EMS Paramedicine Program
Central Washington University
Department of Nutrition, Exercise, and Health Sciences

Assessment for Student Learning: Writing Assessment

Academic Year: 2011 – 2012

Course: EMS 460 – Research in EMS-I

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Introduction

A writing assessment was conducted on the students enrolled in EMS 460 – Research in EMS – I. This course is an introductory course in principles of research and research design as it applies to emergency medical services (EMS) paramedicine. It is intended to enable students to develop the necessary skills to identify research potential in the discipline, design appropriate and meaningful research, conduct effective literature searches for review, develop data collection instruments, collect data, analyze data, draw conclusions, and generate a research report or manuscript. Students enrolled in this course are in the EMS Paramedicine Major, typically in their senior year.

This course relies very heavily on writing components throughout the progression of the course with weekly submissions of writing products and a final project. In addition, students were expected to contribute to a weekly Discussion Board correlated to each session topic. Writing assessments were not conducted on this element of the course since submissions were considered conversational and not required to meet standard writing compliance parameters. As such, the course was deemed an appropriate surrogate course for a student writing assessment in the EMS Paramedicine cohort. The writing products from this course were assessed in this writing analysis project for the 2011-2012 academic year from the Fall Quarter. The course was instructed by Keith Monosky.

The writing analysis was based upon the provided CWU Writing Rubric that contained parameters of Content, Reasoning, Organization, Rhetoric of the Discipline, and Conventions and Presentation. A summary of that analysis is presented in the appended table. In that table, twenty-one students were assessed in the five assessment areas for each assignment submission, as well as the final project. The final project consisted of a research proposal that incorporated all the essential elements of design that were instructed in the course. Throughout the course, all writing products were expected to exhibit proper grammar, sentence structure, punctuation, correct spelling, proper formatting and other rules of composition. This
standard was set forth in the course syllabus and the students were reminded of these expectations with each writing assignment. It was further emphasized in the final project.

**Analysis**

The results of the writing assessment have been tabulated and summarized in the accompanying, appended table. A detailed analysis of those results is provided here for consideration and review.

**Content**

The content of each writing product was assessed for a clear sense of purpose and relevance, as well as accuracy of the content. It was also assessed for completeness, which rarely presented a problem in this course. As can be surmised in the table, content in the writing was overall mediocre. This aspect actually worsened over the duration of the course by about the sixth week, probably due to the nature of the writing assignments. By this period of the course, greater content, detail, and accuracy were expected from the students. Since the structure of the course relied very heavily on previous readings and writing efforts for each subsequent session, errors in content became more evident by the 8th and 9th week.

Content analysis success rate among the students ranged from 16.7% not passing that parameter, to 50% of the students not passing that parameter. This demonstrates a dire need for students to improve their effort in writing with purpose and accuracy. It is notable that students did much better on the final project in the content area as they understood the emphasis on this aspect and were afforded additional time to complete the project. The Quarter average for students not passing in the content aspect was: 23.3%

**Reasoning**

Each writing product was also assessed for the significance of contributed ideas that are properly supported and referenced. Students were expected to delineate between
conjecture and factual information. All writing products were evaluated for continuity, logical progression of thought, complex reasoning, and reasonably accurate conclusions and recommendations.

The students’ performance in this area somewhat paralleled that of content. Most students did a bit more poorly by Quarter’s mid-point; again, probably due to the cumulative nature of the writing assignments. It was also noted the poor performance in reasoning that occurred in the ninth week of the course (this was a point where a lot of integrated information was expected).

Reasoning analysis success rates among the students ranged from 16.7% in the initial weeks, to 50% not pass rate near the mid-point and final sessions of the course. The overall student average throughout the Quarter for not passing in this area was 22.4%. Again, this demonstrates the need for students to consider greater contemplation in their writing products to assure that their ideas are well-thought-out, have adequate support in conclusion and interpretation, and that the written product should reflect logical and complex thinking in the final draft of their effort. This aspect of writing has been observed to be deficient for most students over the past several years. The EMS Paramedicine Program goes to great lengths to assure that its graduates develop the ability to cogently put their thoughts together in a logical and progressive manner that enables the reader to easily understand their intent. The faculty revisits this aspect of writing development throughout the Program.

Organization
Consistent with the other parameters, the aspect of organization for all writing products was assessed. In this process, writing was examined for proper formatting, clear delineation between sections with reasonable continuity, adequate and appropriate inclusion of visual elements, and the construction of the writing product being consistent with its purpose and intent.
Overall, this area was fairly well performed by almost all students. There were occasions whereby section breaks were not clear and not well labeled and formatting could benefit from some improvement, but these areas improved over the duration of the course. The student performance on the final project was well above average in this parameter.

