

# INCORPORATING COMMUNICATION SKILLS INTO A MANAGEMENT INFORMATION SYSTEMS COURSE

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**ABSTRACT:** *The need to help MIS students improve their written and oral communication competencies has been recognized widely. This paper describes an approach that incorporates such skills into an assignment in an upper-level, general course in MIS. The assignment consists of short critiques of current articles and oral presentations. A survey to gather the students' reaction to the assignment was conducted. The results reveal that many benefits are derived from this kind of project.*

**KEYWORDS:** *Communication Skills, Critical Thinking, Management Information Systems, Teaching Methods*

## INTRODUCTION

The importance of interpersonal writing and oral communication skills to the career success of Management Information Systems (MIS) students has been recognized over the years by educators and practitioners alike and widely reported in the literature. Several studies (1, 2, 3) have reported the need for colleges and universities to emphasize these competencies, which are perceived by practitioners to be important to the future of those persons aspiring to information management positions. In particular they found that executives perceive that MIS graduates are coming into the business world deficient in communications skills.

Writing in the classroom also nurtures critical thinking, creativity, and decision-making skills. A study by the National Assessment of Educational Progress directly links writing effectiveness to the development of skills in critical thinking (4). Research work conducted by Risinger (5) indicates that writing enhances learning in several ways:

1. Writing requires knowledge and focuses thought. Students must acquire and present content when

they write. They also gain knowledge, because writing is inherently an integrative process, combining the total intellectual capabilities of the writer.

2. Writing enhances critical thinking. Responsible decision making requires practicing the skills of acquiring, evaluating, and using information for the purposes of identifying courses of action and predicting their possible consequences.
3. Writing shifts the responsibility for learning away from the teacher and toward the student. The ability to write empowers the student with a sense of efficacy and achievement. A written essay belongs only to the student, and it encourages personal learning, which leads to more questions and to the discovery of connections between events, people, and ideas.

It is concluded that critical and creative thinking is emphasized in assignments requiring students to compare, contrast, analyze, synthesize, and evaluate some topic or material.

Clearly there is much to be gained by emphasizing more writing in the MIS classrooms. It refines the students' thinking and creates new learning. It is no wonder that employers require writing skills from business graduates: good communication is one sign of high intellectual abilities of the kind needed to make better decisions in the business world. One need only examine the desirable characteristics of information systems professionals to see that critical thinking and communication skills, in all their dimensions, are prerequisites to a successful career.

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This paper describes a very practical writing and oral assignment to help the MIS students enhance their needed writing and critical thinking abilities. It also outlines the delivery method used, and some observation of the students writing process. The final section reports on the students general perceptions of the assignment.



## COMMUNICATION SKILLS IN INFORMATION SYSTEMS CURRICULUM

The Data Processing Management Association has provided continuous support to institutions to develop or redesign their computer information systems (IS) curricula. This association's 1990 model curriculum for undergraduate IS programs encourages the incorporation of oral presentations and writing projects in all existing MIS courses. This approach, also known as "Writing across the Curriculum" is widely sponsored by the writing centers and English departments of most universities. The premise is that speech and writing techniques, learned primarily in English courses, must be reinforced through assignments in all type of courses across the business curriculum. The following statement summarizes the DPMA position on strengthening communication skills: (6)

*Critical to the IS professional is the ability to communicate both in writing and orally in a wide variety of informal and formal situations. It is necessary for the IS student to develop these skills in formal courses in English composition, technical writing, public speaking and small group discussion. It is also highly desirable that these skills be used and further developed at appropriate places in the IS curriculum. The students should be expected to write formal reports, participate in group discussions during project development, and give formal presentations. (p.10)*

MIS educators have the responsibility of seeing that their students are proficient in communication skills. Employers will continue to find that students who lack these skills fall short of the expected performance needed in their careers.

### Emphasizing communication skills through assignments

Sharing in the responsibility for instilling oral communication and writing skills may not be welcome by every MIS instructor. It is true that some courses lend

themselves better than others to oral presentations and written assignments, but educators can not afford to allow this pervasive inadequacy in communication proficiency to be a problem to MIS graduates and potential employers. The following section describes the incorporation of an assignment in communication skills into an upper-level, general course in Management Information Systems.

