A study was conducted to determine if the one-to-one method of teaching writing devised by R. Garrison was superior to more traditional approaches. Subjects were college students in four sections of freshman composition, two using the Garrison method and two using traditional methods of writing instruction. Analysis of data revealed that students who entered a composition class with below mean levels in syntactic maturity made gains in both treatment groups, with students in the one-to-one treatment classes making the larger gains in writing proficiency. However, students who were above the mean level when they entered a class were likely to exhibit loss of syntactic fluency, sometimes drastically. Neither method of instruction seemed to help students who came to class with good syntactic and presentational skills; however, these students were less likely to lose proficiency in classes taught according to the Garrison method. (FL)
ABSTRACT

Who Benefits: Student Progress in Two Teaching Modes

Paper Presented at the Conference on College Composition and Communication in San Francisco, March, 1982

by

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The material in this presentation is an outgrowth of some work done on the tutorial, one-to-one, or Garrison method of teaching writing. Though impressed by the concept of the tutorial, I had been dismayed to find that research on its effectiveness tended to be either unrealistic studies which almost guaranteed its success, personal testimonials with no data, or studies with serious design flaws. It was my desire to test the Garrison method in a realistic classroom setting and observe its effect on writing excellence, writing anxiety, and the teachers. To be frank, I expected not to find the method superior, but to find what it was an equal to current methods. To my surprise, the one-to-one method was considered superior by the teachers, and both subjective and objective measurements suggested strongly that students in the one-to-one method had mastered the elements of writing better than the control students.

However, the most interesting data from the study concern what happens to those students who are ill prepared for learning to write, as opposed to those who are well prepared. Almost by accident, I noticed that students who enter a comp class with insufficient skills almost always make some progress in writing proficiency (although one-to-one students make significantly more). On the other hand, those students who have good writing skills to begin with tend to lose ground, sometimes drastically (here too, the record of the one-to-one group is better; they tend to lose less).

In this presentation, after discussing the one-to-one method and the studies generally, I will give the data I gathered from my study which point to the odd prepared/unprepared dichotomy. I will also introduce evidence from several other sources which indicates that my data isn't alone, thus suggesting what I have is not an isolated phenomenon. The evidence is strong: we are shortchanging our good students, perhaps actually harming them. Finally, I will spend some time discussing what the evidence might mean.
Of the many alternatives to Current-traditional-rhetoric, one in particular has always appealed to me: the one-to-one, or tutorial method. This particular technique has the simplicity of genius and the persuasiveness of truth (which means that it fits my biases). Basically, the one-to-one technique assumes that writing is a complicated and drawn out process full of cul-de-sacs and recursions, and that the best way for a beginning writer to learn is to be coached at various steps in that process by an experienced writer. Thus, the writing class consists not of a series of lectures on pre-planned topics, but of a series of conferences between student and teacher so that they can discuss a given piece of work not only after it has been shaped but several times during the shaping.

There are several things to be said in favor of such an approach. For one thing, it does focus on the process of writing, not only as mechanical prewriting, writing, and rewriting, but in a more realistic, fluid sense. Second, the student gets instruction in only those things he or she needs to know. Thirdly, students are producing their own writing from the very beginning, instead of doing someone else's writing in the form of exercises. Finally, this method tends to eliminate one of the most dreadful of English department monsters: the papers-to-be-graded dragon. All in all, a superior method of teaching composition, one which can vary from relaxed conversations in the professor's office, exemplified by the approach of Donald Murray, to more hectic encounters in the classroom beehive, typified by the method used by Roger Garrison.

I was drawn to Garrison's tutorial approach because of his claims that it worked, that it was teachable, and that it was flexible. However, my initial enthusiasm was tempered a bit when I started to read up on the research on the topic. I found three types of studies on the Garrison method of tutorial. In the first, the experiment is well set up, well documented, well presented, but
the whole thing is so much and so obviously a laboratory exercise that one wonders if there is any connection to the classroom at all. In the second one may find serious design flaws, and the third consists of a set of seat-of-the-pants evaluations of tutorial methods. None of the studies appeared to me to be trustworthy evaluations of the Garrison method, or even of tutorial in general.