As can be surmised from the appended table, student ratings of success in the organization aspect ranged from 16.7% not passing to 0% not passing in two of the sessions. The average in this aspect of not passing throughout the Quarter was 8.1%.

The students generally did well in this area. There were some students that struggled with some of the basic aspects of organization, but most had only minor problems in developing a clearly understood, but smooth, transition from section to section in their writing products.

*Rhetoric of the Discipline*

This aspect of writing assessment is the easiest to determine since it is discipline-specific. Most students enter into the EMS Paramedicine Major with similar motivations and career goals in mind. This, coupled with the fact that many already have a subordinate role in the EMS delivery system, engenders a discipline-specific culture that each subscribes to. With that, is a characteristic rhetoric that is commonly shared among the students.

This aspect was assessed in all writing products for the course with an emphasis on each student’s demonstration of the knowledge of the discipline, integration of newly learned concepts and phraseology in their writing products, the style and tone of the writing products, and a demonstration of proper application to the discipline and meeting the audience’s needs. The students demonstrated the greatest level of mastery in this aspect of the writing assessment. Their use of discipline-specific language and that learned in the course were well integrated. There were times when several students used the course-specific concepts or terms inappropriately, but many rectified those
deficiencies. The most common concept/term use that presented challenges for the students was the concept of “operationalization” in the context of variable usage in research. This dimension deserves special attention since it was known beforehand that this concept is troublesome for most students and great emphasis was placed on the meaning the term, understanding the term, and using it correctly. This emphasis was placed several times throughout the course, but students continued to struggle with its concept and meaning.

Analysis of the appended table that provides a summary report of the students in the area of “rhetoric of the discipline” demonstrates a fundamental understanding of this process in their writing production. Students performed well with a maximum of 10.5% of student not passing this parameter to a minimum of none not passing this parameter. The average of the students not passing this aspect throughout the course was: 5.24%

Conventions and Presentations
Of all parameters assessed, this aspect probably provided the greatest challenge consistently throughout the Quarter for most students. Even though students performed more poorly at times in content and reasoning, it appeared that more students had at least some difficulty with conventions and presentations. In this aspect of assessment, writing products were evaluated for editing and re-drafting of the written work, adequate proofreading, sufficient citation of referenced work, absence of any plagiarism, and proper appearance of the final document. Of these aspects of the parameter, the only area that the students did consistently well was with regard to appearance. Only one student failed to deliver written products that did not appear appealing or have effective formatting. All of the other deficiencies within this parameter were shared by all students.

By far, the greatest deficiency in this parameter was the students’ failure to proofread, edit, and re-draft all work. Many written products were submitted with the same errors that were identified by faculty in earlier versions. There was also a measureable concern with inadequacy of proper citations and references to others’ work. This aspect
of error has been reinforced multiple times in this and other classes. The general analysis of this aspect of the writing assessment suggests strongly that students are lacking in their proofreading and editing skills. It is easy to presume that this deficiency likely stems from time management issues or a lack of motivation on the part of the student. Given the prevalence of this issue, a more intense effort and varied strategy will be employed in future writing courses within the Major to assure diminution of these deficiencies.

A general analysis of the appended table in this aspect demonstrates a not pass rate from 10.53% to a high of 19.05%. Although this parameter did not exhibit the poorest not pass rate of all of the parameter, the greater concern is the overall average not pass rate for the entire class over the Quarter. That rate was: 15.71%

Conclusions
The information obtained through this writing assessment of EMS 460 – Research in EMS – I, was quite illuminating. Although student writing products often yield undesirable results in many courses, to quantify that level of deficiency based upon an objective rubric was very informative. From this data, it can be concluded:

- Students must be encouraged to improve their content in writing with emphasis on purpose and accuracy.
- Students require considerable direction in developing their writing skills in proper reasoning through greater contemplation in their writing products to assure that their ideas are well-thought-out and have adequate support in conclusion and interpretation. Furthermore, students should endeavor to reflect logical and complex thinking in the final draft of their effort.
- Some focus may be necessary to guide students in their ability to structure their writing with greater clarity, continuity, and visual enhancements. In particular, students could benefit from an improved delineation of subject topics by section and an effective transition from idea to idea in their writing.
- Students do well with discipline-specific rhetoric, but sometimes struggle with incorporation of new thoughts and ideas into existing knowledge. As students
learn new concepts and ideas, they should be encouraged to learn how best to utilize those concepts and terms in their discipline-thinking. This would likely simply require more practice.

- The greatest concern in student overall performance in writing is their failure to adequately proofread their work, edit it, and re-draft their work with greater meaning and purpose. Students, in general, would benefit from a greater attention to detail in their writing.
Appendix

Writing Assessment Results Summary Table

EMS 460 – Research in EMS – I

Fall 2011

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