And Gladly Count: Examining the Error-Reduction Component of a Writing Program.

A study at Lansing, Michigan Community College investigated whether the current policy of grading the students according to the number of errors in their compositions was actually helping the students to make fewer errors in their writing. Error data were collected from 4 graded essays from each of 311 students in 2 writing courses (one on exposition, the other on argument). Results showed a 50% reduction in errors, with the students making the most impressive gains in the first course, indicating that the rigorous error-count system of the school is getting positive results.

Conclusions of this study are that marking papers does decrease error--just as was always thought. (Two appendixes showing error-reduction data and the grading procedures are attached.)

(PRA)
AND GLADLY COUNT: EXAMINING THE ERROR-REDUCTION COMPONENT OF A WRITING PROGRAM

by Robert H. Bentley
Lansing Community College

(presented at the Boston 4Cs, 23 March 1991)

If students remember their high school English teachers as either hated enemies or merely harmless drudges, surely it's the correcting of errors that earned our colleagues in secondary education the reputation. And when Harvard legitimized writing instruction some hundred-and-a-half years ago, we at the college level got our chance to share in the action.

We all know the common rationale for correcting errors: error impedes communication and sometimes causes misunderstanding. We also all know that many errors don't cause misunderstanding (spelling night as nite, or through as thru, for example), but simply violate social conventions or etiquette. As Mina Shaughnessy has observed, these errors may not confuse readers, but they may annoy or distract some readers. Certainly, control over surface errors is a prerequisite to the higher levels of the educated world: the cognoscenti--by God--know how to use a semi-colon!
As Connors and Lunsford say in their important study of error-frequency: "the world judges a writer by her mastery of conventions, and we all know it. Students, parents, university colleagues, and administrators expect us to deal somehow with those unmet rhetorical expectations, and, like it or not, pointing out errors seems to most of us part of what we do" (396).

In the Lansing Community College transfer writing program, like it or not, pointing out errors is a part of what we are expected to do. I'm familiar with the view that says marking errors is a negative and trivial approach to writing instruction. In my years at the Flint campus of the University of Michigan, I helped set up and operate a writing lab program for basic or developmental writers that operated from the premise that fluency and confidence should be developed prior to worrying about the surface conventions.

I don't think even in those days that I confused the expectations of basic or developmental courses with those of freshman composition. I'm pretty sure that when our colleagues agreed to required composition courses, it wasn't so that we could teach literature in disguise, or produce fluent students who remain incompetent in the conventions of Edited American English. I think they wanted (and still want) us to produce students who can write essay exams and term papers competent in content, structure, style, spelling, grammar and punctuation.

In our two-year college, these pressures are exacerbated.
We are on the quarter system (for two more years), and offer a fairly conventional 3-term sequence: exposition, argument, and research paper. But the nursing program, for example, requires only the first two courses, but complained to us a couple of years ago that their students couldn't write research papers. We suggested they require the research paper course—but their curriculum is already too full with accreditation-mandated courses. The secretarial program allegedly received threats from our area's largest employer some years ago that it would no longer hire our products if they weren't better prepared in spelling and punctuating. And, because a fairly large number of our students say they want to transfer to four-year schools, we are always aware that our courses need to be just as rigorous as those of the colleges and universities that agree to accept our credits under Michigan's "Macrao agreement" that guarantees two-year graduates junior standing when they transfer.

So, with a mostly part-time faculty (Fall term, 1990: five full-time, fifty-one part-time), with an open-door policy mandated by law, and with a placement system that allows us only to recommend, but not require, sub-transfer developmental courses, we have designed our program. The courses are taught from standard syllabuses designed by the faculty writing committee. Grading standards are provided with the syllabus for each course, and faculty are expected to follow them. Students are given subskill grades in content, structure, and style which result in an overall grade. Faculty are also asked to count student errors and assign
a separate mechanics grade [we count spelling errors as part of mechanics].

And now comes the fun part: a student's overall grade can be lowered by the mechanics grade, but never improved by it. A student's overall grade may not be more than one whole number above the mechanics grade, so an overall grade of 3.5 would be lowered to 3.0 if the student scored 2.0 in mechanics. Moreover, the paper fails entirely if the student makes more than 20 error points in 500 words. [Appendix I: Writing Standards] [I've provided you with a handout that gives some detailed information on the grading standards, and particularly on the mechanics grade.]

