.8             |
| Control of Syntax & Mechanics                              | 2.8     | 3.2     | 2.8     | 3.1     | 2.9             |
| Total  | 15.3    | 18.1    | 16.6    | 17.6    | 16.9            |
| <b>Freshman Essays</b>                                     |         |         |         |         |                 |
| Context & Purpose  | 2.1     | 3.0     | 2.7     | 2.9     | 2.7             |
| Organization & Cohesion                                    | 2.2     | 2.8     | 2.7     | 2.7     | 2.6             |
| Content Development & Coherence                            | 2.3     | 2.7     | 2.7     | 2.7     | 2.6             |
| Genre & Disciplinary Conventions                           | 2.1     | 2.7     | 2.6     | 2.9     | 2.6             |
| Sources & Evidence   | 2.2     | 2.8     | 2.5     | 2.7     | 2.6             |
| Control of Syntax & Mechanics                              | 2.5     | 3.1     | 2.6     | 2.9     | 2.8             |
| Total  | 13.4    | 17.0    | 15.8    | 16.7    | 15.8            |
| <b>Junior Essays</b>                                       |         |         |         |         |                 |
| Context & Purpose  | 2.8     | 3.4     | 2.8     | 3.1     | 3.0             |
| Organization & Cohesion                                    | 3.1     | 3.1     | 2.9     | 2.9     | 3.0             |
| Content Development & Coherence                            | 2.7     | 3.1     | 2.8     | 3.0     | 2.9             |
| Genre & Disciplinary Conventions                           | 2.6     | 3.0     | 2.9     | 3.3     | 2.9             |
| Sources & Evidence   | 2.9     | 3.4     | 3.0     | 3.1     | 3.1             |
| Control of Syntax & Mechanics                              | 3.0     | 3.2     | 2.9     | 3.2     | 3.1             |
| Total  | 17.2    | 19.3    | 17.3    | 18.6    | 18.1            |
| <b>Difference Scores (Junior Rating - Freshman Rating)</b> |         |         |         |         |                 |
| Context & Purpose  | 0.7     | 0.4     | 0.2     | 0.2     | 0.3             |
| Organization & Cohesion                                    | 0.9     | 0.4     | 0.2     | 0.3     | 0.4             |
| Content Development & Coherence                            | 0.5     | 0.5     | 0.1     | 0.4     | 0.3             |
| Genre & Disciplinary Conventions                           | 0.5     | 0.3     | 0.3     | 0.4     | 0.3             |
| Sources & Evidence   | 0.7     | 0.5     | 0.5     | 0.4     | 0.5             |
| Control of Syntax & Mechanics                              | 0.5     | 0.2     | 0.3     | 0.3     | 0.3             |
| Total  | 3.9     | 2.3     | 1.5     | 2.0     | 2.3             |

**Table 6a. Average Scores for Individual Learning Habits Essays by Category and Essay Level**

| Essay ID   | Context & Purpose | Organization & Cohesion | Content Develop.  | Genre & Discipline | Sources & Evidence | Syntax & Mechanics | Total |
|--|-------------------|-------------------------|-------------------|--------------------|--------------------|--------------------|-------|
| <b>Freshman Essays</b>                                     |                   |                         |                   |                    |                    |                    |       |
| 23   | 4.0               | 3.7                     | 3.4               | 3.8                | 4.0                | 4.2                | 23.0  |
| 26   | 3.4               | 3.3                     | 3.4               | 3.4                | 3.3                | 3.1                | 19.8  |
| 27   | 2.7               | 2.4                     | 2.7               | 2.6                | 2.2                | 2.4                | 14.8  |
| 28   | 2.0               | 1.9                     | 1.8               | 1.8                | 1.8                | 2.3                | 11.4  |
| 29   | 2.9               | 2.5                     | 2.2               | 2.2                | 2.1                | 2.4                | 14.2  |
| 30   | 1.5               | 1.6                     | 1.9               | 1.5                | 1.8                | 2.2                | 10.4  |
| 31   | 1.5               | 1.5                     | 1.4               | 1.4                | 1.2                | 1.8                | 8.7   |
| 32   | 2.6               | 2.5                     | 2.5               | 2.6                | 2.5                | 2.6                | 15.1  |
| 33   | 3.8               | 3.8                     | 3.8               | 3.7                | 3.5                | 3.3                | 21.9  |
| 34   | 3.0               | 2.6                     | 3.2               | 2.8                | 3.4                | 3.3                | 18.2  |
| 35   | 1.3               | 1.9                     | 1.7               | 2.2                | 1.6                | 2.8                | 11.4  |
| 36   | 3.4               | 3.3                     | 3.4               | 3.3                | 3.5                | 3.2                | 19.9  |
