College students have difficulty in written communication, despite attempts by universities to place English courses in the "core curriculum." Although many companies indicate that writing is an expected competency, and many companies consider writing when they promote, students still enter the workforce with poor grammar skills. Clear and concise communication is especially important in the health professions, where life-and-death decisions may be made based on written communication. Instructors in a large southwestern university used the concept of "selection" to provide more opportunities for students to practice their writing skills. Students could self-select up to 19 written assignments throughout the semester, with papers being 1-3 pages in length. An assignment was due each week, which required more student planning. From a grading perspective, the pilot project seemed to indicate that the more assignments that students submitted, the better their writing became. Despite this, students gave negative feedback about the assignments. In addition, the instructors found the pilot to be labor-intensive, averaging 20 hours per week for grading, and does not recommend the activity for tenure-track faculty.

Keywords: writing skills, incremental writing, enhancing writing

As society becomes more technology-oriented, many find that the art of writing is becoming a lost skill. Many college campuses are finding that English departments are focusing more on a writing style that is geared toward modern communication and is limiting their emphasis on grammatical rules. Even The Chronicle of Higher Education published an article entitled “1ce Upon a Txt” that emphasized the need for written communication to parallel spoken communication, with importance placed on “fingered speech” (Ferris, 2013, ¶4). Creating text that parallels spoken language may be appropriate for fiction and daily communication; however, in a professional world, especially when that world that deals with life and death, such communication should not become the norm. In health care, people must correspond, both written and orally, in such a way that there is no room for interpretation. For example, it is a fundamental practice among medical professions to use precise anatomical terms, many of which are Latin derivatives, to ensure that both the speaker and the listener share the same base of understanding. The concept is the same for health administrators who must communicate with the provider, the payer, and the patient: communication must be succinct and clear, with no room for perception or interpretation.

PROBLEM

Historical Overview

For many decades, there has been a discussion at universities regarding the ability of students to write effectively. Many universities have found that entering students, especially at the freshmen level, tend to have a higher opinion of their writing abilities, but over the course of the semester, students find they do not possess a solid foundation of grammar (Collins & Bissell, 2004). Because of the high percentage of students who need to take remedial coursework before beginning higher education courses, most colleges have placed English in the "general education" curriculum, the first basic courses in academia. Many of these first-year composition courses have placed emphasis on content and creativity, as opposed to grammatical structure. Thus, we are finding a cohort of students...
who write creatively, but who may write in such a way that it is difficult for the reader to perceive the true meaning of the text. Adding to this is the fact that social media has annihilated grammar, syntax, transition, and spelling.

Thus, a dichotomy seems to have occurred between academia, emphasizing creativity and content, and health professions fields, such as medicine, where there is less need for flowery speech that captures the audience’s attention. Rather, in health professions, there is a need to ensure that the idea that is received by the recipient is the same as that which is sent by the originator.

**Theoretical Model**

The basic premise of communication can be traced to Aristotle, who indicated that communication was composed of five essential parts: speaker, speech, audience, effect, and occasion (Narula, 2006). Research into communication models began in earnest in the 1940s and 1950s, and two types of communication models seem to have developed: linear and non-linear. Linear models, such as Aristotle’s model and Shannon and Weaver’s model placed emphasis on the sender providing a message. Shannon (Figure 1) enhanced the Aristotelian model by indicating that between the time a message was transmitted and before it was received “noise” could occur (Lanigan, 2013). In this case, noise may be any type of signal that could interfere with the initial message.

![Figure 1. Shannon and Webb Model of Communication](image)

Later, Berlo (Narula, 2006) identified specific categories for each of the components identified in the Shannon and Weaver model and developed a model that stressed the relationship between the receiver and the recipient of the communication. Berlo’s model had a similar overall concept as the Shannon model, but Berlo identified specific areas that were included in each of the four basic components. For example, Berlo identified five areas for “source,” including communication skills, attitudes, knowledge, culture, and the social system surrounding the idea. In addition, Berlo identified the importance of the five human senses in his model. By introducing this concept, Berlo emphasized the importance of the environment on communication.

In the 1950s, Schramm emphasized the importance of feedback between sender and the recipient in communication. In the Schramm model (Figure 2), both sender and recipient interpret messages, with the sender interpreting the idea/source that was perceived, initially, and then encoding the idea into a message that would be transmitted. In turn, the recipient would decode the received message and then encode the feedback, which would be returned to the initial sender. However, interpretation—both encoding and decoding—on both sides of communication may increase the chance of misinterpretation, though it may also increase the chance of identifying when a communication was misinterpreted in the first place.