This approach to spelling and mechanics, borrowed from a college in Maryland and adapted by our writing committee, has been attacked (as you might imagine) on several fronts. Some faculty, perhaps feeling that the marking of error is wrong or beneath them, simply don't comply with the standards. Some, hired term-by-term, reportedly feel that low grades bring about low student evaluations, and low evaluations can cost them their jobs (the latter is not an entirely unwarranted assumption). Some of our colleagues in the Humanities department told us in a joint study committee on writing programs that our standards are too harsh. They especially objected to our so-called "double-zero" category: the student who makes more than 20 errors in a 500-word paper will fail, no matter what other redeeming qualities the paper might have.
Now, I should take a moment to explain that our colleagues in the Humanities department offer literature-based composition courses (that's right, competing writing programs): all Arts and Sciences students are required to take our first course in exposition, but then they may choose among our next two courses and those offered in Humanities to complete their three-course requirement.

So I believe the Humanities people have a legitimate interest in our first course and our writing standards. In their program, a paper containing 16 or more mechanical errors but with redeeming qualities in content, structure and style need not be failed, but should receive no more than a 1.0.

The joint committee agreed that a single mechanics standard would be desirable, but neither department has offered to change its position.

And this leads me to the study I am presenting today. As our writing committee talked about our standards, it seemed to me that we all had our doubts about our approach to spelling, punctuation, and grammar. We know the pressures on us: we know that we are somehow expected to turn out mechanically competent students in our 11-week terms in spite of our open-door policy and our huge workloads. None of us seemed willing to go back to our old impressionistic mechanics standards where a student would get a 4.0 from one teacher but a zero from another with the same number of errors. But could we achieve the same results if we lowered our standards to match those of the Humanities?
Come to think of it, what results were we getting with our current standards? Do they actually reduce error?

When I asked this, we all fell silent for a moment. Tentatively, we agreed that we thought we got results, but none of us seemed sure. I’m (almost) sure that (some) students improve as they go through the term. Naturally, they forget everything between terms and you have to start all over with them in the next course....

It seemed to me sensible to find out just what results we do get before offering to alter our standards, or urging Humanities to change theirs on the vague grounds that ours are somehow better. I asked and received the writing committee’s permission to study this question and carried out the initial study during the past fall term, 1990.

I decided to limit my research to our first two courses, exposition and argument. The third course—on the research paper—seems a different breed of cat: students write two major papers and are expected to put them through at least two drafts. Extensive conferencing is built into the course, and I just wasn’t sure what errors I’d be studying. In addition, very few sections of our third course are offered in the fall term, and I was afraid the numbers would simply be too small.

So I sent out a request for volunteers and followed up with error count forms. More people volunteered than actually returned forms at the end of the term, but I was pleased with the response: I have data from eleven sections of our first course, Writing 121, and from six sections of the second course, Writing 122.
Appendix II [your handout labeled "Error Reduction Data"] shows the results of this study. I should explain that while our students typically write paragraphs, practice essays, and some graded re-writes, the majority of their grade comes from four graded essays in each course. Two of the essays are written outside of class, and two are written in-class during a two-hour period [itself a controversial policy].

As I began to correlate the data, I found it expedient to eliminate those students who only wrote some of the papers. If there is interest in pursuing the tentative findings presented here, one useful question to ask would be whether the drop-outs correlate roughly with poor mechanics grades, as common sense would dictate.

In any event, what you see on the sheet then represents the track record of those students who completed either course: 219 in the first course, and 92 in the second. Another caution: the second group is only approximately 42% the size of the first, and this means comparative data must be looked at with some skepticism. I am also somewhat concerned that the students in the second group are, in fact, in the second course during the fall term. Some of them may have begun last year in developmental courses and had a heavy dose of mechanics; some others surely waived our first course after testing out—so the comparisons have to be very tentative. Further research would follow the same students through two terms, and the results would be much stronger.
Now to the data. You'll note my footnote of thanks to my two "number crunchers" Tom Franke and Van Gwynn. I need to tell you "up front," as they say, that my mathematical skills are best described as Remedial Checkbook. I was trained in literature, and later in rhetoric and linguistics, but I've never been near courses in descriptive or interpretive statistics. So, if I sound as if I'm talking to children when explaining these data, please don't take offense--this is how it had to be explained to me.

The first set deals with Writing 121. You'll note that students went from 9+ errors on the first paper (H1) up to 10+ on the first in-class paper (C1), and then dropped on the next two papers. When the home themes are compared (H1 and H2, the first and last papers), there is a statistically significant drop of 3.6083. The "P" (probability) tells us that the possibility that this was mere chance is one-in-a-thousand. Even the less impressive gain between in-class papers (T = 2.1800) has a P of .05, which I'm told is very respectable for educational research.

Writing 122, at first blush, looks less interesting. Please note the different order of assignments here: H1, C1, H2, C2. When we compare themes one and three, both out of class, not much happens. The numbers here are very close to the last home paper in Writing 121: students seem to have leveled off at about 6+ errors.