| Average  | 2.6<br>Competent- | 2.6<br>Competent-       | 2.6<br>Competent- | 2.6<br>Competent-  | 2.6<br>Competent-  | 2.8<br>Competent-  | 15.7  |
| <b>Junior Essays</b>                                       |                   |                         |                   |                    |                    |                    |       |
| 73   | 4.1               | 4.0                     | 4.0               | 4.0                | 4.1                | 4.0                | 24.1  |
| 76   | 2.8               | 2.5                     | 2.8               | 2.7                | 2.8                | 3.0                | 16.5  |
| 77   | 3.4               | 3.6                     | 3.2               | 3.4                | 3.4                | 3.7                | 20.5  |
| 78   | 2.7               | 2.6                     | 2.6               | 2.5                | 2.5                | 2.6                | 15.4  |
| 79   | 2.5               | 2.3                     | 2.4               | 1.9                | 2.9                | 2.5                | 14.4  |
| 80   | 2.9               | 2.8                     | 2.8               | 2.9                | 3.1                | 3.3                | 17.6  |
| 81   | 2.6               | 2.6                     | 2.4               | 2.3                | 3.0                | 2.0                | 14.8  |
| 82   | 3.8               | 3.7                     | 3.7               | 3.8                | 3.6                | 3.7                | 22.1  |
| 83   | 2.8               | 3.2                     | 2.9               | 3.2                | 3.1                | 2.8                | 17.9  |
| 84   | 2.8               | 2.8                     | 2.8               | 3.0                | 2.8                | 3.2                | 17.2  |
| 85   | 2.5               | 2.7                     | 2.1               | 2.2                | 2.5                | 2.9                | 14.7  |
| 86   | 3.4               | 3.4                     | 3.0               | 3.1                | 3.4                | 3.4                | 19.6  |
| Average  | 3.0<br>Competent  | 3.0<br>Competent        | 2.9<br>Competent  | 2.9<br>Competent   | 3.1<br>Competent   | 3.1<br>Competent   | 17.9  |
| <b>Difference Scores (Junior Rating - Freshman Rating)</b> |                   |                         |                   |                    |                    |                    |       |
| 23 & 73  | 0.0               | 0.3                     | 0.7               | 0.2                | 0.1                | -0.2               | 1.2   |
| 26 & 76  | -0.6              | -0.8                    | -0.6              | -0.8               | -0.5               | -0.1               | -3.3  |
| 27 & 77  | 0.7               | 1.3                     | 0.6               | 0.8                | 1.2                | 1.3                | 5.8   |
| 28 & 78  | 0.7               | 0.8                     | 0.8               | 0.8                | 0.7                | 0.3                | 4.0   |
| 29 & 79  | -0.4              | -0.2                    | 0.1               | -0.4               | 0.8                | 0.2                | 0.2   |
| 30 & 80  | 1.4               | 1.2                     | 1.0               | 1.4                | 1.3                | 1.1                | 7.3   |
| 31 & 81  | 1.1               | 1.1                     | 1.0               | 0.9                | 1.8                | 0.3                | 6.1   |
| 32 & 82  | 1.2               | 1.2                     | 1.2               | 1.3                | 1.1                | 1.1                | 7.0   |
| 33 & 83  | -1.0              | -0.6                    | -0.9              | -0.6               | -0.4               | -0.6               | -4.0  |
| 34 & 84  | -0.2              | 0.2                     | -0.5              | 0.2                | -0.6               | -0.1               | -0.9  |
| 35 & 85  | 1.2               | 0.8                     | 0.4               | 0.0                | 1.0                | 0.1                | 3.4   |
| 36 & 86  | 0.0               | 0.1                     | -0.4              | -0.2               | -0.2               | 0.3                | -0.3  |
| Overall  | 0.4               | 0.4                     | 0.3               | 0.3                | 0.5                | 0.3                | 2.2   |



**Table 6b. Average Scores for Individual Learning Habits Essays by Category and Essay Level  
(Divergent Scores Removed)**

| Essay ID   | Context & Purpose | Organization & Cohesion | Content Develop.  | Genre & Discipline | Sources & Evidence | Syntax & Mechanics | Total |
|--|-------------------|-------------------------|-------------------|--------------------|--------------------|--------------------|-------|
| <b>Freshman Essays</b>                                     |                   |                         |                   |                    |                    |                    |       |