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The assignment in question consists of a short summary and evaluation of current articles. On the first week of class each student is assigned a chapter from the course textbook. They are to read it completely, and then conduct a literature search on the topics covered in it. From this search they are to select three articles that they understand and like the best. They are to write one-page summary and evaluation of each article, each essay to be submitted at a different date during the term. A three-page guideline of general instructions and "how to write a summary and critique" are provided the first day of class (see Appendix A on pages 30 and 31). A sample package consisting of a current article with a summary and evaluation of it is also given to the students.

The first part of the three-page guideline provides general instruction about the assignment: article currentness, orientation, length, etc. The second part helps the students in the writing process by describing clearly how to write a summary and an evaluation. What to look for, what to omit, and what steps should be taken in reading and understanding an article is covered in the summary section. The evaluation section outlines the criteria that are to be used in critiquing the article. These are evaluation of style and content, and the article's relationship to assigned

chapter. The students also appreciate the sample package because they know in advance how the report should look and what is expected from them.

After having graded more than 800 of these reports, some observations on the students learning struggles are in order:

1. Even after it has been clearly stated in the guidelines and illustrated on the sample package, students have a tendency to disregard the length of the report: one page.
2. Longer reports usually have very long summaries and very short evaluations. This denotes student struggles with condensing and focusing on the main ideas, with editing their work, and with providing their own opinion of the article.
3. In reports of less than a page, both the summary and evaluation are very short. Typically the summary is not a comprehensive one, focusing on the first one or two pages of the article or merely listing the major subheadings.
4. In the evaluation part of the report, students tend to discuss the article's style more than its content and usually fail to discuss the relationship of the article to the chapter assigned.

Students are, however, presented with a great deal of evaluation. Corrections usually given after the first report usually consists of comments such as "follow length requirement," "check spelling," "sentence too long," "fragment, not a sentence," "evaluate relationship to chapter," "summary too long, evaluation too short," "combine these two sentences". As the students work on their second and third assignments, they follow instructions and guidelines more closely, their writing techniques substantially improve, and more effort is put into the analysis of the article.

In addition to the article review, each student is required to give an oral report of about ten minutes in length, on any one of the three articles reviewed. This



presentation takes place when the assigned chapter is covered in class. Questions from fellow students and the instructor follow the presentation. Presenters are reminded that the audience should feel they have gained the same knowledge from the presentation as they would have had they read the article themselves. Each presenter is usually asked: (1) restate the most important points the article made; and (2) discuss the article relationship to the assigned chapter. Whether it contradicted it, validated it, or complemented it.

### Students' Perceptions of the Assignment

A survey was administered to assess the students' perception of this assignment. A total of 204 students participated in the survey. A questionnaire requested their opinion regarding their level of agreement to sixteen statements about the written part of the assignment (article summary and evaluation). Each statement was evaluated in a Likert scale consisting of the following values and categories:

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly agree

Table 1 shows the ranking of statements, their mean score, standard deviations, and minimum and maximum values.

It is very encouraging to observe that all the statements rated above 3.00, which indicates a positive reaction to the assignment. Based on the results in table 1, it appears that this type of assignment

contributes to the enhancement of students' intellectual abilities and communication skills in several ways:

1. It expands and facilitates the students' understanding of concepts and principles in the fast changing field of management information systems.
2. It familiarizes students with the necessary tools to work on a report and encourages them to consider its physical presentation.
3. The evaluation component of the assignment helps students learn to compare, contrast, and analyze information, all very fundamental attributes of skilled decision makers.
4. It helps the students to focus on main problems and synthesize and convey ideas. These are the same skills they will need as managers to convey messages and prepare concise letters and executive briefs.

### SUMMARY

Several studies have pointed out over and over the need to reinforce the oral and written communication skills of business students. This paper has presented a very practical way to help students improve their communication and critical thinking skills through an assignment in a upper-level, general course in MIS. The assignment consists of short article reviews and oral presentations. A survey indicates that students reacted favorably to this assignment. Benefits perceived from this assignment include an improvement in writing and analysis skills, and an opportunity to expand their knowledge of information systems and to enhance their library skills.