With the help of a grant from the Brigham Young University-Hawaii Campus professional development fund, I determined to test the Garrison method of one-to-one instruction in a real-life classroom setting, being as sure as I could to set the research design to rigorous standards. I started out with eight sections of composition, four experimental, four control (which number dwindled, through vicissitudes of life, to two each), controlling as best I could for teacher, student, materials, variables, while maintaining a natural writing class atmosphere. I made four hypotheses: 1) that the Garrison method would prove superior by subjective evaluation (holistic scoring), 2) that the Garrison method would prove superior by objective evaluation (free modification analysis), 3) that the Garrison method would prove superior in the opinions of the teachers who were introduced to it through the experiment, and 4) that the students would exhibit less writing anxiety as a result of being taught in the Garrison method. I was able to keep all the hypotheses but number 4, writing apprehension.

Quod erat demonstrandum: the Garrison method is a superior way of teaching composition in a typical college classroom setting.

However, it is not my purpose in this presentation to give a "how-I-done-good-research" report, but to present and comment on some unexpected data from the project; data which, I have since learned, have surfaced in other reports.

First, to my study. After I had analyzed the overall data from the study,
I, for a reason which escapes me at the moment, began idly grouping the numbers into patterns. For instance, I grouped the gain and loss of syntactic maturity according to the starting maturity of the students, with the least syntactically mature student at the beginning, and the most at the end, in a sort of line-up-in order of height fashion. The results intrigued and surprised me, so I did the same, only organized the data according to size of loss or gain in syntactic maturity, and the results were the same. I organized them according to who lost and who gained, and the results were similar.

Let me share with you what I have found (I will use the data from the free modification analysis, because the numbers are nicer, though the numbers from the holistic evaluation would do as well). Basically, what I discovered is that, for both modes of teaching, those students who were below mean level in syntactic maturity were more likely to make gains, and to make larger gains. Those students who were above the mean were likely to exhibit loss of syntactic fluency, and sometimes to lose big. Further, I discovered that the Garrison method, which is superior overall, gains most of its superiority from the gains of the lower and slightly above mean students. Neither method of teaching seems to help a student who comes to the class with good syntactic and presentational skills. In fact, a good student is likely to be harmed by the class, no matter what mode. The best that can be said about the one-to-one mode is that it is significantly less likely to hurt the student.

Having given my thesis, let me now offer some data. I will use the figures from the free modification analysis in this presentation, though the figures from the holistic evaluation support what I am about to say. First, a word about free modification. Free modification, (FM) a term coined by Francis Christensen refers to longer-than-a-word modifiers, usually set off by commas, which can be moved about in the sentence, and which thus constitute
a source of stylistic freedom as well as syntactic maturity (hence the name "free"). An example would be a sentence such as,

In the misty moonlight, we made moonshine.

An alternative model would be

We made, in the misty moonlight, moonshine.

Which is less felicitous, perhaps, but grammatically correct, and finally

We made moonshine in the misty moonlight.

Now there are two important facets to free modification: how much of it, and where it is. Generally, college freshmen have about 16% of their words in free modification, whereas professional writers have about 34. In addition, professional writers attach much of their free modification to the ends of sentences, and college students not at all (almost). So, by measuring the extent to which a student uses free modification, we may measure the extent to which he or she is approaching the skills of good writers (not to be confused with how good they are becoming, though there is a correlation).

As I indicated earlier, in my study, the one-to-one group made significant gains in syntactic maturity over the control group. However, it is when we look inside each group, examining within-group trends, that the real significance of the data emerges. I would like to present two views of these groups, plotting their progress two ways, and show what I found.

The first view plots both experimental and control group gains against starting level.