The picture brightens somewhat in looking at the second and fourth themes, both in-class. Here the 2.2458 is again a significant decline: the P or probability factor says five chances in a thousand that this is an accident.
And now for what I consider the most exciting "stuff." If we compare the very first paper students wrote in the first course with the very last paper in the second course, we find that students are making significantly fewer errors. Since this pits an "H" paper against a "C" paper, we can avoid the apples-to-oranges problem by comparing the first in-class with the final in-class, and here we see a whopping 5.5117 reduction in error (approximately 50% reduction).

I haven't said much about the standard deviation. In case any of you are also remedial checkbook, this is "the square root of the arithmetic average of the squares of the deviations from the mean" (Webster's New World). Roughly, this means the distance above and below the mean, so you can see there is quite a spread.

This reduction from 8.1-something at the beginning of the first course to 4.49-something by the end of the second strikes me as potentially meaningful. I'm assuming that the good students (for the most part) don't get worse and suddenly start making new errors. This would indicate that there is movement toward the mean on the low end—put another way, the worst students are moving up, while those already above the mean stay about the same. (Eyeballing the data partly confirms this, by the way. The students who make few or almost no errors stay about the same, and I think the worst ones get better.)

Now what does all this prove? You'll recall that it was Twain who pointed out that figures never lie, but liars figure. I don't want to be a liar, so I figure I'll be cautious here. Obviously, our rigorous error-count system gets some results. We
DO see a 50% reduction in errors. The students make the most impressive gains in the first course, and a much more modest one in the second (again, remember the limitations of the data). They evidently learn to edit their work even in the limited framework of the in-class essay, for their best work is their final paper.

One could use these data, tentative as they are, to argue for the status quo: despite Skinner's warnings about negative reinforcement, we see evidence that students improve. Is it permanent? Is anything? Could we relax our standards to match those of the Humanities department? The data don't tell us.

Of course it's possible that students would be just as motivated by the threat of a 1.0 as they are by the threat of a zero. There is, however, the possibility that this would result in grade inflation, that the grades of the students who are mechanically inept would "float" up to 2.0 (the overall grade may be one number higher than the mechanics grade, remember), and this might in turn push up the overall grades of the other students. It's also possible that our students might do even better if we made the standards harsher—but I'm not ready to push for that.

It's also possible that easing up on the standards might help that group excluded from this study—those dropouts I mentioned. Surely some of them received bad grades on the first paper or two and simply quit. If some of the neediest sought out one of our developmental courses, so much the better. On the other hand, perhaps some might have stayed around and learned.
One of the oldest cliches in the book is to end a study with a call for more research, but I'll do it anyway. I'd like to do a larger, two-term study, and perhaps include an experimental group that was graded under somewhat relaxed standards.

In the meantime, for those of you who sometimes feel like little more than high-priced proofreaders, take heart from the study: it seems marking papers does decrease error—just like we always thought.

Works Cited:


APPENDIX 1
Department of Communication
LANSING COMMUNITY COLLEGE

APPENDIX: WRITING STANDARDS

Assigning the Mechanics Grade in WRI 111 and WRI 122

The Communication Department's Writing Standards place heavy emphasis upon the conventions or "mechanics" of writing Edited American English. The overall grade on a paper may be no more than one whole number grade higher than the mechanics grade. If the mechanics grade falls below the 0.0 range, the overall grade on a paper will be 0.0, regardless of grades in content, structure, and style.

The mechanics grade for 500-750 word essays will be assigned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Error Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0 (excellent)</td>
<td>0-1 error points</td>
</tr>
<tr>
<td>3.5</td>
<td>2-3 error points</td>
</tr>
<tr>
<td>3.0 (good)</td>
<td>4-5 error points</td>
</tr>
<tr>
<td>2.5</td>
<td>6-7 error points</td>
</tr>
<tr>
<td>2.0 (satisfactory)</td>
<td>8-11 error points</td>
</tr>
<tr>
<td>1.5</td>
<td>12-13 error points</td>
</tr>
<tr>
<td>1.3 (poor)</td>
<td>14-15 error points</td>
</tr>
<tr>
<td>0.0 (failure)</td>
<td>16-20 error points</td>
</tr>
<tr>
<td>0.0 (failure on essay)</td>
<td>more than 20 error points</td>
</tr>
</tbody>
</table>

Assigning Error Points:

1. One point errors: spelling, manuscript form.
   (Note: subsequent misspellings of the same word should not be counted.)

   punctuation, for example use of commas in series, to separate main clauses, with restrictive/nonrestrictive clauses and phrases; use of semicolons to separate main clauses; use of colons to separate main clauses and to introduce formal appositives; superfluous use of commas, semicolons and colons; use of end punctuation.

   grammar, for example verb forms, agreement, case (including use of apostrophes) and adjective-adverb usage. (Note: subsequent apostrophe errors on the same word should not be counted.)