**Workforce Viewpoint**

According to Collins & Bissell (2004), employers expect people who have graduated from college to have a basic understanding of grammar. However, Quible (2008) found many employers were dissatisfied with the writing skills of their employees. This parallels a survey of 120 American corporations, employing 8 million people, which found that about two-thirds of the salaried employees had some writing responsibility, yet over 40% of the firms had to provide training/retraining in writing skills (National Commission on Writing, 2004). Since writing is a “threshold skill,”
the emphasis on good writing skills is crucial to the viability of an organization, as organization functions that are most dependent on communication (i.e., customer contact and research and development) are least likely to be outsourced (National Commission on Writing, 2004, p. 8). Many companies see writing as a “marker” that is associated with high-skill, high-wage, professional work (Quible & Griffin, 2007). Thus, people who communicate in a clear manner are more likely to be hired and to be considered for promotion. This is substantiated by a survey that found approximately 50% of all companies consider writing abilities when making promotion decisions (National Commission on Writing, 2004).

**Academic Viewpoint**

Despite written communication being viewed as a key goal for many universities (Stern & Solomon, 2006), most universities have found that many students enter college unprepared in basic writing skills. To illustrate the extent of the problem, Collins and Bissell (2004) cite a 1999 U.S. Department of Education report which stated that “29% of college freshmen required remedial classes in math and English” (Collins & Bissell, 2004, p. 664). Academicians today find a continued decline in grammatical skills. For this reason, many colleges have developed “writing across the curriculum and writing intensive courses” (Kellogg and Raulerson, 2007, p. 240).

Although writing across the curriculum seems to be waning, academicians continue to emphasize that writing remains an important challenge for students because it requires an integration of memory, language, and thinking abilities (Kellogg & Raulerson, 2007). How such writing intensive courses are structured is crucial to student skill development. Kellogg and Raulerson (2007) found deliberate practice tends to improve writing skills, especially if timely feedback is provided. Thus, for students to become effective writers, they must deliberately practice. This concept dates back to the late 1800s, when Bryan and Harter claimed “over ten years are necessary for becoming an expert” (Ericsson, 2006, p. 691). This 10-year rule has become a concept standard in many skill-building processes (from football to classical piano), and Kellogg and Raulerson (2007) indicated that deliberate practice was highly effective in developing skills.

**Student Viewpoint**

Unlike many skills that are enhanced by the 10-year rule, writing may not be viewed by the student as applicable to the rule. Many students tend to think of writing as a “talent” or a “gift” and thus do not consider how extensive practice could enhance their abilities (Ericsson, 2006). They fail to realize that composing good text requires self-regulation (Lovett, Lewandowski, Berger, & Gathje, 2010). This is because writing requires many self-regulatory mechanisms such as planning, evaluating, and revising (Graham & Harris, 2000). In order to self-regulate, students need to control their environment, behavior, and personal processes (Graham & Harris, 2000). Only after students become comfortable in setting goals and planning for a task, seeking the necessary information, organizing information, and putting information into their own words can they become better writers (Graham & Harris, 2000). Students tend to become more self-regulating with age and schooling (Graham & Harris, 2000), whether this is based on maturation or having had greater opportunities to practice the skill.

In order to become more effective writers, college students should practice their writing skills “over extended texts”
(Kellogg & Raulerson, 2007, p. 238). Kellogg and Raulerson (2007) further found that writing skills would vastly improve with practice that incorporates professionally relevant tasks. Schmidt and Bjork (Kellogg & Raulerson, 2007) found that spacing practice in shorter sessions was more effective than long block sessions, as the shorter sessions promoted long-term retention and transfer of skills. Boice found that the longer sessions, often called “marathon sessions,” caused anxiety, exhaustion, and writer’s block (Kellogg & Raulerson, 2007). Ericsson (2006) found that elite performers tended to practice their skill roughly the same amount every day, including weekends; thus, a student would not benefit from writing a term paper over a semester unless the student worked daily on the paper. This would seem to indicate the value of having shorter writing assignments that necessitate daily effort, as opposed to term papers, which frequently are written, with little time for editing, at the close of a semester.