Place figure one about here -

As you will note in figure one (the table and the graph show the same thing; the table is more precise, the graph shows trends better), one scale
is beginning FM percentage, the other is the percent of that group who gained in syntactic fluency. As the figure indicates, in the experimental group 75% of those with the lowest beginning syntactic fluency made gains, and 66.7% of those in the control group. This means that no matter what class a student is in, he or she is likely to make some sort of gain. This trend continues until we reach the cutoff point, which is the mean syntactic level. At that point, the experimental group begins to lose ground, though a student is still likely to gain in fluency until well into the 25 to 30% bracket. The control group, on the other hand, loses less of ground immediately. In the control group, an above average student has only one chance in five of gaining. However, it is not the comparison between control and experimental groups that is important, it is the trend, which clearly shows that the more syntactically mature a student is when he/she enters class, the less likely he/she is to make gains in maturity.

Let's take a second look at the data from another angle for a moment. In this view, we will look at the average change in FM percentage plotted against beginning FM percentages.

Place figure two about here

In the graph on the figure (here again the graph and chart give the same information), the horizontal scale tells us what the beginning FM percentage of the students was, in groups of five percentage points, and the vertical scale tells us how much the mean gain of each group was. So, the students who began the course with between 5 and 10 percent FM usage averaged a 4.6% gain in syntactic maturity for the experimental group, and a 3.13% gain for the control. However, both groups did gain in syntactic maturity. Compare
that what happens in the groups whose beginning FM percentages were in the above average range. In the control group, the mean gain isn't at all, but a loss, and the losses get bigger as the starting average gets higher. For the experimental group, the gains keep getting smaller and smaller, until finally, with exceptionally fluent students, they drop off into losses. Again, though the experimental group does much better than the control group, the trend is clear: those with higher syntactic skills to begin with tend to exhibit some loss of syntactic maturity at the end of the semester, no matter what the instructional format is.

Let us turn our attention now to some other evidence supporting my contention that this is a generalized phenomenon. I had been worried that the makeup of my total experimental population might have some effect on my results, since the Brigham Young University-Hawaii Campus student body has an unusually high percentage of non-native speakers of English in it, drawn from mostly non-Indoeuropean language groups. However, evidence from other sources suggests that I am not alone. As one example, the data from Simmons (1979) has hints in it that the problem in the Los Angeles area might be the same. Although the data is not organized to show intra-class gains, there is separate data for each of the sixteen classes participating (remedial and regular English classes from four different schools). In most cases the remedial classes showed the greatest gains, and, though it would be difficult to say for sure given the data, it is possible that in some cases the significance of the overall gains is a result of the remedial classes' gains. A second source of evidence has some from the University of Idaho, which uses a pre- and post-test formula for evaluating composition students. A preliminary analysis of about fifty sets of essays from both preparatory and advanced classes indicates the same trend, even stronger than in the BYU-HC
I don't want to give any figures here, because the study is still in progress, but the suggestion is there that the data will confirm the trend of the BYU-HC study.

However, for solid evidence, let me turn to a study done at Washington State University by Richard Haswell. This study I find very significant for two reasons. First, in the study, there are major differences between what I did and what Haswell did: I was testing tutorial methods, he was testing sentence combining; I used FM as my measure, he used T-units; I used edited, out of class essays, he used timed, in-class essays. The second significant factor is that his results coincide with mine to a remarkable degree, thus giving an independent validation of my data. Let us look at his data.

The graph at the bottom of the page clearly indicates that as students approach the norm in pre-test scores, their percentage of gains diminishes, until finally, the gains become losses as the students go from being below mean to being above mean. Similarly, the table at the top of the page illustrates the progression. The table headed Pre-Post Improvement Illustrates the progression. The table headed Pre-Post Improvement Improvement is especially interesting. It shows that in the experimental group, of those at the bottom of the syntactic maturity ladder, 100% made gains, while of those at the top of the ladder, only 7% made gains. As with my study, the experimental group did better, but all this means is that the slide towards loss of syntactic maturity is slowed, not arrested. Good students still come out of class demonstrating less of a tendency to write more complex sentences than they did before. Thus Haswell's findings mirror my own.

