Answering the Calls to Improve Communication

Nancy Bearden Howell

Abstract – Calls to improve communication skills come from both academia and industry. Other calls encourage communication across the curriculum and recommend communication-specific courses within the disciplines. This paper describes strategies implemented, in response to these calls, in a three-hour junior-level course at a four-year university. The theme Finding Your Voice weaves through both the written and oral communication components in order to increase awareness of the differences between voices used for personal communications with peers and friends and professional communications with colleagues and clients. Writing as Revision encourages a step-by-step approach to the writing process. Speaking to Learn enables the incorporation of oral communication without sacrificing course content. General requirements for writing assignments and oral presentations are explored in this paper, as well as specific topic assignments. Self assessment and peer assessment procedures are also discussed.

Keywords: Written Communication, Oral Communication, Communication-Intensive, Discipline-Specific, Computer Science.

CALLS FOR EFFECTIVE COMMUNICATION SKILLS

Both academia and the business world emphasize the importance of effective communication skills. Accreditation agencies such as Southern Association of Colleges and Schools (SACS) and The Accreditation Board for Engineering and Technology (ABET) require that communication be included in the curriculum. Pine & Barrett [4] indicate that including written and oral communication components in the curriculum are essential “because software engineering professionals are required to write and present regularly” (p. 314). In addition, employers cite the importance of both technical and communication skills. Research in this area indicates that effective communication skills (or the lack thereof) determine the student’s career success or failure [5]. Thus communication is vitally important for “survival” in the business world.

In response to these calls to improve both written and oral communication, several courses in the curriculum of the School of Computing have been designed and/or revised to provide opportunities for students to enhance their communication skills. One such course is CSC 309, a writing-intensive course in the Computer Science program at the University of Southern Mississippi. This course provides an opportunity to combine the focus on remaining knowledgeable of technological advances and ethical concerns with our industry’s requirement for employees with effective communication skills.

The concepts Finding Your Voice, Writing as Revision, Speaking to Learn, Self Assessment, and Peer Assessment used in this paper are key elements of the Quality Enhancement Plan (QEP) recently implemented at the University of Southern Mississippi.

STRATEGIES FOR WRITTEN COMMUNICATION

Multiple and varied writing assignments provide opportunities for students to write, assess, and receive feedback. These assignments include weekly informal projects as well as formal research papers written to APA style guidelines. The weekly informal projects provide opportunities to investigate somewhat controversial topics and

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then discuss the ethical issues presented. Proper sentence structure and grammar are required in these short assignments.

Requirements for the formal research papers indicate that the length should be between 1400 and 1500 words. In addition, the research papers require at least two instances each of direct quote, paraphrase, and summary, along with proper citations as per APA Style Guidelines.

Strategies incorporated into this written communication process include finding your voice, writing as revision, and assessing your work.

**Find Your Voice**

Finding a Voice is the theme of the Quality Enhancement Plan (QEP) recently implemented at the University of Southern Mississippi. An intent of Finding a Voice is to increase awareness of the need (in fact, requirement) that one analyze both the message to communicate and the audience to which the message is directed and determine the appropriate wording to use to deliver that communication. Thus, one needs to Find Your Voice that is appropriate for the given situation.

Text messaging communication to friends and/or peers typically differs from email communication to family and the writing requirements in formal research papers. These different audiences require different voices. Writing assignments provide opportunities to both Find Your Voice to communicate informally and Find Your Voice to communicate formally.

One of the weekly informal projects requires that students investigate the Turnitin service and then “Find Your Voice” to prepare a 300- to 400-word document describing the purpose of Turnitin and discussing the prevalence of plagiarism on campus. This assignment does not require the use of a particular style guideline, but it does require that any references used be listed.

Find Your Voice to write research papers requires a formal voice (“your” formal voice). Some students struggle with this concept as it conflicts with their attempts to avoid plagiarism by directly quoting (and citing) sources. In one case, more than 30% of a student written paper was extracted directly from reference materials, prompting the grading comment “I need to hear Your Voice”.

Realizing that different situations and different audiences require different voices is one thing; actually using different voices is a different issue. And, Writing as Revision presents its own set of challenges.

**Write and Revise**

A newalt [1] indicates that the iterative nature of the software design process leading to the development of the finished product is similar to the steps involved in writing research paper. The software design process involves planning, designing, coding, testing, modifying the code, and repeating the steps until the requirements are satisfied. Similarly, the writing process should involve multiple iterations, each moving closer to the finalized document. The University of Southern Mississippi’s QEP program names this writing approach Writing as Revision.