**PILOT PROJECT – CAFETERIA PLAN**

Considering the importance of structured writing across time, two instructors at a School of Health Administration developed a pilot project in which students during the 2011-2012 academic year would be provided a plethora of writing assignments. Students would self-select assignments, with each assignment having a specific point value, and points for all assignments submitted would accumulate toward the overall grade in the course. The grading would be structured so that students were forced to select a minimum of 50 points of writing assignments, but they could choose more assignments to improve their grade for the course. Students would still be required to take examinations throughout the semester, with good grades on the exams not meeting the overall points needed for a C (thus ensuring that students would need to submit at least two writing exercises).

On the first day of class, the instructor discussed the grammatical errors that most often occurred in previous semesters, with errors including comma use, vague pronoun reference, diction, verb tense, citation, and reference page. Students used the first class day to edit a paper for these issues so that they also practiced some common techniques for editing papers (i.e. reading the paper aloud).

A total of 19 writing assignments was developed, with points ranging from 5-30. The points allocated for each assignment were somewhat indicative of the length and difficulty of the paper, with reports ranging from 1-3 pages. The brevity of the assignments was intentional; the total number of pages required throughout the semester approximated a “long report” required in other classes (25-30 pages). In addition, the brevity forced students to put more emphasis on planning (because there was a need to write within a specified page limit, a concept frequently found in government report requirements). Finally, the brevity of the assignments allowed more time for editing. Specific guidelines were provided for the papers (such as APA style, margins, double-spacing). A generic rubric placed as much emphasis on grammar as on the content—50% for content and 50% for grammar—although points for specific items could vary slightly between the assignments.

Individual assignments paralleled the focus of the week’s lecture but required additional reading or activities. Assignments were varied to consider perceived variance between male and female writing styles (straightforward dialog versus more creative writing). Much research (Beard & Burrell, 2010; Farringdon, et al., 2014; Jared, Juan, & Nazi, 2013; Lee, 2013; Roivainen, 2011), as well as antidotal information, has indicated that K-12 females tend to be better writers than males, yet at least some research (Collins & Bissell, 2004; Yarborough & Johnson, 1989) has found that the gap between writing skills declined as students gained more knowledge and experience and when assignments were based on straightforward direction. For that reason, most of the assignments contained an action as well as a writing component. Assignments included the following: self-introduction with discussion of home county demographics; comparison of a newspaper article with a specific public health model; cultural impact analysis related to a health clinic; reading level determination and discussion of implications to the worksite; shadowing of a health administrator and describing the knowledge, skills, and attitudes needed to successfully transfer into that position; developing a population pyramid and explaining how the information would be useful for a health administrator working on a strategic plan. Although all the assignments dealt with public health (course subject), some assignments were more geared toward personal insight (i.e., analyze the impact of public health in a day in the student’s life) than public health concepts.

Strict guidelines, such as timeliness for submitting papers, were upheld, and points equaling a letter grade were deducted for any partial day of late submission. To encourage students to start their writing assignments early in
the semester, more points were allocated for papers submitted earlier in the semester. On average, there was an assignment every week, but students were given the leeway of choosing which papers they would submit so that students could work around tests and reports in other courses. Students also could decide early in the semester the grade they would seek for the course. Once they had accumulated enough points, they could cease submitting papers. Because of the numerous times that students could receive points for their writing assignments, no “rounding up” of final grades was considered, so students realized the value in continuing to submit papers throughout the semester.

Once work was submitted, students received feedback within one week. Although specific criteria were developed for each writing assignment, the overall rubric framework was 50% content and 50% grammar. On the first submitted paper, the instructor circled each grammatical error, a labor-intensive effort for the instructor, noting in the margin the type of error. Tallies were made at the end of the paper to reflect grammatical errors so that students could see the grammar issues that they most often committed. Over the semester, students could track improvement on specific grammatical issues, which would reflect how they should be paying more attention to detail and editing their papers for specific grammatical problems.

**RESULTS**

Thirty-seven students participated in the course, with 22 being female and 15 being male. All students were in their senior year, the semester preceding the residency. Students completed 2-15 writing assignments, with 10.9 being the average number of assignments submitted. The average number of assignments completed by females was 10.7 and the average for male students was 12.2. This indicated that males wrote more assignments, suggesting that they were not as confident in their writing abilities as females, they were willing to put in extra effort to improve their writing, or they had performed poorly on class tests and were trying to improve their final grade.

The scores for the initial assignment ranged from 60 to 98, with women scoring between 60 and 98 and men scoring between 62.5 and 91. Females earned an average score of 84.9 on the first writing assignment, and males an average initial score of 79.9. This range reflected a slightly wider range in skill set for females over males, but this was not significant.