2. Two point errors: major mechanical errors—fused sentences, rhetorically ineffective sentence fragments and comma splices.

rev: 09-07-89

Robert H. Bentley
Communication Dept.-12
LANSING COMMUNITY COLLEGE
P.O. Box 40010
LANSING, MI 48901-7210
Grading Procedures for WRI 121, 122, and 123

Essays

The instructor will assign a grade in each of the four categories listed (content, structure, style, and mechanics).

The overall grade for a paper is derived as follows:

1. The instructor will average the first three grades and, if necessary, round the answer to one of the LCC grades (0.0 to 4.0) using the grade conversion table shown below.

2. The essay will receive the grade computed in step one, unless that grade is reduced by the mechanics grade. The overall grade will not be more than one whole number higher than the mechanics grade. For example, an essay with a mechanics grade of 1.0 will not receive an overall grade higher than 2.0. Furthermore, if the mechanics grade falls below the 0.0 range, the essay will receive an overall grade of 0.0, regardless of its other grades.

For example, suppose an essay receives the following grades: content 3.0, structure 3.0, style 2.5, and mechanics 3.0. The content, structure, and style grades average to 2.83, which rounds to a 3.0. The mechanics grade has no effect in this example, so the essay grade is 3.0. However, if the mechanics grade were 1.0, the essay would receive a 2.0.

Tests

Objective tests will be assigned numerical grades based on the table below. For example, a test score of 72% will receive a grade of 2.0.

Final Grades

Final grades will be based on weighted averages, as explained in the course syllabus (see "Grading System [B]"). Averages will be rounded as shown below.

Grade Conversion Table

<table>
<thead>
<tr>
<th>Traditional Letter Grade</th>
<th>Percentage Grade</th>
<th>Range of Computed Grades</th>
<th>Numerical Grade to be Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>91-100</td>
<td>3.75-4.00</td>
<td>4.0</td>
</tr>
<tr>
<td>A- &amp; B+</td>
<td>86-90</td>
<td>3.25-3.74</td>
<td>3.5</td>
</tr>
<tr>
<td>B</td>
<td>81-85</td>
<td>2.75-3.24</td>
<td>3.0</td>
</tr>
<tr>
<td>B- &amp; C+</td>
<td>76-80</td>
<td>2.25-2.74</td>
<td>2.5</td>
</tr>
<tr>
<td>C</td>
<td>71-75</td>
<td>1.75-2.24</td>
<td>2.0</td>
</tr>
<tr>
<td>C- &amp; D+</td>
<td>66-70</td>
<td>1.25-1.74</td>
<td>1.5</td>
</tr>
<tr>
<td>D &amp; D-</td>
<td>60-65</td>
<td>1.00-1.24</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
<td>Below 1.00</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Error Reduction Data: Fall, 1990

WRI 121: four graded essays in the sample. Essays 1 and 4 are written "at home" and are labeled H1 and H2. Essays 2 and 3 are written in class and labeled C1 and C2.
N = 219 (11 sections)

Mean scores: 
H1 = 9.146119; C1 = 10.462055; C2 = 8.538881; H2 = 6.767123
Standard deviation: 8.109784; 8.104412; 7.212155; 5.424923

Some Comparisons:
H1 vs. H2: T = 3.6083; P < .001
C1 vs. C2: T = 2.1800; P < .05

WRI 122: four graded essays in the sample. Essays 1 and 3 are written "at home" and are labeled H1 and H2. Essays 2 and 4 are written in class and labeled C1 and C2.
N = 92 (6 sections)

Mean scores: 
H1 = 6.315271; C1 = 7.152174; H2 = 6.423913; C2 = 5.500000
Standard deviation: 4.678650; 5.437260; 4.814457; 4.497584

Some Comparisons:
H1 vs. H2: T = 0.1553; P = [not significant]
C1 vs. C2: T = 2.2458; P < .05

Of Most Interest:
1. WRI 121 H1 (first paper) vs. WRI 122 C2 (last paper): T = 4.0559; P < .001
2. WRI 121 C1 (1st in-class) vs. WRI 122 C2 (last paper): T = 5.5117; P < .001
3. Reduction of standard deviation over two terms: 8.109784 > 4.497584

Special thanks to Arts and Sciences Interim Dean Thomas Franke and Van Gwynn, Office of Institutional Research, Lansing Community College, for their invaluable help in compiling and interpreting these data.