| 23   | 4.0               | 3.7                     | 3.4               | 3.8                | 4.0                | 4.2                | 23.0  |
| 26   | 3.4               | 3.3                     | 3.4               | 3.4                | 3.3                | 3.1                | 19.8  |
| 27   | 3.1               | 2.7                     | 2.9               | 2.7                | 2.3                | 2.5                | 16.2  |
| 28   | 2.0               | 1.9                     | 1.8               | 1.8                | 1.8                | 2.3                | 11.4  |
| 29   | 2.9               | 2.5                     | 2.2               | 2.2                | 2.1                | 2.4                | 14.2  |
| 30   | 1.3               | 1.3                     | 1.5               | 1.2                | 1.4                | 2.0                | 8.7   |
| 31   | 1.5               | 1.5                     | 1.4               | 1.4                | 1.2                | 1.8                | 8.7   |
| 32   | 2.6               | 2.5                     | 2.5               | 2.6                | 2.5                | 2.6                | 15.1  |
| 33   | 4.1               | 4.1                     | 4.1               | 4.0                | 3.7                | 3.7                | 23.7  |
| 34   | 3.0               | 2.6                     | 3.2               | 2.8                | 3.4                | 3.3                | 18.2  |
| 35   | 1.3               | 1.9                     | 1.7               | 2.2                | 1.6                | 2.8                | 11.4  |
| 36   | 3.4               | 3.3                     | 3.4               | 3.3                | 3.5                | 3.2                | 19.9  |
| Average  | 2.7<br>Competent- | 2.6<br>Competent-       | 2.6<br>Competent- | 2.6<br>Competent-  | 2.6<br>Competent-  | 2.8<br>Competent-  | 15.8  |
| <b>Junior Essays</b>                                       |                   |                         |                   |                    |                    |                    |       |
| 73   | 4.1               | 4.0                     | 4.0               | 4.0                | 4.1                | 4.0                | 24.1  |
| 76   | 2.8               | 2.5                     | 2.8               | 2.7                | 2.8                | 3.0                | 16.5  |
| 77   | 3.5               | 3.8                     | 3.5               | 3.7                | 3.5                | 3.9                | 22.1  |
| 78   | 2.7               | 2.6                     | 2.6               | 2.5                | 2.5                | 2.6                | 15.4  |
| 79   | 1.9               | 2.1                     | 1.9               | 1.4                | 2.5                | 2.3                | 12.1  |
| 80   | 3.5               | 3.3                     | 3.4               | 3.4                | 3.5                | 3.6                | 20.6  |
| 81   | 2.3               | 2.4                     | 2.1               | 2.0                | 3.0                | 1.7                | 13.5  |
| 82   | 3.8               | 3.7                     | 3.7               | 3.8                | 3.6                | 3.7                | 22.1  |
| 83   | 3.4               | 3.7                     | 3.5               | 3.9                | 3.5                | 3.3                | 21.3  |
| 84   | 2.8               | 2.8                     | 2.8               | 3.0                | 2.8                | 3.2                | 17.2  |
| 85   | 2.3               | 2.2                     | 2.0               | 1.9                | 2.0                | 2.5                | 12.8  |
| 86   | 3.1               | 3.1                     | 2.7               | 2.7                | 3.1                | 3.2                | 17.9  |
| Average  | 3.0<br>Competent  | 3.0<br>Competent        | 2.9<br>Competent  | 2.9<br>Competent   | 3.1<br>Competent   | 3.1<br>Competent   | 18.0  |
| <b>Difference Scores (Junior Rating - Freshman Rating)</b> |                   |                         |                   |                    |                    |                    |       |
| 23 & 73  | 0.0               | 0.3                     | 0.7               | 0.2                | 0.1                | -0.2               | 1.2   |
| 26 & 76  | -0.6              | -0.8                    | -0.6              | -0.8               | -0.5               | -0.1               | -3.3  |
| 27 & 77  | 0.4               | 1.1                     | 0.7               | 1.0                | 1.3                | 1.5                | 5.9   |
| 28 & 78  | 0.7               | 0.8                     | 0.8               | 0.8                | 0.7                | 0.3                | 4.0   |
| 29 & 79  | -0.9              | -0.4                    | -0.3              | -0.8               | 0.4                | -0.1               | -2.1  |
| 30 & 80  | 2.1               | 1.9                     | 1.9               | 2.2                | 2.1                | 1.6                | 11.9  |
