

Assessing Outcomes in a Communication-Intensive Course

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Abstract – Educators from various disciplines endorse and support the assessment process. Though outcomes assessment processes are often informal, the process needs to be formalized. Stakeholders expect accountability. Accreditation agencies require programs to assess outcomes at the course level and at the program level in order to demonstrate effectiveness in meeting stated objectives. This paper describes methods implemented in a discipline-specific content-oriented three-hour junior-level course at a four-year university to assess the outcomes of written and oral communication components. Levels of assessment implemented at various stages in the writing process include self assessment, peer assessment, assessment via consultation with a writing tutor, and self-assessment of the overall process. Sample Self Assessment and Peer Assessment forms and procedures are examined. Assessing outcomes of the oral component is determined in part by analyzing the pre and post data provided by students on a Personal Report of Communication Apprehension survey form.

Keywords: Outcomes, Assessment, Communication-Intensive, Discipline-Specific, Computer Science.

OVERVIEW

Accreditation agencies such as Southern Association of Colleges and Schools (SACS) and The Accreditation Board for Engineering and Technology (ABET) endorse, support, and require outcomes assessment. Formal assessment must occur both at the course level and at the program level in order to demonstrate effectiveness in meeting stated objectives. This paper describes some of the assessment measures implemented in CSC 309, a writing-intensive (in fact, communication-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 written and oral communication skills [3].

Both the written and oral communication projects assigned in this course provide opportunities for Writing as Revision, Self Assessment, and Peer Assessment, key elements of the Quality Enhancement Plan (QEP) recently implemented at the University of Southern Mississippi.

ASSESSING 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 term-paper writing process encourages step-by-step development leading to the final paper.

Anewalt [1] cites parallels that can be drawn “between the software design process and the writing process” (p. 156). The software design process should involve planning, designing, coding, testing, modifying the code, and repeating the steps until the requirements are satisfied. Similarly, the writing process should involve multiple

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iterations, each moving closer to the finalized document. The University of Southern Mississippi's QEP program names this writing approach Writing as Revision.

The steps in the Writing as Revision timeline for preparing the formal research papers include preparation of abstract and/or outline, initial draft, second draft, and final document. They each provide checkpoints where assessment occurs.

Self Assessment

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 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).

One of the items on this Self Assessment form requests that the student point out what parts of his paper still need work as well as areas on which he would like to have advice. The writer includes the completed Self Assessment form with his portfolio of term paper materials.

Peer Assessment

Kussmaul [2] indicates that the use of peer assessments or peer reviews (situations in which colleagues review and comment on each other's work) is documented as a best practice in software development. The advantages of peer reviews listed by Kussmaul include not only opportunities that peer reviews 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.

During the peer review, the reviewer provides written comments on how well the writer achieved his objective as well as parts of the paper that the reviewer believes need additional work. The reviewer uses these written comments as a guide when he discusses his critique with the writer.

The writer includes the completed Peer Assessment form with his portfolio of term paper materials.

Assessment via Consultation

Before the final paper is submitted, the writer is encouraged to schedule an appointment with a writing tutor on campus. These tutors are typically graduate students in the English Department who spend up to an hour reviewing the writer's paper and providing comments.

Following these consultations, the writing tutors document the session by completing a tutoring session report and sending it to the instructor. The checklist of information provided by the writing tutors indicates the materials that the writer brought to the conference and the issues that the tutor and writer worked on. In addition, the tutor provides a written description of the consultation.

Self Assessment

Immediately following the submission of the final paper, the writer completes a self assessment of his paper by describing what he perceives to be the most difficult part of the assignment as well as the successful parts. In addition, he describes how using the Writing as Revision process contributed to his overall success with the paper. The writer includes the completed Self Assessment form with his portfolio of term paper materials.

Self Assessment of Writing Process

Once all writing assignments have been completed, students self-assess their written communication skills and their use of the Writing as Revision process by completing the Writing as Revision Self-Assessment Form.

The following questions are extracted from this self-assessment form: Describe what you consider to be the successful parts of your writing assignments., How do you plan to use the “writing as revision” process for writing assignment in other classes?, Describe your overall assessment of your written communication skills.

This is one student’s self-assessment of how he used the Writing as Revision 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 these assessment strategies to their oral communication assignments.

ASSESSING ORAL COMMUNICATION

Students present a minimum of three oral communication assignments during this course. They select presentation topics from lists provided by the instructor and then prepare and present the material to their class. By doing so, they become a subject matter expert for their chosen topics. Requirements for these presentations include defining the topic, indicating why there are concerns relative to this topic, and discussing current or potential solutions. In meeting these requirements, the speaker prepares a professional and informative presentation that might also be entertaining.

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. 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?

In addition, the QEP Personal Report of Communication Apprehension (PRCA) survey form is administered twice - in pre-format at the beginning of the semester and then in post format at the end of the semester. On this survey form, the student responds on a scale from 1 to 5 to statements such as “My thoughts become confused and jumbled when I am giving a speech”, “I have no fear of giving a speech”, and “I face the prospect of giving a speech with confidence”.

CONCLUSION

Assessing outcomes is a key element in the educational process as accreditation agencies require assessment at both the program level and the course level. It is also important that students have opportunities to assess their written and oral communication skills via self-assessment, peer assessment, and assessment by consultation. By completing these assessment forms and/or reviewing comments on other assessment forms, students realize both the importance of effective written and oral communication and their own improvements in the communication process.

REFERENCES

- [1] Anewalt, Karen, “A Professional Practice Component in Writing: A Simple Way to Enhance an Existing Course,” *Journal of Computing Sciences in Colleges*, Consortium for Computing Sciences in Colleges, USA, Volume 18, Issue 3, 2003, pg 155 – 165.
- [2] Kussmaul, Clifton, “Using agile development methods to improve student writing,” *Journal of Computing Sciences in Colleges*, Consortium for Computing Sciences in Colleges, USA, Volume 20, Issue 3, 2005, pg 148 – 156.
- [3] Polack-Wahl, Jennifer, “It Is Time to Stand Up and Communicate,” *30th ASEE/IEEE Frontiers in Education Conference*, 2000, FIE 2000, Volume 1, 2000, pg F1G/16 – F1G/21.

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