The scores for the final assessment ranged from 76.8 to 100 for females and 83 to 100 for males. The average score for females on the final assignment was 94.2, while the final score for males was 93.5. Overall, males had a more condensed range than females, and their overall scores improved more than females when compared to the initial assignment. However, there was no statistical difference between final assignment scores of females and males.

By the end of the term, the average increase in scores rose by 11.16 points. Male scores increased between 2 and 33 points from the first to the last assignments. Female scores decreased for three students; other female scores increased between 1 and 30 points. Again, there was no significant difference between the increase in scores for males and females.

At the close of the semester, students were surveyed on the value of the pilot project, with students writing confidential comments that were collected by a graduate student and not reviewed by the professor until after final grades had been submitted to the registrar’s office. To maintain anonymity, no demographics were included on the survey. Some of the comments, both negative and positive, made by students included the following:

- “I don’t like having so many assignments. There were assignments every week.”
- “I prefer 1 long paper at the end of the semester. I can work on that over spring break.”
- “When I got round to writing some of the assignments, the points for each was small unlike the first assignments that had lots of points. That’s not fair.”
- “I did not like all the assignments at the first of the semester. However, looking back over my work, I see that I improved in my writing.”
- “Thank you. Whenever I use a comma, I think about you.”
Although anecdotal, they do seem to reflect two important areas of interest to this study: some students realized the importance of the writing exercise, and some students were not yet prepared to allocate necessary time to enhance their skills. Although some students acknowledged their improved writing skill, they were dissatisfied with what they perceived as “too much work” throughout the semester. Some, who did not begin the writing assignments early in the semester, indicated they were not able to achieve a higher grade, but did acknowledge that the responsibility in choosing the assignments was solely their own.

RECOMMENDATIONS

To be successful in adapting a cafeteria plan for the typical face-to-face classroom, instructors should consider the technical merits from both the student and the faculty’s viewpoint. Students, unless thoroughly briefed at the initial meeting, may not be comfortable with the format, as they must take more responsibility for their work. Students who tend to procrastinate will find that their failure to start working early in the semester on activities can prevent their attaining a high grade. Some students have difficulty choosing activities, especially if the emphasis of all activities requires writing a lengthy paper/report. Because each activity by itself has limited value, students overlook the cumulative points of all the activities. Students also will decide not to work on “small” projects (interpretation: few points) if they have major assignments in other courses. For these reasons, before designing a cafeteria plan, a number of recommendations are suggested.

Student Perspective

1. Vary the page requirements for individual projects. Each project requires some type of write-up, but some projects place emphasis on other skills, so the length of the report submissions should vary between one and five pages.

2. Vary the points for projects. In our case, the point spread was between 5 and 30, the points depending on the instructor’s perception of the time required to complete the project, as well as the length of the report submitted.

3. Place projects with the greatest point value at the beginning of the semester. This should be done for three reasons. First, there are typically fewer projects required in other classes during the first two months of the semester; thus students would have more time to complete the projects in this class. Second, this will force students to begin projects early and not procrastinate until after their first exam when they might be scrambling for points. Finally, this will offer more rewards to students who continually manage their time, thus encouraging professionalism.

4. Toward the end of the semester, have two or three projects of limited point value (i.e., 5 points) to address borderline grades. This will demonstrate to students that the instructor is willing to work with the students for their success, yet it also will demonstrate that students must take responsibility for their work throughout the semester.

5. Have a limited number (1-2) of team projects focused on service-delivery. This will allow students to work in teams in an out-of-class activity, something that many students in the authors’ discipline have found useful as they move into the work environment. Student reports can consist of two areas. The first can be a composite of all team members’ reporting on the factual information (what they did, the assignment of responsibilities, etc.). The second part of the report can be an individual effort (i.e. the individual student’s reaction to something).

Instructor Perspective

1. Schedule plenty of time for grading. Initially, the authors scheduled 20 minutes per student report, but quickly learned that because of the various levels of writing skill and the uniqueness of each report, the authors were spending an average of 20 hours per week grading papers.

2. Limit class size to fewer than 20 students. The authors’ university has “writing intensive courses,” and this activity occurred in this type of structured course. For that reason, 50% of student grades were based on
writing skills. On average, especially for the first few reports submitted, the authors averaged 20 hours per week on grading. With larger classes, grading may become unmanageable. Any delay in providing feedback to students could hurt students' ability to learn from their mistakes.