Which brings us to the important question. Why should this be so? I am
assuming when I ask this, that we are not actually stunting students; that those who come to class with good skills don't lose them, but that they have chosen merely not to demonstrate them. Linguistic competence is, after all, rather hard to kill.

So, let me consider some of the possible answers. I'd like to start first with Haswell's theory. He suggests that it is a matter of cognitive development. That is, most of the gain is shown by the ill-prepared because the experience of studying and working in a college atmosphere simply speeds up their development and brings them up to the norm. I have two objections to this. First, is one that Haswell could not have known about, because he didn't have the data. It is this: in my analysis of essays at the University of Idaho I could have found two patterns. The first would be that all the remedial students (we call it 103) gained while advanced students (104) didn't. Such a pattern would indicate cognitive growth. What I found though, was that the pattern existed for each class. That is, 103 students still exhibited the below mean/above mean behavior, although their mean was considerably lower. So did the 104 students. This would seem to indicate that it is not a matter of cognitive development, but that it is something which occurs within each class structure. The second objection I have to a cognitive development theory is that it doesn't explain fully why the good students should lose. If we were to accept a cognitive development theory, we might expect good students to either stay put or to make smaller gains.

What other reasons might we advance, then? Since the behavior patterns seem to relate to the individual class, I might suggest two possible reasons. First, it might be that we as teachers are simply allowing the better prepared students to coast. There is ample evidence in the literature to indicate that the way to a teacher's heart is through involved diction, long essays, big
words, and proper spelling. It could very well be that in our relief to find a student who can actually write a series of English sentences, we subtly and unconsciously indicate to that student that he or she doesn't need to push to succeed in the class; that he or she can spend time on sociology or anthropology or biology and still get the A or the B or the P or the S. I have often found myself fawning over a bright student, marking wonderful, and excellent over papers that were in fact no more than adequate, and giving that student's further efforts only cursory attention, saving myself for the semi-literate who is trying to grasp the idea of a thesis.

A second explanation might be the effect of the dreaded red pencil. Syntactic fluency means, for most freshmen, good and poor writers, trying styles and structures that they are not familiar with, experimenting with the language, making hypotheses about what will and will not work, grammatically and stylistically. And, as is inevitable, many of these experiments don't work. Miscues is what they are being called nowadays, mistakes that indicate the student is working with a not altogether controlled style. However, miscues indicate that the student is trying, is learning. What we as teachers should do is encourage that sort of behavior, after first learning to recognize it. What we usually do do is to zap it with AWK, or Frag, or Sp. Students are not dummies. If they stick their necks out and get them chopped up, they will keep them in the next time. On the pre-test essays in most of these studies, the students may be trying to show the teachers that they have writing mastered. Since they don't, they make mistakes, which are noted in red, and which teach the student not to make any more experiments. Safe and sure wins the race.

So, then, where does this leave us? In the position of a doctor with a set of curious symptoms and no discernable disease, or a scientist with some interesting data and no theory. I suggest it would be well worth our while to spend
some time looking at the gifted writer as much as we have been looking at the basic writer; studying ways to inflame the imagination and enlarge the ability of those who make the top layers of the class as well as those who live at the bottom; that we devise strategies for teaching the already competent as well as the not so competent.
Gains and Percentages by Starting Level Maturity

Adapted from Shook, 1981

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### Table A

<table>
<thead>
<tr>
<th>Pre-test % of FM Usage</th>
<th>Experiment (n=39)</th>
<th>Control (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in Gains</td>
<td>% Gains</td>
</tr>
<tr>
<td>5.5 to 10.5</td>
<td>4 3</td>
<td>75.0</td>
</tr>
<tr>
<td>10.5 to 15.5</td>
<td>18 14</td>
<td>78.7</td>
</tr>
<tr>
<td>15.5 to 20.5</td>
<td>11 8</td>
<td>72.7</td>
</tr>
<tr>
<td>20.5 to 25.5</td>
<td>3 2</td>
<td>66.7</td>
</tr>
<tr>
<td>25.5 to 30.5</td>
<td>3 0</td>
<td>0.0</td>
</tr>
<tr>
<td>30.5 +</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