### REFERENCES

1. Yaverbaum, G., and M. Khosrowpour. 1988. Exploring the Crisis in Information System Education: Educators and Executive Concur on Many Issues. Education and Computing 4(2), 119-123.
2. Sumner, M., R. Klepper, and R. Schultheis. 1990. An Assessment of the Attitudes of Graduates and Employers toward Competencies Needed for Entry-Level MIS Positions. Proceedings from the information Systems Education Conference, (Chicago).
3. Pollack, T. 1990. The MIS Curriculum: Which Competencies Are really Important to Business Professionals? Proceedings from the Information Systems Education Conference, (Chicago).
4. Applebee, A., J Langers., I. and Mullis. 1986. The Writing Report Card: Writing Achievement in American Schools. Princeton, NJ: National Assessment of Educational Progress. Washington, DC: Educational Resources Information Clearinghouse. ED 273 994.
5. Risinger C.F. 1987. Improving Writing Skills through Social Science. Washington, DC: Educational Resources Information Clearinghouse. ED 285 829.
6. Data Processing Management Association. 1990. Information Systems: The DPMA Model Curriculum for a Four Year Undergraduate Degree; A draft report of the Data Processing Management Association, Park Ridge, Illinois.

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Janet F. Larabee has a Ph.D and teaches Management Information Systems courses at Eastern Illinois University. Areas of research interest include MIS curriculum development, Information Resources Management, End-user Computing and Organizational Computing.

**Table 1: STUDENTS' PERCEPTIONS OF THE ARTICLE REVIEW ASSIGNMENT  
IN AN MIS COURSE: RANKING OF MEAN RESPONSES**

Statements	Mean	Std. Dev.	Min.	Max.
This assignment helped me to expand my knowledge of the field of MIS beyond the information in our textbook.	3.985	.724	1	5
I understood the value of doing a neat and professional job in the physical presentation of this assignment.	3.887	.761	1	5
This assignment enabled me to use the library resources effectively.	3.754	.803	1	5
This assignment encouraged me not just to do a summary but to use my evaluation skills in critiquing the information in the article.	3.696	.751	1	5
This type of assignment helped me to identify and to focus on central issues in an article.	3.666	.669	2	5
Through this assignment I was able to practice what I had learned in English courses concerning sentence structure, punctuation, and grammar.	3.661	.759	1	5
The page limit imposed on the assignment required me to be concise and to practice writing, rewriting and restructuring of sentences.	3.651	.9189	1	5
This exercise gave me a chance to reconcile and assess different points of views, to make reasoned judgments, and to analyze conclusions.	3.588	.683	1	5
This assignment helped me to organize my thoughts in a clear, precisely stated manner.	3.558	.767	2	5
Through the reading of the articles my vocabulary of MIS terms was increased.	3.500	.926	1	5
This assignment improved my abilities to select and relate ideas to each other.	3.386	.795	2	5
As I worked on this project, the style and content quality of the second and third articles improved compared to the first article.	3.372	.9066	1	5
As a result of this assignment, I am able to summarize a text better than I did before.	3.294	.875	1	5
This assignment improved my abilities to outline and develop ideas in coherent paragraphs.	3.264	.839	1	5
As a result of this assignment, I am able to evaluate the style and content of an article better than before.	3.250	.780	1	5
This exercise enabled me to improve my paraphrasing and quoting skills.	3.230	.840	1	5
This exercise improved my ability to distinguish between primary and secondary information.	3.147	.862	1	5

## Appendix A: ARTICLE REVIEW GUIDELINE INSTRUCTION

As a supplement to the material in the book, each student will conduct a literature search on an assigned chapter. Each student must read the assigned chapter first, then search for articles related to it and select the three best.

1. Search articles in journals dated late 1989, 1990, 1991, or 1992.
2. The original article must be at least 3 full journal pages in length.
3. The article must be managerially oriented, and related to the content of the assigned chapter. (You will be assigned a chapter in class)
4. You must submit two good photocopies of each article. I will keep one and return the other to you.
5. Prepare a one page summary and evaluation for each article (typed, one side of page, single spaced, one inch left and right margins, first half of the page should contain summary, second half the evaluation). Submit this page with the article. Each article is submitted at three different dates throughout the semester.
6. The first line of the review should include your name, chapter assigned and date. The second line should include the article's title, author, and journal. The summary and the evaluation texts should be separated by a blank line.

### HOW TO WRITE A SUMMARY AND AN EVALUATION

The summary is a brief restatement of the main points in a article. The following points will help you know what is most important to include in a summary:

1. **Purpose.** A summary should indicate why an article or report is being written. (Often a report is written to solve a problem or to explore new areas of interest.) Your summary should give the reader some kind of brief introduction (even one sentence will do) indicating the main purpose of the report.
2. **Essential specifics.** Include information on the names, costs, codes, places, or dates essential to understanding the original.
3. **Conclusions or results.** Emphasize what was the final outcome, the result of the tests, the proposed solution to the problem.
4. **Recommendations or implications.** Readers will be concerned with important recommendations - what they are, when they can be carried out, why they are necessary.