3. Emphasize the importance of early activities because of their value (points) and the implication of the decision to choose/not choose an activity. Initially, some students chose not to begin their activities during the first weeks of the course, thinking they had plenty of time to fulfill the requirement. After the first test, when some students realized that they needed points, they discovered that there were fewer projects during the latter part of the semester that were "big ticket" items. The instructor should ensure that this is discussed during the first day of class, when the syllabus is covered, and is subsequently addressed throughout the semester.

4. Be aware of activities in other classes. This impacts students choosing to select a project from the cafeteria plan. Be especially aware of when tests and reports are due in the one or two courses for which students normally spend exorbitant amounts of time in preparation (i.e., accounting). The best solution for the cafeteria plan would be to not have any activity due the week of important times in other courses. The authors teach in a program based on cohorts, so obtaining this information is not difficult. However, in situations where students may come from different colleges or departments, it may be difficult (or impossible) to acquire the schedules.

5. Have a variety of topics and a variety of methodologies for learning. Since students learn differently, consider using something other than the usual "report" format. Students could be asked to develop talking points for the supervisor's speech to the board of directors; students could create a video to demonstrate a local problem; students could be asked to demonstrate a specific task to a person who does not speak the same language; students could develop a website or blog.

6. Plan the major activities (the activities with the greatest points) early in the semester before students have deadlines for other classes.

7. Assign specific deadlines for each activity. If deadlines are not spaced appropriately throughout the semester, students will attempt to perform all the activities at the end of the semester (during spring break or Thanksgiving), thus defeating the purpose of time management and "writing across the semester."

8. On the first day of class, thoroughly review the expectations for the course. Since the cafeteria plan is a different style of teaching, students must be aware that it is labor intensive, throughout the term, for both the instructor and the student. Draw students' attention to the fact that the concepts are different and that students clearly recognize the expectations for choosing as many (or as few) activities as they want. Reinforce that the activities in the cafeteria plan are varied to allow students to pick topics most suitable to their career plan or can be used to consider career options.

9. Develop a rubric for the course that requires that students complete at least a certain number of points through activities. For example, the two major tests could equal 60% of the grade, but students must earn enough points to garner 10% of their grade through activities if they choose to get a C in the course. Remind students that the 60% is based on obtaining perfect scores on both exams. If the student does not think this is possible, the student should plan to earn more than 10% points from activities to ensure a C in the course.

10. Grading all of the activities is time consuming. Students usually submit the first activity, but the number of submissions declines mid-way in the semester when students have requirements in other courses. The submissions usually increase toward the end of the semester when students realize their grades may be in jeopardy.

11. When teaching multiple classes each semester, it could be important to understand the flow of the various activities as the instructors plan their other courses. It would be wise not to attempt a cafeteria plan in multiple courses in any given semester.
LIMITATIONS

Although a pilot study, the project had a number of limitations. First, the study occurred during one academic year, and the students in this particular year may not be representative of other cohorts. Secondly, the number of students who participated in the pilot project was small. The number of students in the two cohorts is close to the normal number of students in the health administration cohorts, but the small number could skew any information gleaned from the pilot study. Thirdly, the cohort had a number of non-traditional students who frequently show more concern with their preparation for classes; this concern could carry over to writing skills or could reflect that older students have more experience that could enhance writing skills.

From the instructors’ viewpoint, the amount of time spent in grading was tremendous. They spent an average of 20 hours per week providing feedback to students. Although happy with the ultimate improvement in students' writing skills, the instructor does not suggest the use of a cafeteria plan to improve writing skills if the instructor is on the tenure-track.

CONCLUSION

The cafeteria plan is a good methodology to give students more responsibility for their learning. Students not only can pick activities that they consider important in their future work, they can use methodologies, other than writing lengthy reports, that also may be useful in their future. Although the cafeteria plan originally had been designed to ensure that students wrote “small chunks” across the semester, the cafeteria plan can be used to assist students in thinking creatively so they can express themselves in more ways with the written word. This creative thinking is necessary in professional environments for solving organizational and systemic problems.

REFERENCES


**About the Authors**

**Tina T. Fields,** PhD, MPH (TFields@txstate.edu), is an associate professor in the School of Health Administration, Texas State University, San Marcos, TX. Her areas of research include Texas/Mexico Border health issues, diversity, assessment and pedagogy, social determinants of health, and rural health.

**Jeffrey J. Hatala,** PhD, MMC (Hatala@txstate.edu), is an assistant professor in the School of Health Administration, Texas State University, San Marcos, TX. His areas of research include obesity prevention, public health policy, diversity, and rural health.