---

Graph A

- **Control**
- **Experimental**
Mean Changes in FM Usage

Table B

<table>
<thead>
<tr>
<th>Pre-test</th>
<th>Experiment (n=39)</th>
<th>Control (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of FM Usage</td>
<td>% of FM Usage</td>
</tr>
<tr>
<td>Group</td>
<td>% Change</td>
<td>Group</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>5.5 to 10.5</td>
<td>10.2</td>
<td>10.2</td>
</tr>
<tr>
<td>10.5 to 15.5</td>
<td>46.0</td>
<td>5.84</td>
</tr>
<tr>
<td>15.5 to 20.5</td>
<td>28.0</td>
<td>4.99</td>
</tr>
<tr>
<td>20.5 to 25.5</td>
<td>7.7</td>
<td>-3.93</td>
</tr>
<tr>
<td>25.5 to 30.5</td>
<td>7.7</td>
<td>3.61</td>
</tr>
<tr>
<td>30.5+</td>
<td>0.0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Graph B

- Control
- Experimental

Change in FM Usage (%) vs. Pre-test FM Usage (%)


### TABLE 3

Pre/Post Achievement by Experimental and Control Students on Two Syntactic Factors for Ten Subgroups Established by Rank Order of Initial Syntactic Performance (Figures in Parentheses are Full-Group Means)*

<table>
<thead>
<tr>
<th>Grouping by Pre-Test Score (Mean)</th>
<th>Score Range on Pre-Test (Words/unit)</th>
<th>Pre-Test Score (Mean)</th>
<th>Post-Test Score (Mean)</th>
<th>Pre/Post Diff. in Means</th>
<th>Pre/Post Improvement (% of N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EX</td>
<td>CON</td>
<td>EX</td>
<td>CON</td>
</tr>
<tr>
<td>CLAUSE</td>
<td></td>
<td>1-19</td>
<td>6.20-7.83</td>
<td>7.42</td>
<td>7.04</td>
</tr>
<tr>
<td>LENGTH</td>
<td></td>
<td>20-39</td>
<td>8.01-8.79</td>
<td>8.33</td>
<td>8.47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40-59</td>
<td>8.81-9.34</td>
<td>9.06</td>
<td>9.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60-79</td>
<td>9.35-10.30</td>
<td>9.77</td>
<td>9.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80-99</td>
<td>10.47-12.23</td>
<td>11.41</td>
<td>11.28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(9.26)</td>
<td>(9.06)</td>
<td>(9.28)</td>
<td>(8.73)</td>
</tr>
<tr>
<td>T-UNIT</td>
<td></td>
<td>1-19</td>
<td>9.64-12.27</td>
<td>11.35</td>
<td>11.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40-59</td>
<td>13.50-14.87</td>
<td>13.98</td>
<td>14.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60-79</td>
<td>14.80-17.14</td>
<td>15.89</td>
<td>15.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80-99</td>
<td>17.21-23.14</td>
<td>19.25</td>
<td>18.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(14.94)</td>
<td>(14.21)</td>
<td>(16.30)</td>
<td>(14.69)</td>
</tr>
</tbody>
</table>

* Experimental N = 56  Control N = 44

---

### Figure 1. Change in Clause Length

![Graph showing cumulative % of N for EX and CON](image)

- **EX**: Cumulative % of N = 21, 69, 91, 96, 100
- **CON**: Cumulative % of N = 6, 16, 27, 38, 49

- **Pre-Test Scores (Words per Clause)**
  - 6-6.99
  - 7-7.99
  - 8-8.99
  - 9-9.99
  - 10-10.99
  - 11-11.99
  - 12-12.99

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15
A Highly Selected Bibliography

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One-to-One: Studies About


Free Modification: Procedures and Caveats

Christensen, F. A generative rhetoric of the sentence. College Composition and Communication, 1963, 14, 155-161.

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