The following points tell you what to omit in a summary:

1. **New data.** Stick to the original article. Avoid introducing comparisons with other works or references. Readers will expect a digest of only the material being summarized.
2. **Irrelevant specifics.** Do not include any biographical details about the author of an article.
3. **Background.** Material in the introduction to articles can often be excluded from a summary.
4. **Reference data.** Exclude information in footnotes, bibliographies, appendixes, tables, or graphs. All such information supports rather than expresses conclusions and recommendations.
5. **Jargons.** Technical definition or jargon in the original may confuse rather than clarify the essential information the general reader is seeking.

### SUMMARY

To write an effective summary, you will have to read the material very carefully, making sure that you understand it thoroughly. Then you will have to identify the major points and exclude everything else. Finally, you will have to put the essence of the material into your own words. This process demands an organized plan. The following steps will help you prepare your summary:

1. **Read the material once in its entirety to get an overall impression of what it is about.** Become familiar with large issues, such as the purpose and organization of the work, and the audience for whom it was written.
2. **Reread the material.** Read it twice or more often if necessary in order to locate all      and only      the main points: underline them in the article. To spot the main points, pay attention to key words introducing them, such as **first, second, accordingly, as a result, although, despite, basically**, etc. Also pay attention to the first and last sentence of each paragraph. Often the first sentence of a paragraph contains the topic sentence, and the last sentence summarizes the paragraph or provides some type of transition to the next paragraph.

**Appendix A: ARTICLE REVIEW GUIDELINE INSTRUCTION, continued**

3. **Collect your underlined material or notes and organize the information into a rough-draft summary.** Use the language of the original, together with any necessary connective words or phrases of your own. Your purpose at this stage is to extract the principal ideas from the examples, explanations, and opinions surrounding them.
4. **Read through your rough draft and delete whatever information you can.** See how many of your underlined points can be condensed, combined, or eliminated. Make sure that you are faithful to the original by preserving its emphases and sequence.
5. **Now put the edited version into your own words.** Connect your sentences with conjunctive adverbs (also, although, because, consequently, since) to show relationship between ideas in the original.

**EVALUATION**

An evaluation of the summary includes your opinion of the material. Here, you have the opportunity to judge the merits of the report or article, paying special attention to whether the report's recommendations should be followed, modified, or ignore.

In evaluating the material, include information on the content and the style of the original and how it relates to the respective chapter in the textbook. Here are some questions that you should try to answer.

**EVALUATING THE CONTENT**

1. **How carefully is the subject researched?** Is the material accurate and up to date, or are important details missing? Where could the reader find the missing information? If the material is inaccurate, will the whole work be affected or just part of it? Exactly what has the author left out?
2. **Is the writer objective?** Are conclusions supported by evidence? Is the writer following a particular theory, program, or school of thought? Is this fact made clear in the source? Has the author emphasized one point at the expense of others?
3. **Does the work achieve the goal?** Is the topic too large to be adequately discussed in a single article, or book? Do the recommendations make sense? Is the work sketchy? Are there digressions, tangents, or irrelevant materials?
4. **Is the material relevant to the audience for whom you are writing your evaluation?** Is the entire work relevant or just part of it? Why? How would that audience use it? Would every member of your profession profit from reading the work or only certain specialists? How does the material relate to the topics covered in the lectures and the chapter assigned to you?

**EVALUATING THE STYLE**

1. **Is the material readable?** Is it well written and easy to follow? Are there helpful headings, careful summaries, and appropriate examples?
2. **What kind of vocabulary does the writer use?** Are there many technical terms? Is the language precise or vague? Would your audience have to skip certain sections that are too complicated?
3. **What visuals are included?** Charts? Graphs? Photographs? Are they used effectively? Are they easy to understand by themselves? Are there too many or too few of these visuals? Are they used to clarify, or to get a point in fewer words? Are they used to go into greater detail or simply to arouse interest?

**EVALUATING THE RELATIONSHIP**

1. **How does the article relate to the chapter assigned?** Does it confirm, agree, or disagree with it? Does it expand upon the information contained in the textbook chapter?
2. **How does this article relate to your work life?** Has your life been influenced as a result of this article? Have you benefited from having read this article?

Note: The articles selected must be at least three full pages in length. Please staple two copies of the article to your one-page report. Check the spelling of your work.



### **STATEMENT OF PEER REVIEW INTEGRITY**

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