| 31 & 81  | 0.9               | 0.9                     | 0.7               | 0.6                | 1.8                | 0.0                | 4.9   |
| 32 & 82  | 1.2               | 1.2                     | 1.2               | 1.3                | 1.1                | 1.1                | 7.0   |
| 33 & 83  | -0.7              | -0.4                    | -0.6              | -0.1               | -0.2               | -0.4               | -2.4  |
| 34 & 84  | -0.2              | 0.2                     | -0.5              | 0.2                | -0.6               | -0.1               | -0.9  |
| 35 & 85  | 1.0               | 0.3                     | 0.3               | -0.3               | 0.5                | -0.3               | 1.5   |
| 36 & 86  | -0.3              | -0.2                    | -0.7              | -0.6               | -0.4               | 0.0                | -2.0  |
| Overall  | 0.3               | 0.4                     | 0.3               | 0.3                | 0.5                | 0.3                | 2.1   |

### Appendix: Learning Habits Assessment Rubric

| Assessment  | Superior   | Competent  | Satisfactory  | Less Than Adequate   |
|---|--|--|---|--|
| <b>Scores</b>   | <b>4.2, 4.0, 3.8</b>   | <b>3.2, 3.0, 2.8</b>   | <b>2.2, 2.0, 1.8</b>  | <b>1.2, 1.0, 0.8</b>   |
| <b>Context and Purpose for Writing and Critical Thinking</b><br>Includes considerations of audience, purpose, and the circumstances surrounding the writing task. | Skillfully demonstrates a strong understanding of context, audience, and purpose that is relevant to the assigned task (s) and offers a superior level of critical thinking to support the main claim.               | Demonstrates competent consideration of context, audience, and purpose, and a clear focus on the assigned task (s). The task aligns with audience, purpose, and context. Offers a proficient level of critical thinking to support the main claim. | Demonstrates awareness of context, audience, purpose, and to the assigned task (s). Offers a sufficient level of critical thinking to support the main claim. | Demonstrates minimal attention to context, audience, purpose, and to the assigned task (s). Offers a less than adequate level of critical thinking that does not support the main claim. |
| <b>Organization and Cohesion</b>  | Skillfully demonstrates ability to structure and organize material and ideas as a means of supporting the main claim.  | Demonstrates competent organization and structure to support the main claim.   | Adequately organizes and structures material to support main claim.   | Attempts to organize and structure material but is often unsuccessful.   |
| <b>Content Development and Coherence</b>  | Skillfully uses appropriate, relevant, and compelling content that conveys the writer's understanding of the discipline and contributes to the coherence of the work.  | Uses appropriate and relevant content to explore ideas within the context of the discipline and contributes to the coherence of the work.  | Uses adequately relevant content to explore ideas within the context of the discipline through most of the work.  | Occasionally uses appropriate and relevant content to explore simple ideas in some part of the work.   |
| <b>Genre and Disciplinary Conventions</b><br>Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields.       | Skillfully demonstrates successful execution of a wide range of conventions particular to a specific genre and/or writing task(s), including organization, content, presentation, formatting, and stylistic choices. | Demonstrates competent use of important conventions particular to a specific genre and/or writing task(s), including organization, content, presentation, formatting, and stylistic choices.   | Follows expectations appropriate to a specific genre and/or writing task(s) for basic organization, content, presentation, and stylistic choices.             | Attempts to use a consistent system for basic organization, content, presentation, and stylistic choices.  |
| <b>Sources and Evidence (as appropriate)</b>  | Skillfully demonstrates effective use of high-quality, credible, relevant sources to support ideas that are appropriate for the discipline and genre of the writing.   | Demonstrates competent use of credible, relevant sources to support ideas that are appropriate for the discipline and genre of the writing.  | Demonstrates adequate use of credible, relevant sources to support ideas that are appropriate for the discipline and genre of the writing.                    | Demonstrates an attempt to use sources to support ideas in the writing.  |
| <b>Control of Syntax and Mechanics</b>  | Uses fluent language that clearly and skillfully communicates meaning to readers and is virtually error-free.  | Uses language that clearly conveys meaning to readers. Language has few errors.  | Uses language that conveys meaning to readers. Language may have some errors.   | Attempts to use language to convey meaning to readers but is often unsuccessful because of errors in usage.  |