In order to encourage the Writing as Revision strategy, term paper requirements have been modified and the timeline of activities has been “stretched out” to include multiple drafts and multiple assessments. Approximately a week after discussing the requirements for a given term paper, the abstract and/or outline as well as hard copy of reference materials are due. In another week, the initial draft of the paper is due; this is followed by the requirement for the second draft and then the final document. Associated with each of these “steps” in the term paper timeline is an opportunity to assess the work done.

**Assess Your Work**

The various types of assessment include self assessment, peer assessment, assessment via consultation, and self-assessment of the overall process, with specific questions to be answered on each of the assessment forms.

The Self Assessment, completed by the writer himself at the time the initial draft is due, provides an opportunity for the writer to document how well his paper is developing. In some cases, the writer has realized that the topic choice

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is not a good one (meaning either he is unable to find sufficient reference materials or the topic is too broad to develop adequately in a paper of the required length).

Peer review or Peer Assessment (situations in which colleagues review and comment on each other’s work) occurs at the next stage of the paper development process. Kussmaul [3] indicates that the use of peer reviews is documented as a best practice in software development. The advantages of peer reviews listed by Kussmaul include not only opportunities that they provide for learning from others but also that “People tend to do better work when they know it will be reviewed by peers” (p. 152).

After the second draft is prepared, the writer describes the purpose of his paper to a peer and the peer reads the paper and writes comments on the Peer Assessment form. In some cases, the peer assessment occurs in the classroom; other times, the peer assessment occurs away from the classroom so that the writer has the option of finding a classmate, a friend, or a relative to conduct the peer review.

Before the final paper is submitted, the writer is encouraged to schedule an appointment with a writing tutor in the Writing Center on the University’s campus. The tutors who staff the Writing Center are typically graduate students in the English Department who spend up to an hour reviewing the paper and providing comments regarding topic development, overall flow of ideas, and organization.

Once all writing assignments have been completed, students self-assess their written communication skills and their use of the Writing as Revision process. Because these writing strategies have only recently been formally introduced into the curriculum of the course discussed here, significant analysis of assessment data has not yet occurred. However, preliminary reports from students are encouraging. This is one student’s self-assessment of how he used this process: “Typically I would blast through the first draft, making sure to cover all the key areas. Second draft would primarily focus on the flow of the paper, and the third concentrated on flow and formatting.” Another student provided the following comment: “I really like this process because it allowed me to do my papers in a timely manner.”

Some students actually applied the Writing as Revision and Assess Your Work strategies to their oral communication assignments.

**STRATEGIES FOR ORAL COMMUNICATION**

Hoffman, Dansdill, & Herscovici [2] discuss writing within the discipline of Computer Science and promote Writing to Learn (WTL) as a means of encouraging active learning. The oral communication counterpart to the Write to Learn philosophy for written communication is the Speak to Learn concept, a key element of the University of Southern Mississippi’s QEP program. Speak to Learn involves researching a topic sufficiently in order to become a subject-matter expert, preparing a presentation, and then delivering that presentation to an audience.

In order to incorporate an oral communication component into the curriculum of the course described in this paper without sacrificing course content, the Speak to Learn concept is used. Students select presentation topics from lists provided by the instructor and then prepare and present the material to their class. By doing so, they become subject matter experts for their chosen topics.

**General Requirements**

Each oral communication project presentation requires at least 15 PowerPoint slides with an appropriate design template and bulleted text that describes and/or defines the topic, indicates why there are concerns relative to this topic, and discusses current or potential solutions. In meeting these requirements, the speaker prepares a professional and informative presentation that might also be entertaining.

**Grading Criteria**

One of the keys to assessing the oral communication presentations is obtaining peer feedback. Students are encouraged to ask questions and/or make comments on both the content and delivery of the presentation. In
addition, grading is based on organization, delivery, and response to questions. Is the presentation organized with sufficient level of detail and adequate technical content? Is the appropriate level of enthusiasm conveyed with no distracting nervous habits? Does the speaker listen carefully to questions and properly interpret his presentation materials?

CONCLUSION

By increasingly emphasizing the importance of effective written and oral communication, incorporating Writing as Revision and Speaking to Learn, and preparing and using grading rubrics, one learns to approach writing and speaking in a new way. Learning new strategies, accepting the challenges of applying those strategies, and recognizing discipline-specific requirements combine to make this a fun, and yes, challenging experience.

REFERENCES


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Nancy Bearden Howell is an Instructor in the School of Computing at the University of Southern Mississippi in Hattiesburg, Mississippi. Ms. Howell earned both a B.S. and M.S. in Mathematics from the University of Southern Mississippi and completed additional coursework at The University of Mississippi. Her current teaching assignments include a junior-level communication-intensive course in the Computer Science program.